



**Chris Basham**

INDIANA UNIVERSITY

SCHOOL OF INFORMATICS AND COMPUTING

HUMAN-COMPUTER INTERACTION DESIGN

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# Contents

<b>Abstract</b> .....	3	<b>Prototypes</b> .....	53
<b>Introduction</b> .....	4	<b>Evaluations &amp; Testing</b> .....	68
<b>Research</b> .....	14	<b>Final design</b> .....	79
<b>Literature</b> .....	28	<b>Strategies</b> .....	89
<b>Exemplars</b> .....	30	<b>Conclusion</b> .....	94
<b>Findings</b> .....	37	<b>Contribution</b> .....	95
<b>Insights</b> .....	41	<b>Reflections</b> .....	97
<b>Problem</b> .....	43	<b>Dictionary</b> .....	101
<b>Constraints</b> .....	44	<b>Acknowledgements</b> .....	104
<b>Concepts</b> .....	47	<b>Biography</b> .....	106

# Abstract

Three times per month, a group of runners known as the Blooming Fools Hash House Harriers navigate a 3–5 mile trail of flour laid throughout Bloomington, Indiana’s diverse rural, forested and urban landscapes. Since summer 2010, the group more than doubled, now averaging 45 participants per event, making it increasingly difficult to manage and maintain safety without disrupting the core enjoyability of the event. OnCheckIN is a mobile system designed to quickly and confidently determine who has yet to regroup at certain waypoints, so the missing can be found.

Over the last nine months, I’ve embedded into the local and national House Hash Harrier community, participating in nearly thirty events and organizing three. I’ve examined projects fostered by the community and identified opportunities to enrich participant experience while respecting 73 years of cultural development. A functional prototype has been locally and actively utilized since March 2011, and by the end of the year, the project will launch for chapters worldwide.

# Introduction

## Rediscovering my inner runner

Throughout elementary school, I feared bicycling. More specifically, I disliked when other bikers encroached, irrationally convinced their presence (i.e. most likely my older brother) would crash me. While the neighborhood kids biked the long and steep hills among each other's houses, I ran and was never too far behind. During recess, I jetted across the playground, incidentally startling overseeing teachers with my un-bottled speed. With wind-swept mopped hair, I fantasized about zooming the world into blurred periphery by willpower alone. The dream ended the moment I sat on the years-forgotten bicycle. With one fear quelled, another dream vanished, and running ceased.

Throughout my adolescence, I struggled to find my sport outlet. As newly muscled teenagers threw baseballs at reckless velocities, I no longer confidently swung the bat for fear of it hitting knuckles instead of an artificial appendage. Unlike my brothers, the crashing, cleated, bruised bodies worn from contact football never amused me. Golf, while tame, demanded excessive equipment and finely tuned hand-eye coordination. Though fascinated by the teen-oriented movies of the early 1990s, the gracefulness of martial arts didn't seem attainable.

In summer 2008, no longer satisfied uninvolved in any strenuous physical activity, I convinced a friend to join me on morning weekday runs. I needed to feel my heart thumping, to remember how to battle oneself, to fight for the sake of my future wellbeing. The first few weeks, we couldn't complete 200 yards without resting. Slowly, our stamina built until the end of summer, we could complete a two-mile loop without

stopping. These runs continued the following summer, but without accountability during the between months, improvement was unsubstantial. Running stagnated, and I was content only pursuing the occasional 30-minute distance.

Interning in Ohio during summer 2010 retrained me as an athlete. Biweekly lunchtime Ultimate frisbee games in the company's soccer field subtly conditioned me to surpass my expectations. In early August, a co-worker invited me to run a local 10-km race. After powering through the finishing line, doubling any distance I've previously attempted, I was enthralled. By November, a number of racing events were conquered, including two 5-km's, a nighttime 15-km trail and a half-marathon. However, these accomplishments weren't by personal effort alone.

All these racing events brim with various forms of social encouragement. Friends and families of runners cheer with signs along the race course. Volunteers reward exhausted runners with orange slices and cupped water. Participants urge fellow, struggling racers, and those who finish backtrack to wave later runners to the finishing pads. These faceless individuals encourage strangers, including me, but because I don't know them, any praise seems like a facade and fades quickly into the horizon. Running among people can still seem as lonely as running alone, and I want to run with people. I desire an intimate relationship that isn't superficial and lasts beyond race day. I need a friend to champion, mentor and run with me. I find that friendship with Rebecca Petrush.

After off-handedly discovering our mutual affection for barefoot running during our initial encounter, Rebecca, a seasoned distance runner and linguistic Ph.D. student at Indiana University, adopted me as her running protégé. She introduced me to local racing events and fellow runners, instructed me in proper discourse and fitness techniques, critiqued my running form and shared her vast experiences and struggles as a budding endurance athlete. Her ceaseless and spontaneous encouragements motivated me to not only become a more considerate runner but also reemerged the

“Running among people can still seem as lonely as running alone, and I want to run with people.”

passion for running buried years deep. She taught me while running may occasionally reward the disciplined runner with medals and plaques, it doesn't have to be about competing against a rival or record, nor for the weekend warrior does it have to be an incessant struggle for maintaining physical fitness. Instead, running can be something to love, embrace and share and is for the everyman.

## Finding the everyman

In an effort to discover a social running activity promoting non-competitiveness, a conversation with a former Ultimate player during this past summer prompted me to explore an international movement called the House Hash Harriers.

Emerging in Malaysia's Kuala Lumpur in 1938 (**FIGURE 1**), a group of British military officers patterned weekly runs after a game called the "Hare and Hounds" in which the runners ("the hounds") chased another runner ("the hare"). The hare incrementally lays crumpled pieces of newspaper on the ground, representative of the hare's "scent," while the harriers (i.e. named after the breed of hound used for hunting hares) traverse the trail of paper in attempt to catch the hare. The runners initiated each trail at a local club, snidely dubbed the "Hash House" for its bland food. Harriers rewarded themselves with beer upon concluding the run.<sup>1</sup>



**FIGURE 1:** The House Hash Harriers was established in Malaysia in 1938.

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1 <http://harrier.net/presskit/shistory.html>

The House Hash Harriers (also abbreviated to HHH or H3) are self-described as a “drinking club with a running problem.” Their constitution establishes their purpose in four parts:

- To promote physical fitness among members.
- To rid weekend hangovers.
- To acquire a good thirst and to satisfy it in beer.
- To persuade older members they are not as old as they feel.

After a hiatus throughout the Second World War, the Harriers spawned its second chapter (i.e. a kennel) in Singapore in the 1960s. The movement quickly spread throughout the region, gaining traction in the United States by the mid-1970s. The Harriers, recognized as the largest running organization in the world by Guinness World Records, currently claim over 2,000 kennels internationally in all seven continents and 500 within the U.S.<sup>2</sup>

A little more research revealed the existence of a Bloomington, Indiana kennel.<sup>3</sup> Incidentally, I also discovered fellow HCI/d classmate Rob Begley had already ran several times with this group. On Saturday, September 18, 2010, he introduced me to the Blooming Fools Hash House Harriers.

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2 <http://goo.gl/9Q0wc>  
<http://worldhhh.com/worldhashdirectory.aspx?page=HashStatistics>

3 <http://bfh3.com>

## Meet the hashers

Donning an old lifeguard whistle, gym shorts, a throw-away shirt, a cotton hat and ruined tennis shoes, I joined a group of 30 similarly dressed people in a Cascades Park parking lot, a few miles northwest of the Indiana University campus (**FIGURE 2**). They gathered and talked in small social groups, mugs frothy with freshly poured keg beer, waiting for more arrivals and the start of the hash. I was soon directed to the open trunk of one vehicle to sign my name on an attendance roster. Rob initialed next to his name listed a few pages in the spreadsheet as “Just Rob.” Just Rob further explained anyone not named by the kennel is designated as their first name prepend with the label “Just.” I wrote my “mother-given” and new “hash-given” name along the margins: “Basham, Chris” and “Just Chris,” respectively. With this being my “virgin” hash, I was graciously exempt from the \$6 fee.

After 20 minutes past the scheduled start time, two hashers violently exclaimed, “Gather up you wankers!” Attendees quickly reformed, encircling the two. Each carrying a bag of white cooking flour, they sprinkled it on the ground, writing cryptic symbols on the bricked surface, explaining for the benefit of first-time “virgin” attendees how to navigate the trail (**FIGURE 3**). As the hares for this hash, only these two hashers knew where this pre-laid route would lead. Globbs of flour dotting the ground suggests a hash trail. An encircled X or dot indicates a check, warning the trail could deviate in any number of directions. A tailed arrow, known as the hare’s arrow, directs hashers along the true trail.

As an additional courtesy to virgins, the hares prompted each hasher to quickly introduce themselves in turn. Innuendo-laden names, such as White Lightning, Dr. Grumpy, BiblioSex, Mother Schucker, Sweet Ho Alabama, Son of Gucci and Hot ‘n Juicy, interlaced among the unnamed Just’s. One revealed his name more creatively



**FIGURE 2:** Hashers gather and socialize before the start of the trail. Photo by BFH3.

by dipping his fingers in his mugged beer and flinging the amber liquid to the crowd, proudly exclaiming, “I’m Jizz Hands!”

The hares pointed to the fresh markings before the crowd with their elbows and mischievously taunted, “Follow the hare’s arrow to trail.” The arrow written during this “chalk talk” pointed to the general direction of the first dot of flour. The barrage of hashers worked together in a unison of anarchy to find the first dot of flour about 50 yards away. Dots were counted when found, “On one! On two! On three!” When the check emerged, the pack echoed “On check!” for the benefit of any wondering hashers. The trail split in a variable number of directions, often at natural intersections in the landscape. “Front-running bastard” hashers scouted the possible paths, counting flour and declaring “Bad Trail” if the flour ended in three parallel lines. Returning to the check, the other paths would be explored until another check was found or a hare’s arrow unerringly directs the hashers along true trail.



**FIGURE 3:** The hares explain the expected trail markings during Chalk Talk. Photo by BFH3.

Hashers joyfully barreled through or climbed over any obstructions along the trail, affectionately relabeling fallen trees, scratching brush, Velcro-ing briar, bloodying thorns, slicing grass, sucking mud and slippery creeks as merely “shiggy” (FIGURE 4). As hashers of various athleticism ventured, the pack naturally splintered and fragmented. Soon, hashers cursed the hares for such an enduring trail, longing for beverage and sustenance. After three miles of forested obstacles, hashers emerged from the woods to an undeveloped neighborhood. Speeding along the pavement, hashers quickly announced the discovery of their most prized symbol, BN. Whistles blew rapturously and “Beer Near!” resonated down the trail of lagging hashers, lifting broken spirits with hope of brief rest (FIGURE 5).

The hares positioned the beverage coolers and tubs of snacks around the hauling vehicle, open for consumption by the sweaty and tired incoming hashers. For the next 30 minutes, hashers replenished, rested and socialized as the pack slowly regrouped. Once the last of the hashers arrived and took a sufficient break, the hares redirected the hashers once again to the final two-miles of trail, encountering open fields, golf courses, neighborhoods and more shiggy. Bounding out the woods onto a gravel pathway north toward the original parking lot, giant ON-IN lettering was the final trail symbol, empowering hashers with the same weight of accomplishment as a racer’s finishing line ribbon.

After another half-hour of waiting and replenishing, the group fully rejoined. While trail was over and the hares’ responsibilities complete, the hashers were not dismissed to leave. One hasher took charge, leading the group in a ceremony of drinking and singing. He initiated, “What do we think of the trail?”

“It sucked!” all responded.

“What do we sing to these hares?”



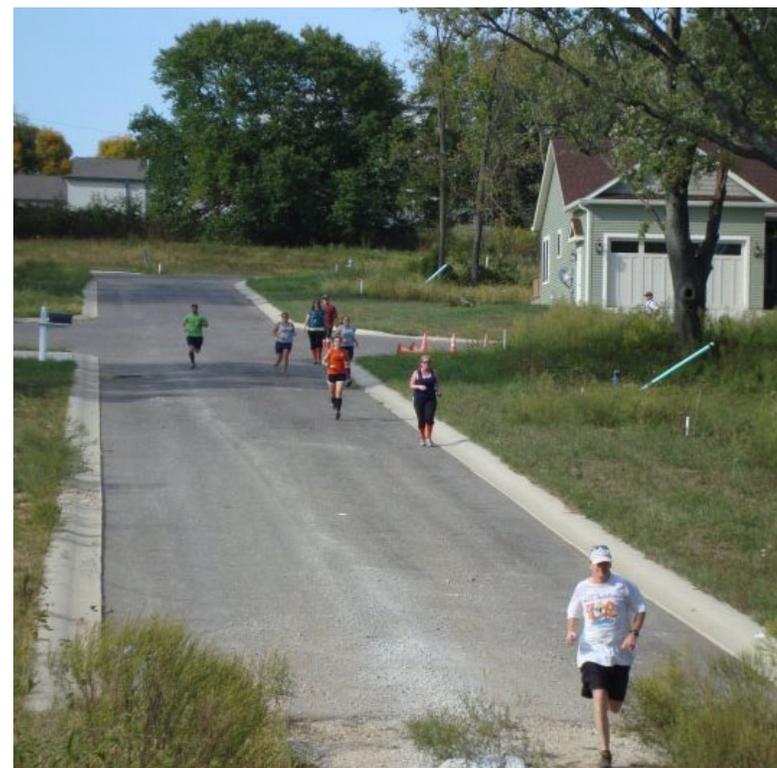
FIGURE 4: Hashers bound over fallen trees, generically labeled as shiggy. Photo by BFH3.

One hasher shouted, “Get a life!” to which the hashers repeated the single lyric to the tune of “The Lone Ranger” before chanting “Down, down, down, down, down,” at which point the hares chugged their beverage of choice and tipped the empty vessel over their heads. As the hashers often forewarned: “For what doesn’t go in you, goes on you. And if you miss, we won’t!”

The master of ceremonies continued, “Do we have any violations on trail?” Hashers rested beverage on their heads, politely indicating their desire to speak. They pointed with their elbows at others in the circle, accusing them of such sins as pointing with their fingers, relieving oneself on trail (i.e. an “environmental”), wearing a hat in the circle, wearing similar clothing as another hasher, attempting to outrun or outperform during the hash (i.e. “competitive behavior”), racing earlier in the day or wearing race memorabilia (i.e. “racist behavior”), calling another hasher by their mother-given name, spilling excessive quantities of beer, etc. It doesn’t matter how outlandish or false the accusation, for accusation is proof of violation. The master of ceremonies commands the accused to enter the circle and once again asks, “What do we sing to these violators?” A song, often lewdly parodying pop culture, is sung and the ritualistic down-down is performed again.

The down-down ritual repeats for more structured violations: Returners are those who miss a hash; every fifth hash attended celebrates an Anniversary; those who start a hash late or forget to initial on the roster are Late Sign-ins.

Virgins are summoned to the circle to formerly introduce themselves and asked, “Who are you and who made you come?” The proper response of a well-disciplined virgin is, “I’m Just Chris and Just Rob made me come.” If I was guilty of any violation during this part, my “hash father,” Just Rob, would have to down-down for not properly teaching me. The encircling hashers greeted with, “Hello Just Chris. Hello babe,” and stamped the welcoming with a humping waist thrust toward the virgin. The virgins



**FIGURE 5:** Hashers emerge from woods to find a Beer Near symbol, directing to the Beer Check. Photo by BFH3.

were then taught the art of performing a proper down-down. “What do we sing to these virgins?”

“Meet the hashers” they all sang to the melody of the Flintstones theme.

Hashers, meet the hashers,  
We’re the biggest drunks in history.  
From the town of Bloomington,  
We’re the leaders in debauchery.  
Half minds, trailing shiggy through the years,  
Watch us as we down a lot of beers.  
Hashers, meet the hashers.  
Down down, down down down down,  
Down down down down down down down down,  
Down down, down down down down,  
Down down down down down down down down.

With one hasher completing his sixth hash, it was time to grant the hasher with a name. Everyone is provided the chance to ask a question, of which no aspect of the person’s life is deemed too sacred.

After all questions cease, the candidate is isolated while the hashers brainstorm. Names are often derived by incidents which occur during a hash, by something the person said off-handedly, by a physical characteristic or occupation. Hashers loudly vote for their favorite name until a single one is decided. The candidate is brought back into the circle and taunted with all the potential names before being bestowed the final name. “Due to your rejection from clown school, now and forevermore—unless you are renamed—you will be known by the Blooming Fools Hash House Harriers as Circus-cision!”

Common questions asked for naming a hasher

**What’s your favorite sexual position?**

**Where was the most public location you’ve had sex?**

**What’s your favorite porn site?**

**What’s the strangest thing you’ve licked?**

**What’s the answer to the question you don’t want us to ask?**

**What celebrity do you look like?**

**What’s your ideal superpower?**

**What’s your childhood nickname?**

**What’s the most embarrassing thing you’ve done on trail?**

After over an hour of these rituals, the master of ceremonies led hashers in an elaborately raunchy choreography coupled with a lightly modified version of the spiritual “Swing Low, Sweet Chariot.” Departing, the master of ceremonies blessed the kennel, saying, “May the hash go in peace.” In unified response, the pack replied, “May the hash get a piece!”

Though the culture was completely foreign and some parts quite disturbing, the love of the trail and the love for fellow hasher I saw underneath the many expletives and occasional moonings were undeniable. When you come to the hash, you are equal. Titles, authority, age, ethnicity, profession, lifestyle, religion, politics and economical or social status are all irrelevant inside the hash, for all is permitted new identities and a fresh start. Everyone unites under the banner of misadventure and social fun as a way to break from the sometimes monotonous, stressful or tiresome outside world.

Hashing is more than a superficial gathering of inebriated and debaucherous runners. Blooming Fools is a family.

# Research

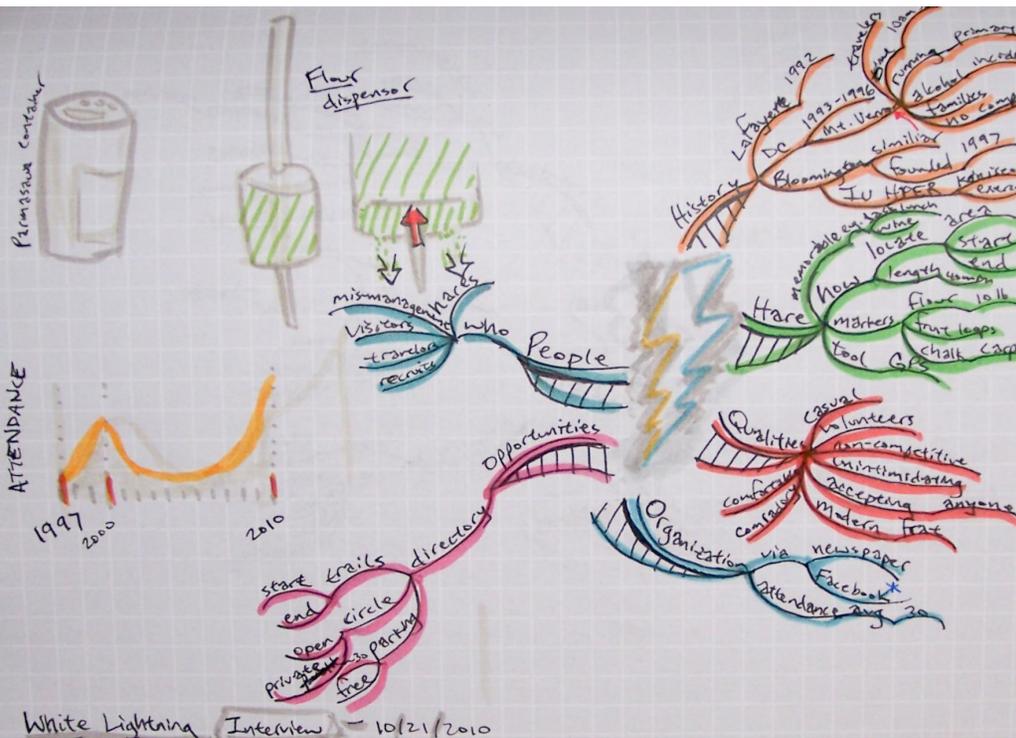
My hesitation for hashing turned into fondness and mild obsession, as faces became friends and trails became stories of conquered battle. By October, I committed to investigating the hashing culture as a full participant.

## Interviews

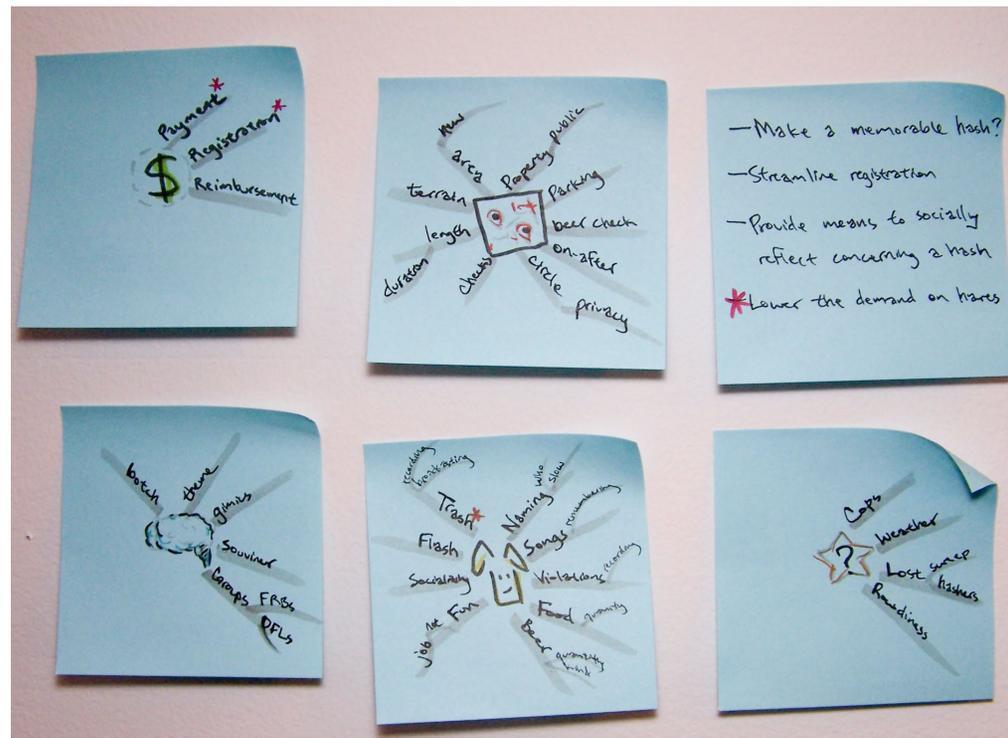
In October, I interviewed two hashers for their perspectives on the community: White Lightning, who founded Blooming Fools in 1997 (**FIGURE 41**), and Jizz Hands, who started hashing less than a year ago at the time but is well traveled among area kennels. I learned the genealogy and history of Blooming Fools; how attendance oscillates over time; how kennels interact and their values and traditions differ; how kennels organize and advertise; how hares design a trail; and what tools and techniques hares employ.

## Focus group

In November, I conducted an informal focus group with a half-dozen of the most seasoned Blooming Fools hashers, as identified by the number of hashes they've attended or hared. We discussed the process used when designing a trail, what problems the kennel commonly faces and their reaction to them, how the kennel has changed over time and the roles various hashers adopt to fill various needs (**FIGURE 42**).



**FIGURE 41:** Notes compiled during an October interview with White Lightning, the founder of the Blooming Fools House Hash Harriers.



**FIGURE 42:** A number of opportunity spaces were synthesized from the November focus group discussions.

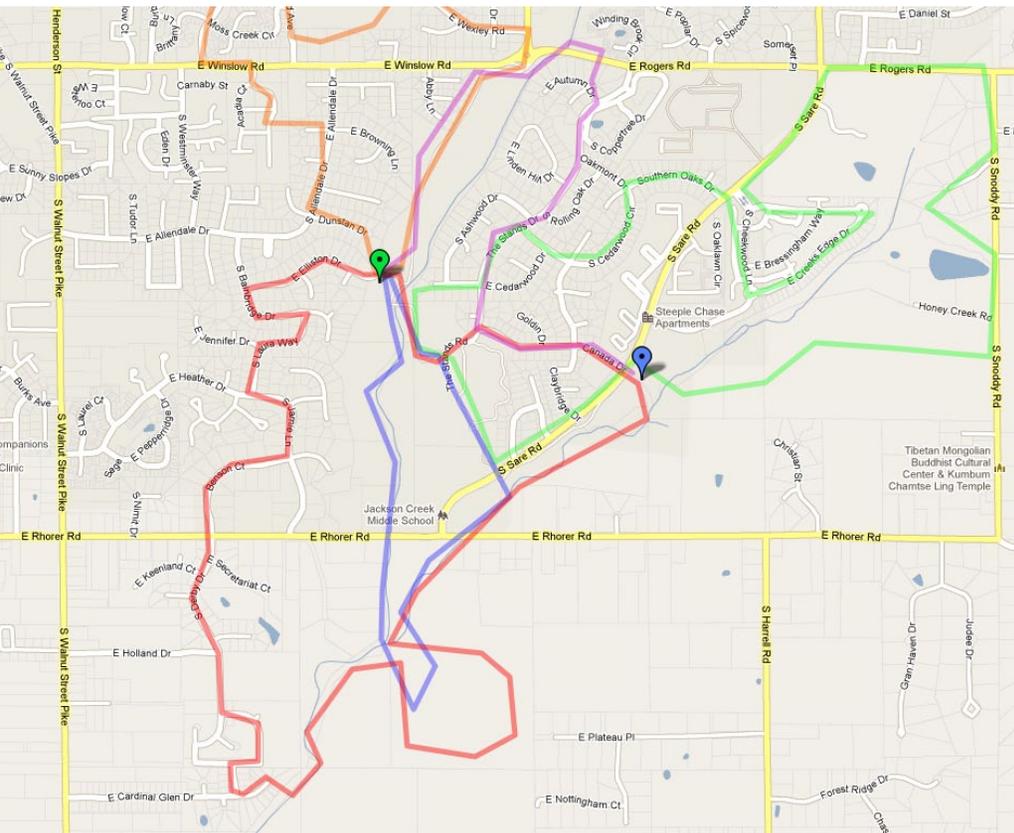
## Participatory ethnography

After my first two hashes, I wanted to know the process involved in organizing one of the events. With three hashes per month, there was certainly opportunity to observe seasoned hares via contextual inquiry or ethnographic methods, but I wanted to experience it firsthand. Partnering with fellow new hasher Rebecca Petrush, we volunteered to hare the November 13 hash. With six weeks to prepare and cumulatively zero haring experience, we blindly entered this adventure not knowing the outcome.

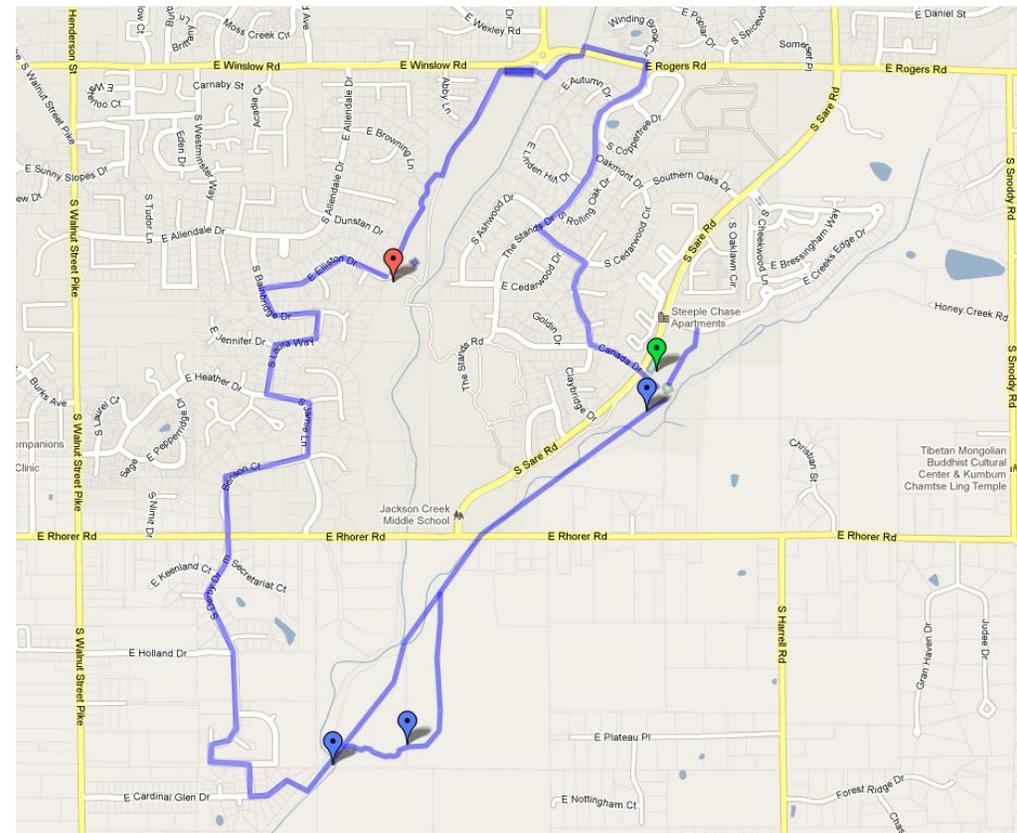
The initial task was to identify a general location to hash. With only one academic year living in Bloomington and little experience exploring the area, I relied on Rebecca's seven-year expertise. She suggested we explore Jackson Creek (located 3-miles south of the IU campus), so we used it as the initial constraint.

Starting mid-October, we scouted various locations surrounding the Jackson Creek area five-times in an effort to identify key locations for parking, Circle, Beer Check and trail paths, venturing through creek bed, fields, urban neighborhoods, a school and a park (**FIGURE 43**). At the end of October, we reevaluated the trail via a 5-hour design session in consideration of forecasted weather conditions (i.e. cold and rainy) and the balance between shiggy (i.e. woods and brush) and urban pathways.

Besides merely identifying the trail's path (**FIGURE 44**), we also arranged other logistics, such as purchasing beer, snacks and flour; acquiring the shared beverage coolers; and announcing the event on Facebook. Playing on the fact two no-named virgin hares are leading the kennel (most likely resulting in plenty of mishaps), we presented the event as something completely ordinary, yet infused it with gimmicks to make it completely atypical. Thusly, the theme of "Just a Hash" encouraged hashers to "cum like it's your very first time and hash like a virgin again."



**FIGURE 43:** The Jackson Creek area was scouted five times in order to determine the optimal path for the November 13 trail. Waypoints indicate starting and beer check possibilities.



**FIGURE 44:** November 13's true trail started at the green waypoint, heading south parallel to Jackson Creek, temporarily branching before merging and winding north along neighborhoods toward the Jackson Creek Trail for Beer Check.

We introduced a number of new symbols to accompany the theme. First, a V-check restricted only virgin hashers to find true trail, rather than anyone. One hasher commended us on this type of check, given he's never seen one during any of his 300 hashes. Second, a cherry check indicated there would be a designated number of business-sized paper cards scattered close to the check, as a pseudo scavenger hunt (**FIGURE 7**). Each card featured a famous historical or pop-culture virgin (e.g. the Virgin Mary and Andy Stitzer, the 40-year-old virgin) along with a description and representative point value. During Circle, all hashers received a laminated card sized for a hasher's whistle lanyard, commemorating the hash (**FIGURE 8**). Third, after the first third of the trail, it split into directions: a longer, more grueling Eagle trail for faster runners and a shorter, benign Turkey trail for slower runners to maintain pace (**FIGURE 6**). Last, a series of hopscotch marks encouraged additional playfulness following the beer check.



**FIGURE 6:** Two hare's arrows merge the Eagle and Turkey trails, directing hashers along true trail. Photo by Rebecca Petrush.



**FIGURE 7:** The Cherry Check indicates eleven "virgin" cards are scattered within 50 feet, and the right symbol dictates a virgin hasher is responsible for discovering true trail. Photo by Rebecca Petrush.

Between the day before and the day of the hash, the hares spent approximately 10 hours laying the trail. (More time was needed than expected to scout the initial part of the trail.) However, as the kennel likes to forewarn: “No matter the planning, a hash will go wrong.”

As one of the largest attendances to date, fifty hashers arrived despite the downpour that would last through the night. Given the sheer quantity of trail symbols, the hares failed to mention the Turkey, Eagle and hopscotch checks. After the hares sent the kennel to hunt for trail, we realized some of true trail marked with toilet paper was removed sometime since the day prior and the kennel was incidentally backtracking along an adjacent two-week hashing trail that had yet to dissolve. After redirecting the kennel to true trail and explaining the forgotten checks, some encountered a perturbed gunman, as it was the first day of hunting season. After exiting the shiggy trail, two hashers and a dog separated from the pack until Circle. At Beer Check, the keg emptied due to the unforeseen horde of hashers, forcing a hare to acquire more beer and delay ceremonies. Observing Circle under a lighted and dry building enclave kept the damp and cold hashers content through the end of the ceremonies.

Despite those numerous, unpredictable mishaps, the hash was considered by many the most successful in recent memory. As one hasher mentioned during the subsequent On-after: “A good hash gets hashers drunk and gives them a good time.” Among the designed gimmicks and unpredictable incidents occurring in-situ, it branded Just a Hash as a memorable and amazing experience for both hasher and hare.

That day, being my sixth hash, I was also fully adopted into the Blooming Fools family, graduating from my current name, Just Chris, and bestowed the hash name, Untouched Private Panther.



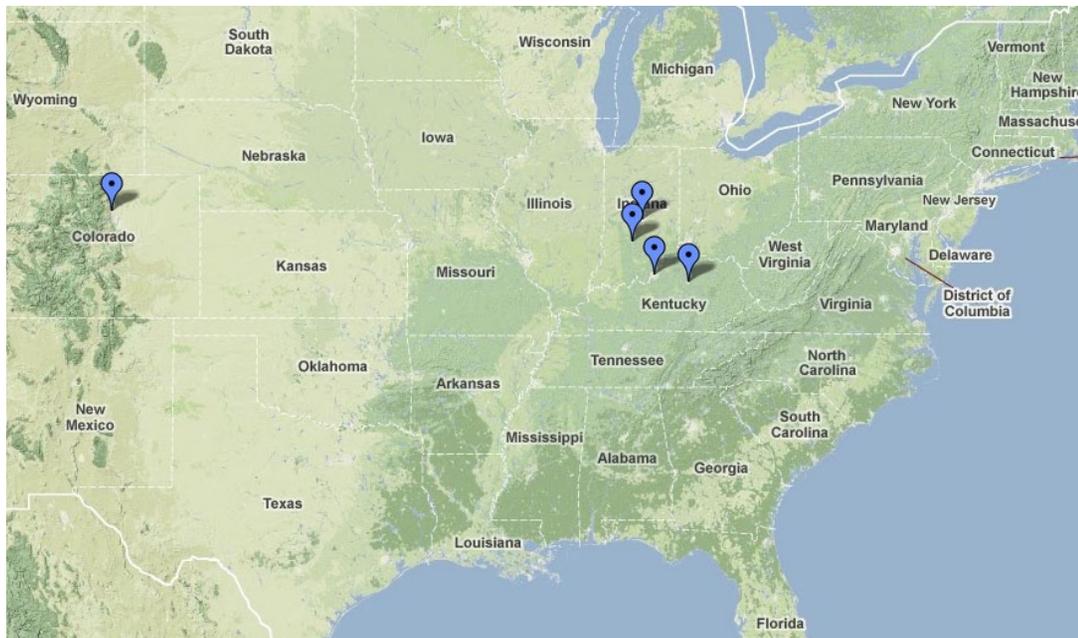
**FIGURE 8:** Hashers collecting the most Virgin cards on trail were awarded first choice of lanyard tags, featuring one of two-dozen famous virgins in pop culture.

## Cultural comparison

To discover the differences among kennels concerning their unique cultures, values and problems and to distill from it the universal aspects of hashing, I had to look beyond Blooming Fools. Since October, I traveled to four foreign kennels and conversed with numerous seasoned and well-traveled hashers, hashing in Indianapolis, Louisville, Lexington and Boulder, Colorado (**FIGURE 9**).

### Blooming Fools

Established in June 1997, Blooming Fools is based upon the Mount Vernon kennel in D.C., the mother kennel of founder White Lightning. Unlike many kennels which promote disturbing levels of crudeness, Blooming Fools is meant to be more “family friendly” and alcohol use is considered incidental. As a consequence of Blooming



**FIGURE 9:** I hashed in Indianapolis and Louisville in October 2010; Boulder, Colorado in February 2011; and Lexington in March 2011.

Fools being situated in a college town, the kennel attracts a slighter younger crowd of hashers and boasts relatively high-quality beers. Unique to the kennel, the group has a strange affinity for orange-colored snack food, incidentally prescribing the hashers a primary diet of pretzels, cheesy poofs, cookies, Doritos and wafers.

Since early records weren't maintained, no one knows the true number of hashes the kennel prepared, though estimations based on the attendance of White Lightning suggest upward of 300 by the end of 2010. Given Blooming Fools hashes twice a month and on most full moon nights, the number of hashes by the end of 2010 is no more than 480.

Currently, only two data sets are maintained by Mismanagement, both stored on shared Google spreadsheets. First, the "hareline" lists the date; meeting and On-after locations; the name of the hash, its hares, those named, visitors; and a short description (i.e. Hash Trash) of past and upcoming hashes. This calendar information is current though late 2009. Second, the roster lists the numerical attendance, haring experience and date of the last hash attended alongside the mother-given and hash-given names of each individual. This roster information has been maintained since the kennel's founding; over 520 people have hashed at least once with Blooming Fools.

Over a majority of its lifetime, the kennel claimed no more than two-dozen participants for any given hash. Following a peak in 2000, attendance plummeted until 2010. Numbers gradually rose through the summer until attendance reached past mid-40s by November.

Much of the attendance increase could be associated with a change in marketing strategy. Most all hash events have been announced on the Blooming Fools blog since September 2007 and likewise on the Twitter account since June 2009. Though a discussion forum is also available, it has been sporadically used by only a few hashers; and

the Twitter account only broadcasts to one-dozen followers. However, the Facebook group ballooned since its first event announcement in March 2009. By the start of 2010, on average 40 people were notified of events within the group; in February, 65; March, 50; April, 90; May, 80; June 185; July, 145; August, 145; September, 155; October, 130; November, 180. Streamlining the announcements of events through a networking system in which current and potential hashers all utilize suddenly opened the group to the local masses.

## IndyScent

The IndyScent Indianapolis, Indiana kennel is described by Blooming Fools as a “drinking club with a running *concern*.” Boasting over 120 named hashers during 2010, the kennel averages one-to-two dozen hashers per hash and three hashes per month. By the end of 2010, the kennel hashed 424 times since its inception in August 1999.<sup>4</sup>

By distributing the hashes among different days of the week, it affords more opportunity for hashers to attend at least once a month. Wednesday night hashes are short and don't have a beer check; Friday night hashes are medium-length and includes one or two beer checks; Saturday afternoon hashes are lengthy and includes upward of three beer checks.

Because so many of the members can't consistently attend hashes, they don't observe forcing returners to down-down. They also claim a dozen hashers as part of the organizational structure, universally deemed Mismanagement. With an elaborate online database, hashers can quickly research hash and hasher attendance records.

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4 <http://goo.gl/WxdbS>

[http://indyhhh.com/?option=com\\_content&id=132&Itemid=57](http://indyhhh.com/?option=com_content&id=132&Itemid=57)

## Louisville

The Louisville, Kentucky kennel<sup>5</sup> was initiated in 2009 and claims 40 hashes by the start of 2011. As a new group, it is powered by seasoned and married hashers Kotex and Pro Boner, who already claim much experience nurturing young kennels, such as one in Lafayette, Indiana. The kennel averages a dozen hashers per hash and alternates hashing Saturdays with Blooming Fools to eliminate scheduling conflicts for the sake of traveling hashers.

However, poor growth and marketing is by far the most problematic issue for the kennel. With no social network established prior to moving to the city, few locals know of the kennel's existence. Given the founders' honored status among area kennels, hashers generously visit Louisville, often tripling attendance. For instance, the December 15, 2010 Holiday Hash included hashers from Bloomington, Lexington and Dayton, Ohio.

## Boulder Flatlanders

After discovering the contact information for the Boulder Flatlanders in Colorado<sup>6</sup>, I contacted the hasher, Chacockqua, and he offered a ride to the February 12 snuggie-themed hash in downtown Longmont. About a dozen hashers attended, including one Just and a virgin. Unlike other kennels, after collecting the \$5 fee, they didn't maintain any attendance records.

At chalk talk, they introduced a number of symbols varying from what was common in the Midwest kennels. A Back Check (BC) which returns hashers a certain number

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5 <http://goo.gl/gHuj8>

<http://sports.groups.yahoo.com/group/louisvilleh3/>

6 <http://bfhhh.org>

of markings in reverse is rather referred to as a Check Back (CB); to indicate the end of the trail, HHH is marked instead of On-In; a check is generally called a Decision Point; and a hare's arrow is tailed with two parallel lines instead of three.

Chalk was handed out to hashers to mark the trail. As hashers venture trail from a check, they use chalk to annotate the check, often indicating with an arrow and their initials (or a symbol representing the hasher) the direction of their heading (**FIGURE 10**). If a trail is marked bad, the arrow annotation is likewise marked at the check. If the trail dies before four flour dots, it's annotated with a "?" meaning it could be a misread trail but most likely not true trail.

After a 12-minute head start, the hounds start to chase the hares along the trail being laid "live" in the 50-degree freshly melted icy streets. For the next three-minutes, hashers walk to buffer a little more time for the hares while still quickly getting the



**FIGURE 10:** Hashers annotate a check indicating directions of bad trails and the final trajectory of the pack. Photo by BFH3.

hashers on trail. Due to poorly marked trail and a disruptive start, the dozen hashers were never together throughout the trail after the first check.

Eventually, Beer Check was found along a small, flowing creek-bed, as the hares waited for incoming hashers. Beers were placed along the snowy, cold ground for the taking. After 10 minutes, the hares continued laying trail as hashers waited in vain for the pack to regroup. Instead, Chacockqua marked an adjacent, more visible section of concrete path, indicating where the Beer Check was and the direction trail continued.

At the On-In, we grouped in a furnished shack. After asking about the quality of the trail (“it sucked”), down-downs persisted beyond trail violations, as any excuse to encourage more singing and drinking: All Just’s drank together. Hares drank together. Those who brought virgins always drank with their virgins. Those with facial hair; with animals or “cock” in their hash names; cursed with “Ron Howard” red hair; who forgot song lyrics or failed to sing; who hashed in a state starting with an “I” (e.g. Indiana and Iowa); or who wore pirate memorabilia drank separate down-downs.

Most of the songs lend themselves to long sessions of improvisation, allowing hashers to introduce new verses between the chorus to riff on each other. With at least three of the Boulder hashers dedicating personal time to research, rehearse and teach new songs, the kennel is infused with a rich and diverse hymnal. After 1.5 hours of down-downs, the group concluded, singing “Swing Low, Sweet Chariot.”

The situation and values of the Boulder Flatlanders seem extremely contrasting to those of Blooming Fools, despite both hailing from college towns. Boulder was founded in 1998 by a group of students who often played Ultimate Frisbee. Frustrated with how other area kennels were organized, they socially isolated themselves from the broader hashing community and dedicated to value live trails and elaborate circles.

Much like Blooming Fools, with a healthy portion of hashers also university students, it's difficult to maintain a consistent group of participants.

Chacockqua has hashed over 200 times over the last decade, yet he doesn't care to track his exact attendance. His philosophy is likewise shared by the Boulder kennel. The number of times someone hashes and who attends doesn't matter. The point of hashing is to have fun with friends while drinking. As such, the only information recorded for each Boulder hash is the incremental number of the event (e.g. February 12, 2011 was the 277th hash of the Boulder Flatlanders) and the names of the hares.

Due to the small size and philosophy of the kennel, they don't naturally encounter many of the problems more frequently experienced by Blooming Fools. Without a sign-in, there is no bottleneck to sign-in. With an easily countable number of attendees, knowing who is or is not at Beer Check isn't very problematic. Without a roster, knowing who celebrates an anniversary or who didn't attend the last hash is no longer relevant, and a naming happens whenever someone simply claims they've hashed five times.

## Lexington Lunatics

A four-day weekend event called the Lexington Hash Bash resulted from the collaboration of two Lexington kennels, the Horse's Ass<sup>7</sup> and Lunatics<sup>8</sup> House Hash Harriers. While Blooming Fools has no problem finding hashers to hare (the calendar is booked months in advance), the Horse's Ass struggles to find hares for every hash. The Lunatics was formed to address that problem and be even less formally structured

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7 <http://lexingtonhah3.com>

8 <http://goo.gl/TYJgc>

<http://sports.groups.yahoo.com/group/L2H3/>

than most kennels. Hosted by the Lunatics as their 12th hash, the event's first day on Thursday, March 17, tasked two-dozen hashers to hash and don kilts along the downtown streets of Lexington in celebration of St. Patrick's Day.

After a hasher pays the fee for a Lunatic hash, the hasher rolls a six-sided dice in a bed pan and writes the number next to their name in a bound sign-in book. If a hasher rolls a one or two, they chance being the day's hare; if a five or six, they chance being the Hash Mouth, i.e. the hasher running Circle. After circling for chalk-talk, those in line to be a hare re-roll for low numbers until three hashers emerge as the final hares and given a map of the pre-designed trail; high numbers re-roll until a single hasher is chosen as the Hash Mouth and given a scepter representing the hasher's temporary authority. In this way, the Lunatics provide everyone an equal chance to hare and engage in Mismanagement duties without any but the few dedicated organizers to be burdened by the responsibility.

# Literature

Despite such a large international community, I desperately scrounged for any academic literature concerning the House Hash Harriers.

While HCI fails to reference the community, any mentions primarily concentrate within the social sciences and humanities. One article from a Singapore university encouraged the government, agencies and locals to support the House Hash Harriers as a means to likewise stimulate the country's economy via sport tourism.<sup>9</sup> Another article categorized communities into three organizational structures: pools, webs and hubs.<sup>10</sup> Both the House Hash Harriers and Facebook were labeled as a web structure, in which “personal relationships are the key” due to the sharing of “similar or complementary needs.” Perhaps a dominate reason why Blooming Fools attendance more than doubled in 2011 (see **“Attendance ballooned” page 38**) was due to the increased and efficient use of Facebook as the primary means of intra-group communication. Both the culture and the service structures are aligned.

Investigating the culture in lieu of its physical demands reveals exertion interfaces as the most relevant HCI field. Lead by researcher Floyd Mueller,<sup>11</sup> the field explores “the use of exertion as input to computer technology.”<sup>12</sup> The *Jogging over a Distance* project

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9 Nopembri, Soni and Tri Ani Hastuti. “The development of Hash House Harriers to advance sport tourism industry in Yogyakarta.” *Saryono Yogyakarta State University*.

10 Fournier, Susan and Lara Lee. “Getting Brand Communities Right.” *Harvard Business Review* 5 July 2009: 105-11. Web.

11 <http://floydmueller.com>

12 <http://exertioninterfaces.com/cms/about.html>

uses spatial audio to pace non-located runners; the conversation of a remote partner pans forward if the partner's pace is faster and backward if slower.<sup>13</sup> This project like nearly the rest featured by Mueller are concerned with remote social interactions and therefore tie more appropriately into the realm of computer-supported cooperative work. These projects neglect the importance of exertion acting as a bonding agent for intimate communal relationships. Instead of focusing on creating or reinforcing relationships within one's present locale, they rather attempt to artificially extend relationships in a means no longer capable of physical intimacy.

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13 <http://exertioninterfaces.com/cms/jogging-over-a-distance.html>

# Exemplars

An exploration of community-driven projects reveals what hashers deem important to hashers.

## Publications

*Harrier Magazine* is a quarterly publication featuring interesting hashing experiences, calendar of upcoming international events, travel tips, editorials, reviews of products used on trail and interviews of hashing personalities (FIGURE 11).<sup>14</sup> Launching in 2002, the magazine claims subscribers in over 40 countries and circulation of 10,000 copies per year.<sup>15</sup>

*Half-Mind Weblog* is a blog authored by Flying Booger, one of the most respected voices in the hashing community.<sup>16</sup> Writing about his hashing experiences since 1990, Flying Booger also produced the *Half-Mind Catalog* in 1995, the first online resource for international kennel contacts and event calendars. Premiering in January 2004, the blog covers topics such as advice and techniques for Mismanagement and hares, interviews of select hashers, commentary on hashing publications, rants about the culture and reviews of hashing projects.

14 <http://harriermagazine.com>

15 <http://goo.gl/XrjCb>

<http://harriermagazine.info/harrier/Harrier%20media%20pack%2020095.pdf>

16 <http://pwoodford.net/hashblog/>



FIGURE 11: The October–December 2009 issue of *Harrier Magazine* contrasts the use of a compass and GPS device on trail and during scouting.

## Directories

There are numerous efforts on both the local and global levels to curate directories of kennel contact information. These projects spawn from early printed directories often created and distributed by traveling hashers.

The *World Hash House Harriers Directory* hosts a database of nearly 2,000 kennel contacts and 24,000 hasher contacts.<sup>17</sup> Forms allow anyone to submit or update kennel contact information; the submissions are reviewed and the database alters accordingly.

More commonly, directories are locally curated; for example, established in 1998, *Go To The Hash* simply links to country-level directories.<sup>18</sup> Though localizing may seem like it should provide more accurate information, it doesn't seem to be the case, as it also decentralizes and varies the quality of the data.

Examining three independently curated sources of kennel contacts for Pennsylvania reveals 14–23 kennels. Of them, only 13 are listed in all three sources and each has 1–6 kennels not listed in the other sources. Only the *Half-Mind Catalog* explicitly labels kennels as “dead” if not hashing at least once per month, while the other two sources simply excludes them.<sup>19</sup> The *World HHH Directory* erroneously and redundantly lists the Ben Franklin Mob kennel as also the Franklin Mob kennel.<sup>20</sup> Four of the 14

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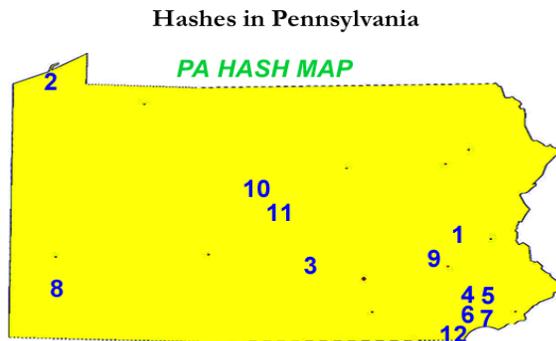
17 <http://gthhh.com/WorldHashDirectory.aspx>

18 <http://gotothehash.net>

19 <http://goo.gl/OhdMF>  
[http://half-mind.com/regionalwebsite/p\\_list1.php?state=PA](http://half-mind.com/regionalwebsite/p_list1.php?state=PA)

20 <http://goo.gl/nqU5i>  
<http://gthhh.com/WorldHashDirectory.aspx?gk=&page=State&state=Pennsylvania>

kennel hyperlinks on *Hash in Pennsylvania* are broken (FIGURE 12).<sup>21</sup> In essence, no effort seems to fully and accurately reflect the current state of the hashing community in even a small scale (i.e. in this state-level subset, representing 1% of the global community).



**FIGURE 12:** Four of the 14 kennel hyperlinks listed in *Hash in Pennsylvania's* directory are outdated. Philly New Moon and Hockessin kennels are not listed in other comparable directories.

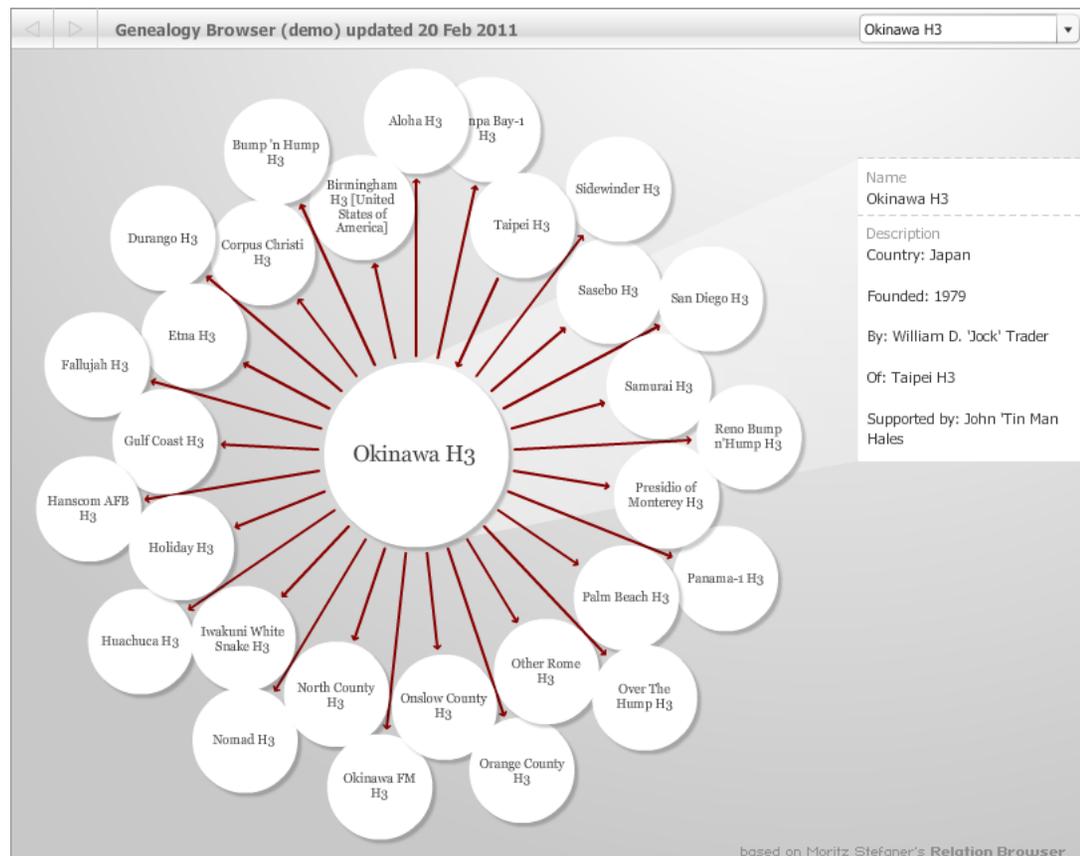
**WARNING:** By clicking On-On any link here, you are certifying you are old enough to drink alcohol & have Half-A-Mind to do so after you run. If you don't have a politically-incorrect sense of humor, go [BACK](#) the way U came.

Location	Hash	Contact Information
Earth	Global Trash	<a href="http://www.gotothehash.net">http://www.gotothehash.net</a>
Allentown	Allentown	<a href="http://www.lv3.com">http://www.lv3.com</a>
Erie	Eerie	<a href="http://www.geocities.com/Colosseum/Goal/4187/Eerie_Hash_House_Harriers.html">http://www.geocities.com/Colosseum/Goal/4187/Eerie_Hash_House_Harriers.html</a>
Harrisburg	Harrisburg/Hershey	<a href="http://www.h5hash.com/">http://www.h5hash.com/</a>
Philadelphia	Philly Full Moon	<a href="http://fullmoon.phillyhash.com">http://fullmoon.phillyhash.com</a>
	Ben Franklin Mob Hash	<a href="http://bfm.phillyhash.com">http://bfm.phillyhash.com</a>
	Liberty Bell	<a href="http://www.hashinphilly.com">http://www.hashinphilly.com</a>
	Philadelphia	<a href="http://www.phillyhash.com">http://www.phillyhash.com</a>
	Philly New Moon	<a href="http://www.elsewhere.com/newmoon">http://www.elsewhere.com/newmoon</a>
Pittsburgh	Pittsburgh	<a href="http://www.pgh-h3.com/Great_Organizers">http://www.pgh-h3.com/Great_Organizers</a>
Reading	Reading	<a href="http://www.readinghash.20m.com/index.htm">http://www.readinghash.20m.com/index.htm</a>
State College	Nittany Valley	<a href="http://www.nvhbh.org/">http://www.nvhbh.org/</a>
	Nittany Valley Full Moon	<a href="http://www.nvhbh.org/fm/nvhbhfullmoon.html">http://www.nvhbh.org/fm/nvhbhfullmoon.html</a>
	Terra Pocus Lux	<a href="http://www.nvhbh.org/rathash/">http://www.nvhbh.org/rathash/</a>
Wilmington	Hockessin	<a href="http://www.hockessinhash.org">http://www.hockessinhash.org</a>

21 <http://hashinpa.com>

# Genealogies

Premiering in 1998, the *Hash Genealogy* project seeks to trace the origins of every kennel to the originating Kuala Lumpur kennel.<sup>22</sup> The project records each kennel's name, the date of its inaugural hash, the hashers who founded the kennel and the previous kennel of the primary founder.<sup>23</sup> As of January 2011, the project identified



**FIGURE 13:** The *Genealogy Browser* provides an interactive means to navigate the House Hash Harriers family tree. Accordingly, Blooming Fools' lineage (established in 1997) traces from Mount Vernon (1985), Samurai (1984), Okinawa (1979), Taipei (1973), Singapore (1962) and Kuala Lumpur (1938).

22 <http://thehashhouse.org/genealogy/>

23 <http://thehashhouse.org/genealogy/gendatadef.html>

2,292 kennels claiming a heritage to another kennel,<sup>24</sup> 337 minimally naming their respective founding members<sup>25</sup> and 557 in which only the title of the kennel is known.<sup>26</sup> Unlike the directory projects, this genealogy attempts no effort to presume the activity of any of these 3,186 kennels; therefore, even if many kennels in this listing is inactive, it still suggests there may be several hundred kennel contacts not listed in the *World HHH Directory*. An interactive visualization utilizing this data provides an alternative and more engaging means of exploring this family tree (FIGURE 13).<sup>27</sup>

## Encyclopedias

Two online encyclopedia were published as a way to define discourse and document the culture. Launched in 2009, *Hashpaedia* is edited and primarily authored by a single hasher, growing the resource to approximately 600 articles documenting renown hashers, countries, events and general terminology (FIGURE 14).<sup>28</sup> The author declares ambitions to eventually relinquish editorial rights to a team of volunteers.<sup>29</sup>

Also premiering in 2009, *HashSpace Wiki* is a traditional Wikipedia-style resource in which anyone is free to contribute.<sup>30</sup> Though not covering as much breadth as *Hashpaedia*, the wiki provides more in-depth entries concerning hash history, traditions, kennels, hashers and events.

24 <http://theshashouse.org/genealogy/genmothers.html>

25 <http://theshashouse.org/genealogy/genfathers.html>

26 <http://theshashouse.org/genealogy/genpossibilities.html>

27 <http://phuk.org.uk/RelationBrowser.html>

28 <http://shakespublishing.com/prepage.htm>

29 <http://shakespublishing.com/intro.htm>

30 <http://wiki.hashspace.com>

The Hashpaedia website features a navigation bar with the logo 'The hashpaedia' and an 'Index letter' dropdown menu. Below the navigation bar is an 'Index' section titled 'About the hashpaedia' with a grid of four columns: Hashers, Countries, Events, and Miscellaneous. Each column contains a list of hash-related terms with links to their respective articles. Some items are highlighted with red text, such as 'New photos' and 'Updated'. Below the index grid are three article preview boxes for 'Abominator', 'Ace', and 'Acko', each with a small image and a brief description. The 'Abominator' article includes a photo of a man and a woman. The 'Ace' article includes a photo of a man. The 'Acko' article includes a photo of a man. The 'AfricaHash.co' article is also visible in the bottom right corner.

FIGURE 14: Edited by a single hasher, *Hashpaedia* compiles 600 hash-related articles.

## Merchandise

Because hashers associate so strongly with their community, they like to wear hash-branded gear as produced by the community. Since hashers want to look stylish while protecting their legs throughout a trail, *HashGoods* specializes in knee-high socks labeled along the sides with ON ON, BEER, SHIGGY, NERD, BACON, etc. (FIGURE 15).<sup>31</sup> Beyond a few shirts, *HashCrap* provides patches and magnetic stickers with the option of designing customized items.<sup>32</sup> More comprehensively, *HashShirts* supplies dozens of shirt, hoodie and sock designs. These retailers and more often post their merchandise on the *HashSpace Store*, as a centralized online market for hashers.<sup>33</sup> One of the most popular items is the Hash Name Necklace, customized to the individual hasher.<sup>34</sup> The store also enables hashers to register for worldwide hashing events.<sup>35</sup>

## Social network

Built upon the Ning platform in early 2008,<sup>36</sup> *HashSpace* is the principal online social network for hashers.<sup>37</sup> As an invite-only network, the community itself enforces the privacy standards, allowing hashers to be less worried about compromising their real

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31 <http://hashgoods.com>

32 <http://hashcrap.com>

33 <https://store.hashspace.com>

34 <http://goo.gl/IQ4iw>  
<https://store.hashspace.com/product.php?productid=16142>

35 <http://goo.gl/a8u6b>  
<https://store.hashspace.com/home.php?cat=256>

36 <http://ning.com>

37 <http://hashspace.com>



**FIGURE 15:** BEER socks protect a Blooming Fools hasher during the February 19, 2011 hash.

identities due to uncensored content. The site features photo and video galleries, blogs, discussion forums, messaging and wall postings to foster relationships among hashers (FIGURE 16). As of April 2011, the network has grown to over 20,000 members.

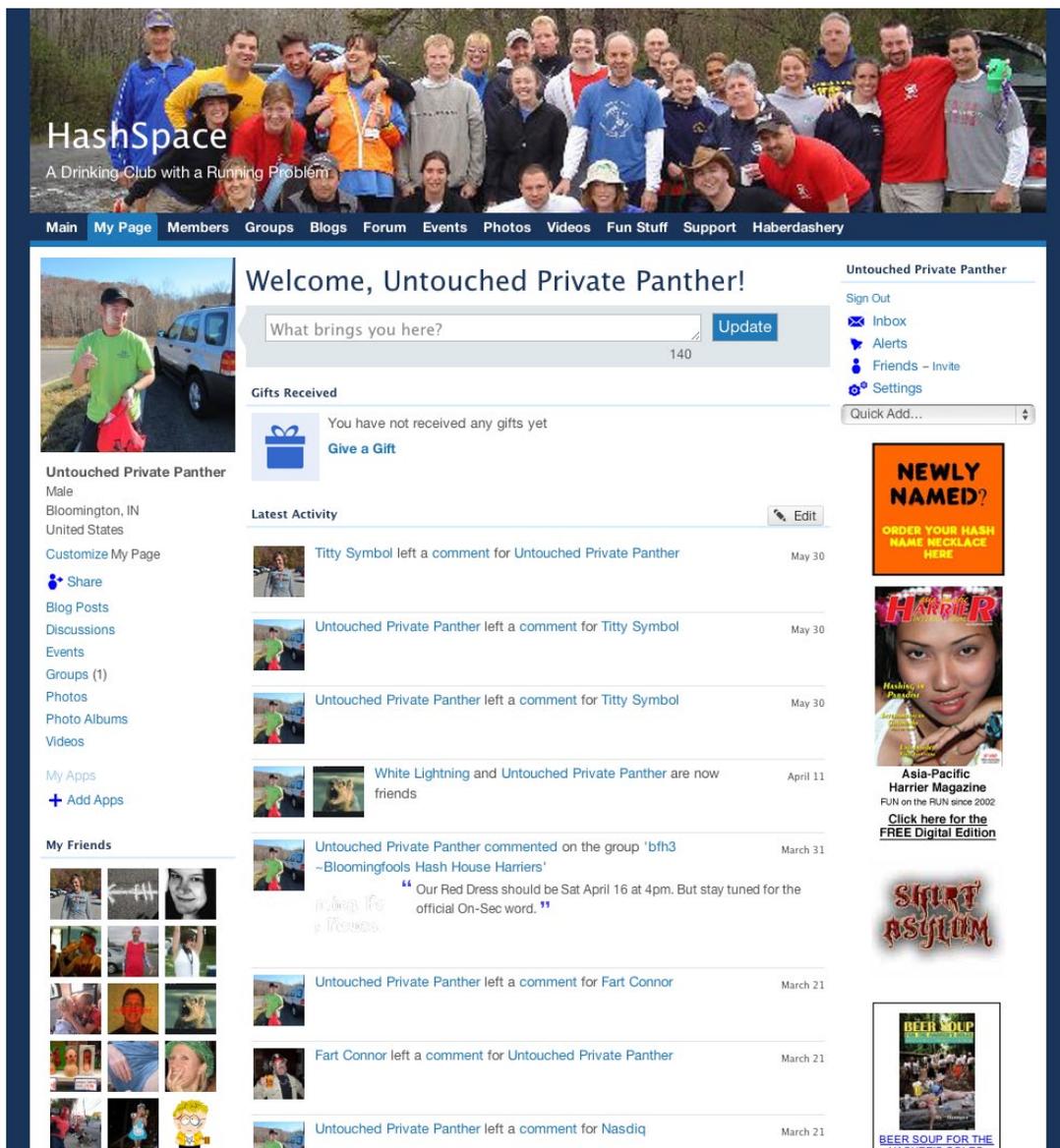


FIGURE 16: Hashing friends can post comments on my personal Untouched Private Panther HashSpace wall, while keeping their real identities discrete.

# Findings

## Murphy's law

Be it cold or stormy weather, poorly marked trail, insufficient beer, cops called to investigate shenanigans, or lost or injured hashers—what can go wrong at a hash will go wrong at a hash. By buffering for six-weeks to design the November 13 hash, it provided so much time to make it “perfect” that we failed to realize accounting for every factor is not achievable, nor is it ideal.

A hash void of the unpredictable, mishaps and chaos is simply a boring hash. These in-situ “screw-ups” makes every hash special and memorable for attendees. These are even immortalized and published by kennels in summarized commentaries written by the Mismanagement Hash Scribe, called Hash Trash. Each misadventure is an irreplaceable memory shared among hashers, reverently told in the same weight as a wartime battle story.

Even though misadventure makes a good story, it may be nerve-racking while experiencing it. After backtracking along confusing markings during the February 18 hash, the pack moved forward, incidentally finding true trail and unknowingly continuing without myself and another. Out of range to hear a whistle, we struggled and eventually found true trail. By the time we discovered Beer Check, all hashers already left. Knowing the trail circled back to the beginning, we ventured back and beat the rest to the end, rather than following further behind on the last half the route.

“What can go wrong at a hash will go wrong at a hash.”

After regrouping at On-In, at least four hashers approached me, wondering where I was; one even attempted to call me during the trail, though my phone was not with me at the time. With only two missing, our absences were much less noticeable than if a large group was missing, such as I also experienced on the November 27 hash. Nevertheless, it was concerning that no one wondered about my fellow lost hasher, nor maybe even suspected he was missing.

## Not everyone is having fun

In spite of the underlying complexity of a hash, it's important hashing doesn't become a job. When Mismanagement has to heckle hashers to pay the standard \$6 fee per event, hashing becomes a job. When the On-Sec (i.e. secretary) has to manually input attendance data in a spreadsheet, hashing becomes a job. When the Hash Mouth has to quickly read through a 12-page roster to list returner and anniversary down-downs, hashing becomes a job. When the Sweeper (i.e. a hasher responsible for finding lost hashers) has to (often erroneously) head count people to know if anyone is missing, hashing becomes a job. Such menial and understated tasks prevent many hashers from fully participating in a hash.

## Attendance ballooned

During summer 2010, Blooming Fools averaged less than 20 hashers per hash and hashed twice per month, on alternating Saturdays. In September, the kennel added another monthly hash, occurring during full moon nights. By November, attendance averaged mid-40s. Since hashing dates have lately been claimed by hares months in advance, Mismanagement adopted a fourth monthly hash in May 2011 called a Wild Hare hash, permitting the hare to choose any day of the month for the event.

Even though Blooming Fools is extraordinarily accommodating regarding its explosive growth, the hares and Mismanagement have little to no experience at such scale. To assist administrative activities, positions within Mismanagement tripled in April 2011, adding two Joint Masters (i.e. assistant manages), a Beermeister (i.e. purchases beverages), a Hash Scribe (i.e. authors of the Hash Trash), a Choir Director (i.e. teaches down-down songs), two Haberdashers (i.e. designs and sells memorabilia) and an AmbASSaWhore (i.e. arranges regular visits to other kennels).

## Kennels are culturally distinct

Kennels are the products of the hashers in them, and therefore, each offers their own flavor. Indianapolis focuses heavily on drinking and socializing, while Boulder endears elaborate songs and long Circle ceremonies. Bloomington has increasingly become athletic, with longer and elaborate trails; provides high quality beers; obsesses over orange snacks; and sings from a very bland song list. Louisville consists of a majority of visitors as they're still trying to grow local interest. Lexington has problems committing hashers to hare. Indianapolis, Lexington and Boulder always lay the trail minutes before the pack follows (i.e. live hare), while Bloomington and Louisville primarily pre-lay trail (i.e. dead hare).

In more populous areas, it is not uncommon for multiple kennels of various flavors to hash independently. For example, D.C. claims 15 kennels<sup>38</sup>, of which some are gender-specific, intended for the athletically elite or more family oriented. Kennels often emphasize different trail symbols or mark them differently. Blooming Fools recently switched from marking Checks with an encircled X to an encircled dot, so the dot can be reshaped as an arrow pointing in the direction of traveling hashers.

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38 <http://dchashing.org>

## Hospitality

A spirit of hospitality for newcomers and visitors is completely prevalent in the hashing culture. Virgin hashers are exempt from any hash fees. Neighboring kennels (e.g. Blooming Fools and Louisville) purposefully hash during different times as to encourage area hashers to visit.

For those who often travel or move, hashing is an instant social network. Hashers arrive at a new town, hash and immediately befriend dozens of locals. Without a vehicle in Boulder, a local hasher drove me 30-minutes round-trip to the hash. Following a Caribbean hash cruise in January 2011, hashers in Florida graciously offered fellow hashing vacationers from Egypt to stay as guests for as long as they desired, while the country settled after the political unrest and revolution. Such hospitality to frequent travelers is probably a primary reason why hashing was able to dramatically spread worldwide over the last 50 years. Its no coincidence hashing is extraordinarily popular in frequently traveling military circles, as that's also from which the community was formed.

“Hashing is an instant social network.”

# Insights

## No efforts address issues during a hash

All efforts by hashers, as reviewed in the Exemplar section, seem to address the culture from an outward-inward perspective. Publications comment upon the culture; directories provide a communication channel among kennels; wiki's define and explain discourse and the culture; e-commerce sites brand the community; genealogies maintain the culture's history; and social networks foster the relationships within the community. However, none of these efforts address issues or opportunities specially occurring during a hash.

## Responsible irresponsibility

Even though hashing seems and plays up a facade of irresponsibility (a down-down song proudly exclaims hashers are “the leaders of debauchery”), it doesn't mean hashers are careless. Rather, hashers desire participants to have fun, be safe and welcomed, to return and tell their friends about hashing. It should be possible to enable hashers to be more responsible and caring for the wellbeing of one another without altering the “irresponsibility” of the sport.

## No universal design

Because each kennel claims different values and principles, no matter what is designed for Blooming Fools, it will most likely not be universally applicable or desirable to all kennels. For example, since Boulder and New York City don't actively sign-in attendees, it would take considerable effort for those kennels to adopt, e.g., a digital sign-in system than Bloomington or Indianapolis, who have been conditioned to sign-in attendees since their respective inceptions.

In the same manner that kennels don't universally share values, hashers each possess unique reasons for participating in the sport. While I hash primarily for geographic exploration and adventure, others hash for socializing, drinking, exercising, networking, escapism or spiritual fulfillment. Therefore, some may understand and promote the value of the designed solution, while others will most likely ignore or outright reject it, for it may not align with their personal reasons for hashing.

# Problem

The user research, literature and exemplar reviews, findings and insights directed to a core problem.

## Who's lost on trail?

Desiring to address the issue of providing a more responsible means of caring for participants during the chaotic happenings of a hash, the core problem emerged as a question asked during nearly every two-dozen hashes attended: Who's lost on trail?

With three- to four-dozen in attendance, confidently knowing who amongst the mass of shifting hashers is not at Beer Check or the On-In is a near impossibility. As a precaution as much as a rest period, hashers wait 30–45 minutes at these waypoints to regroup the kennel before continuing. An accurate assessment would allow hashers to judge whether to wait longer, send out search parties or move forward with the hash.

However, the aforementioned question begs another. To know who isn't at a waypoint, one needs to identify everyone in attendance. Therefore, in order to address the core problem, the sign-in roster will have to be reevaluated.

# Constraints

Before designing for the core problem, there are a few constraints which need to be considered in lieu of the culture.

## Expense

Kennels don't tend to hoard an income, as Mismanagement often only requests a fee proportional to the amount to fully compensate any hash, though this often increases due to inflation, the size of the kennel or the general living costs of the area. For example, in 1997, Blooming Fools charged \$2 per event; in 2007, the \$4 fee raised to \$5; in late 2010, the fee peaked at \$6. The Chicago HHH<sup>39</sup> charges \$8 while New York City kennels charge \$20 for both pizza and beverages.<sup>40</sup> Excess funds are usually only reserved to offset costs for merchandise or annual weekend hashing excursions, and it's not splurged on regularly scheduled hashes. Therefore, the cheaper the solution, the more likely kennels will adopt it. Otherwise, the value of the solution would need to be substantial if the only way it could be afforded is by raising the standard fee.

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39 <http://chicagohash.com>

40 <http://goo.gl/yjpuh>

<http://hashnyc.com/?option=content&task=view&id=18&Itemid=42>

## Portable, durable & replaceable

Assuming whatever designed is intended to be utilized during a hash, then the solution needs to be able to be transported wherever hashers go and be robust enough to survive the harsh environmental conditions hashers commonly face. Because hashers often forget even their lanyard whistles, the system shouldn't be solely dependant on hashers bringing an artifact; instead the system could simply be enhanced by the inclusion of an artifact. Therefore, an ideal solution is small, lightweight, waterproof, shockproof and easily replaceable or non-critical to the system.

## No tech on trail

Some kennels are adamant against any tech use on trail, believing the purity of the hash is tainted when not relying solely on the marked trail and fellow hasher (**FIGURE 17**). Nevertheless, many kennels over the last decade or more have adopted the Hash Flash Mismanagement position as a way to consistently photograph a hash, as a secondary form of documentation, coupled with the Hash Trash summary. As digital cameras continue to become cheaper, lighter and water-resistant, hashers are more prone to tote such technology along trail. With smartphones including both high-quality cameras and GPS technology, hashers can simultaneously photograph and record the route.<sup>41</sup> One Nashville hasher has gone further, occasionally securing a HD video camera to a head strap, later time-lapsing the two-hour recorded hash to a 15 minute YouTube upload.<sup>42</sup>

41 <http://musiccityhash.com/hash-log/604>

42 <http://youtube.com/user/Lancero1013>



FIGURE 17: Issue #45 of House Hash Harrier comic strip

Hash Boy criticizes the use of tech on trail.

<http://goo.gl/XeeBi>

<http://pinky.org/hashboy/strips/hb45page.html>

For some the hashing experience may be as much about documenting a hash as participating in it; toting technology could be a necessary evil or in itself enhance the experience. However, for the majority, such a disdain for technology is most likely spurned by a fear of needing to coddle it in a manner which would rob the individual of their hashing experience. To not tote any technology is to retain freedom, for one doesn't need to care if equipment is damaged or hinders mobility. To not carry a location-aware device is to remove the temptation to "cheat" and not find or follow the hare's trail. Any technological solution should astonishingly reward the hasher with not burdening or obtruding the hashing experience.

# Concepts

## Assisting the hares

During early concept generation, most of my efforts targeted opportunities to assist hares, as they're ultimately responsible for all aspects of a hash (**FIGURE 45**). Spurred from struggles personally experienced while haring in November 2010 (**see “Participatory ethnography” page 16**), a resource such as a database of all suitable parking locations in Monroe County capable of supporting three-dozen vehicles would tremendously assist in narrowing potential starting locations. However, no effort should need to be taken to discover new starting locations. Given Blooming Fools has hashed over 300 times since 1997, a map projecting every starting location could prompt old locations to be reused or new ones to be found in areas never explored (**FIGURE 46**). Since records for these events are quite erratic, backfilling such a database would demand tremendous diligence.

Perhaps other logistics, such as purchasing beverages, could be simplified. If, according to Facebook RSVP's, one knows who to expect at a hash, then one can better estimate both the quantity and types of beverages to acquire relative to personal preferences and leftover drinks.

In a more futuristic solution, the hares could utilize a device to record a live trail as it's laid in order to better estimate the duration and complexity of a trail for on-the-fly optimization; the interface could be integrated into the flour container itself, as to not introduce a new hare artifact (**FIGURE 18**).

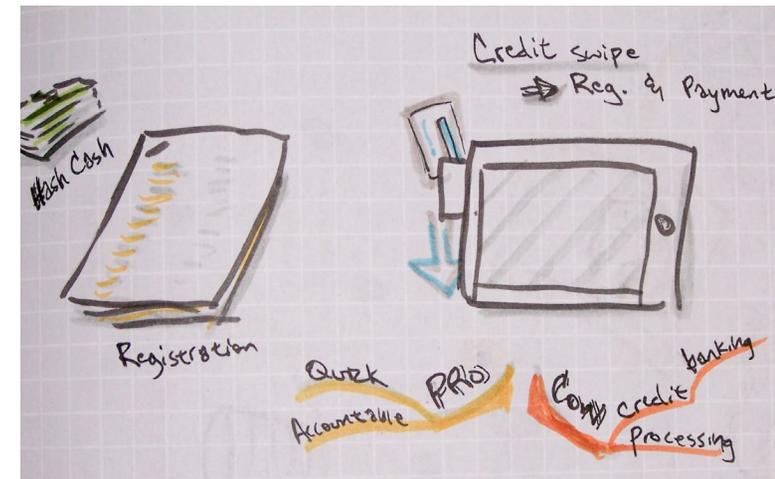
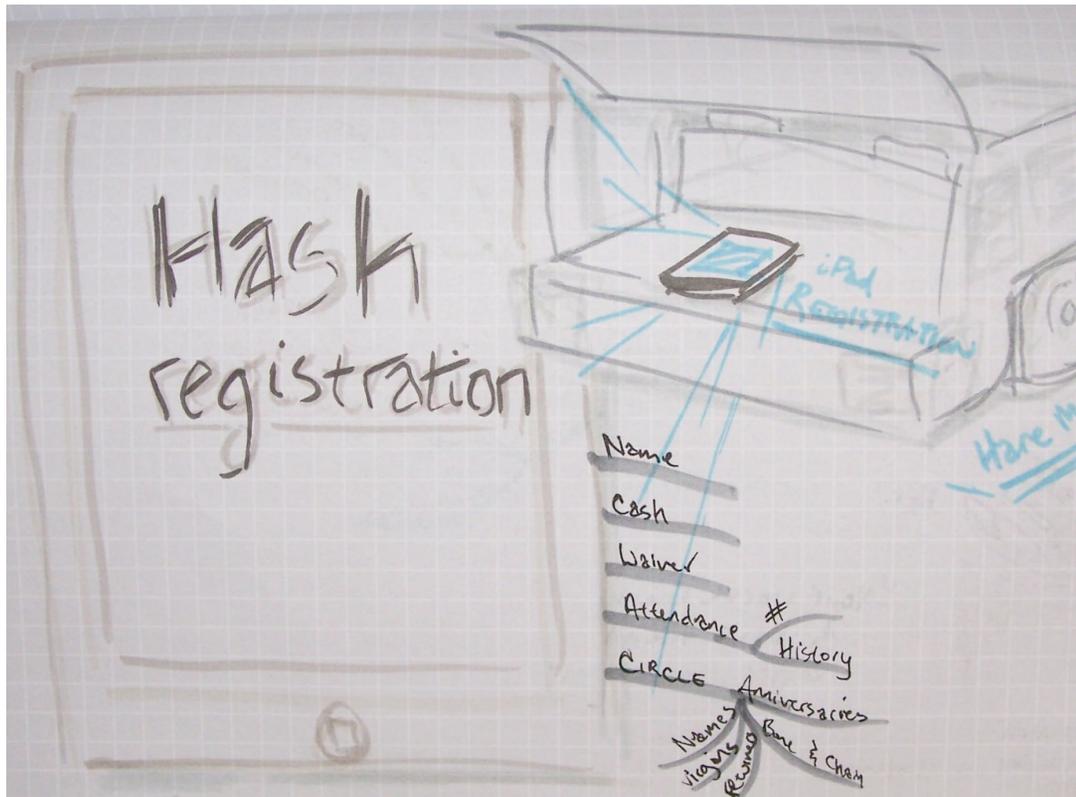


**FIGURE 18:** The Hare Bottle concept records a trail as it's laid. Watch video prototype: <http://vimeo.com/16877241>



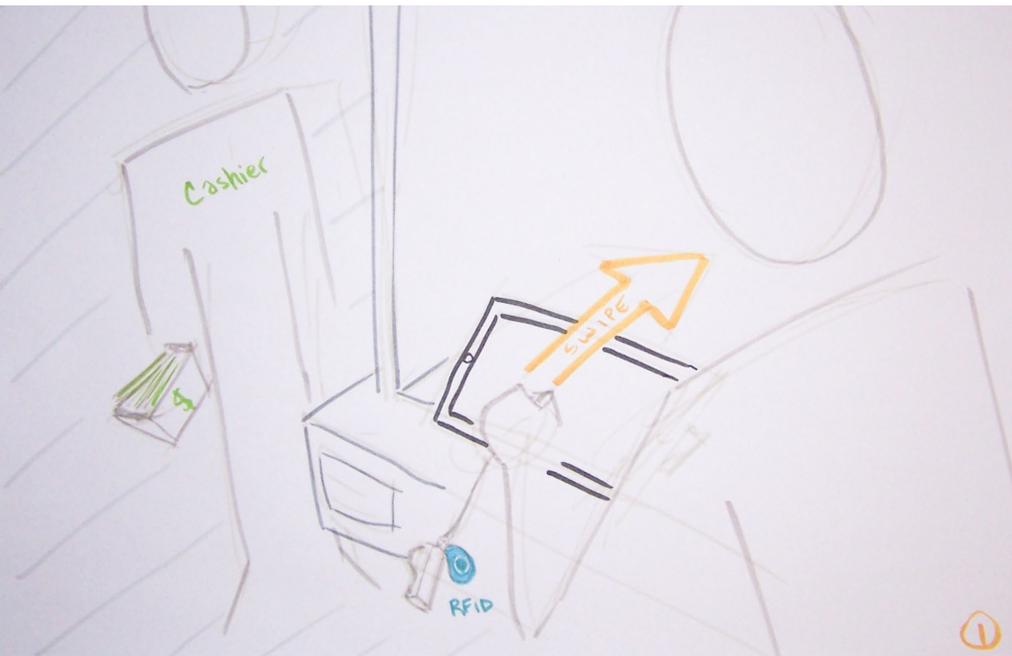
## Digitizing registration

Though not directly assisting the hares, perhaps payment and registration could be digitized into a singular system. A tablet-sized device would be portable, yet provide a large enough screen that hashers could casually and quickly interact with it (**FIGURE 20**). Swiping a credit card could simultaneously pay the event fee and check-in the person (**FIGURE 19**). As a way to encourage more accountability, the Hash Cashier could approve all hasher check-ins upon payment (**FIGURE 47**). Alternatively, a hasher could pay via PayPal or, if no means of paying, could add the fee to a rolling tab. These features were further explored and tested in a later paper prototype (see “**Payment paper prototype**” page 55).



**FIGURE 19:** (Above) Swiping a credit card could simultaneously check-in a hasher and pay their event fee.

**FIGURE 20:** (Left) Digitizing the registration system enables more swift and casual interactions.



**FIGURE 47:** As a way to encourage more financial accountability, a hasher isn't officially checked-in to a hash until the Hash Cashier confirms payment of the event fee by swiping their own RFID key fob.

As the problem scope narrowed, payment became ancillary to the core problem of checking-in hashers so Mismanagement and hares accurately know who to expect at Beer Check and Circle (see **“Problem”** page 43). One of the most tedious aspects of initially checking-in is searching for and initialing one’s name in a 12-page printed spreadsheet (FIGURE 21). Such administrative duties bottlenecks both the hashers registering and manning the registration from fully participating in the hash, for the sake of the process. However, this process can simplify and be less obtrusive.

As initialing itself doesn’t consume much time, the primary means of simplification is to eliminate searching. Many kennels don’t have this problem as names are merely signed sequentially in a bound book and never digitally transcribed. One benefit of the spreadsheet is the attachment of secondary data to an attendee, resulting in many of the statistically-based down-downs, such as Returners and Anniversaries (see **“Dictionary”** page 101). Blooming Fools methodically maintained such data since its inauguration. A digital system triggered by an identifier could automatically check-in an attendee, aggregate any relevant statistics and eliminate the need for post-event manual data entry.

Utilizing some unique identifier to which could immediately be scanned by the system would drastically save time for hashers, reduce any chance for a line to form and decrease the possibility of introducing erroneous data. Assuming an identifier should be carried with each hasher throughout every trail, the form of the identification should be non-obtrusive to the carrier (see **“No tech on trail”** page 45). Given hashers are expected to minimally bring a whistle for security reasons (not having a whistle is a violation), such whistles are often tethered to a lanyard around the neck. Also, additional artifacts are commonly secured to the lanyard to feature various hashing accomplishments, such as laminated printouts awarded to attendees of a specific hash (FIGURE 22). An identifier could be provided as an additional artifact to flaunt, which so happens to serve a specific functionality.



**FIGURE 21:** To check-in, hashers must find and initial their name in a 12-page spreadsheet. Photo by John Wayne Hill.

With RFID technologies readily available for commercial and recreational uses, such a means of unique identification could be translated to hashing. At \$0.70 per unit, molded from ABS plastic and manufactured to be attachable, a RFID key fob would be quite economical (see “Expense” page 44) and robust (see “Portable, durable & replaceable” page 45). Practically, such a system could be functionally prototyped, as a netbook computer, acting as a cheaper and more functional pseudo tablet, could interpret the data stream of a RFID reader tethered through USB. The netbook could either sync the data to an online database or if provided persistent data access, pull only relevant data at the point of use (FIGURE 23).

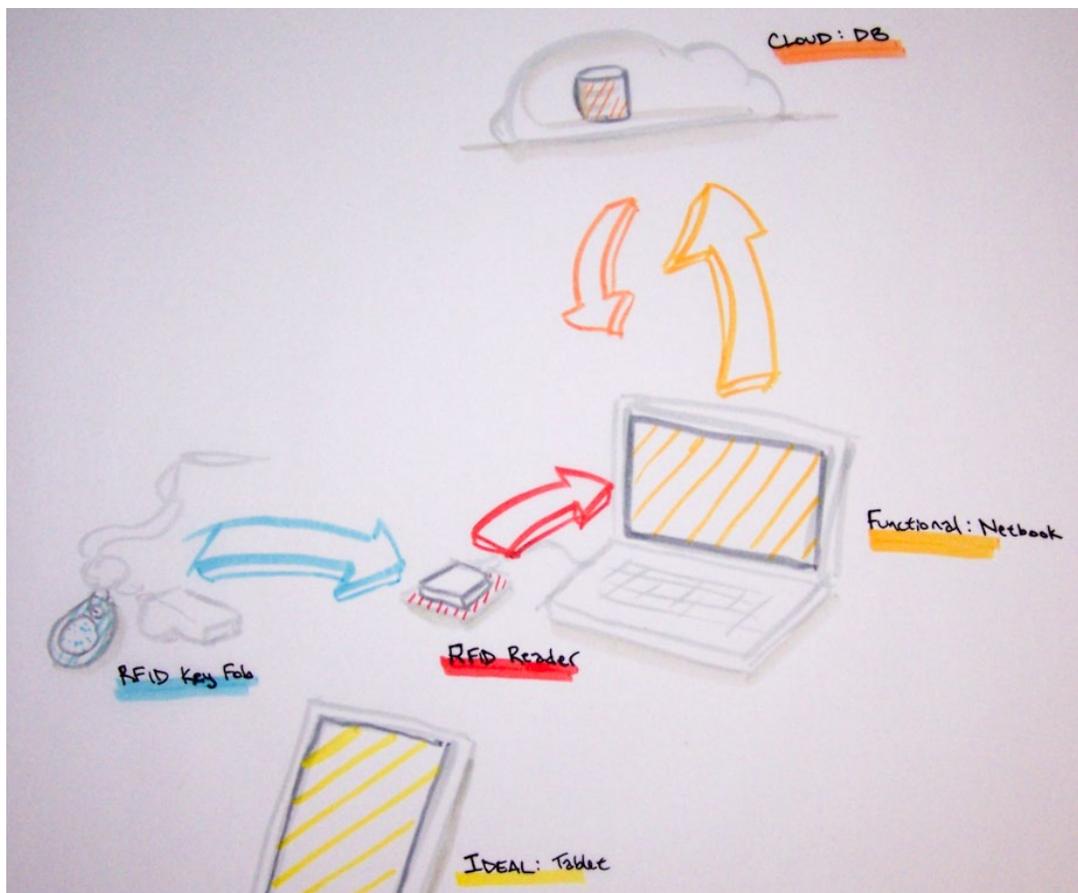


FIGURE 22: (Above) One hasher’s lanyard secures a whistle, car key, bottle opener and laminated tags showcasing various hashing exploits. Photo by John Wayne Hill.

FIGURE 23: (Left) A schematic illustrates how a functional prototype would ideally work.

# Prototypes

Based on the check-in concept, I produced and tested a number of prototypes of various fidelities.

## Foam key fob

Without RFID key fobs available, I sought to test their potential obtrusiveness by prototyping one. Using foam core to mimic the form and a quarter to provide additional weight, the faux key fob was worn along my lanyard during the January 22 hash (**FIGURE 24**). My experience during the trail didn't suffer as a result of the new artifact, and other hashers likewise supposed no additional burden for toting one.



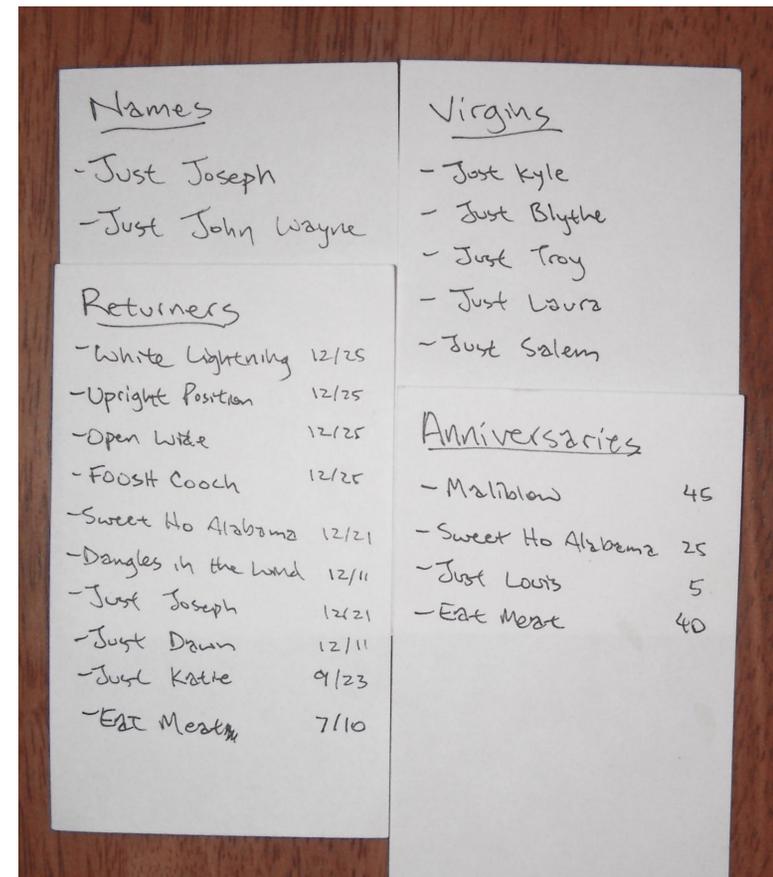
**FIGURE 24:** The whistle lanyard secures the prototyped foam-and-quarter key fob next to the later-purchased RFID key fob.

## Down-down index cards

During every Circle ceremony, the Hash Mouth (i.e. the hasher leading Circle) calls out hashers for down-downs. While some are a result of certain acts done during the event (i.e. a violation), some are as a result of merely attending. Various statistics are derived for each hasher, concluding who are deemed Virgins (i.e. their first attendance), Visitors (i.e. they claim a non-BFH3 chapter as their mother-kennel), Returners (i.e. they missed at least one hash), Namings (i.e. today is at least their six hash and are due to be named) and Anniversaries (i.e. the number of their hashes are divisible by 5).

Deriving such statistics among the 12-page paper spreadsheet is time consuming, and attempting to do it while maintaining some level of order among inebriated hashers is near impossible. Therefore, this experiment attempts to ask the question: If such down-down statistics were computed by the time Circle started (as such data would be available with a digital check-in system), how would the running of Circle be affected?

For both the January 8 and 19 hashes, I manually compiled and wrote all such statistics on 4"x6" index cards during their respective Beer Checks (**FIGURE 25**). During Circle, the Hash Mouth disregarded analyzing the roster in favor of the cards. Subjectively, both Hash Mouths (Dr. Grumpy and White Lightning, respectively) immediately noticed the benefits of such a system and exuberantly expressed their desire for the experiment to continue. Given the freezing weather during both events, the kennel was grateful for quicker ceremonies, though most may not have noticed or explicitly mentioned any difference.



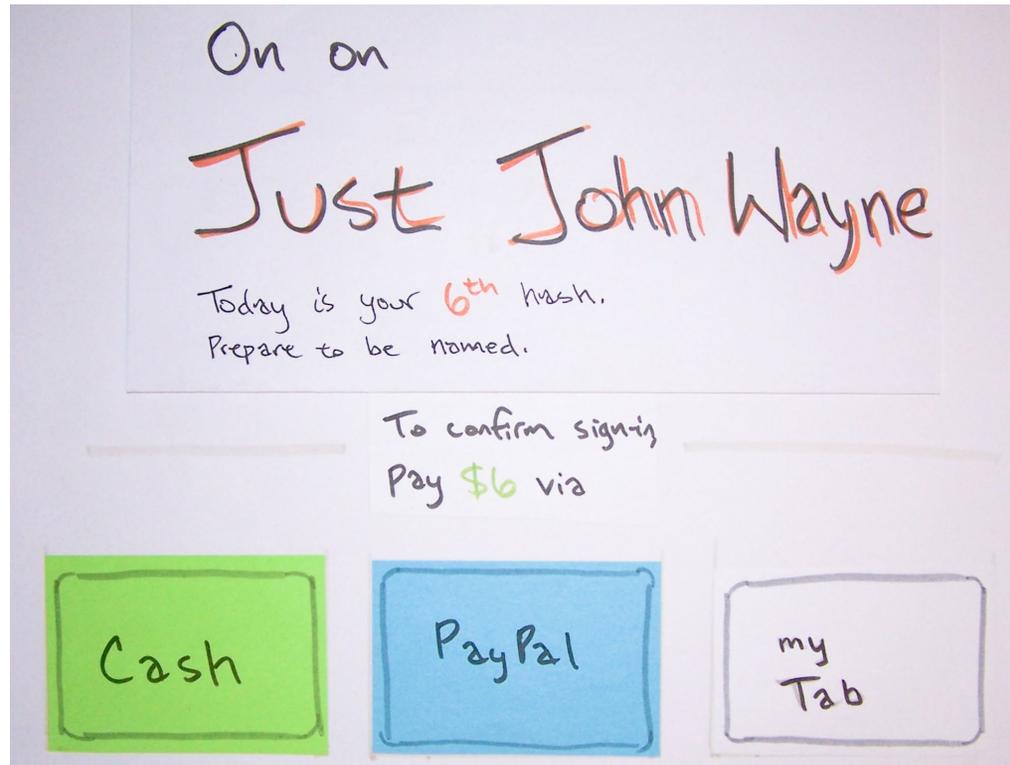
**FIGURE 25:** For two hashes, I compiled four categories of down-downs from the attendance spreadsheet in order to quickly call hashers into the Circle.

## Payment paper prototype

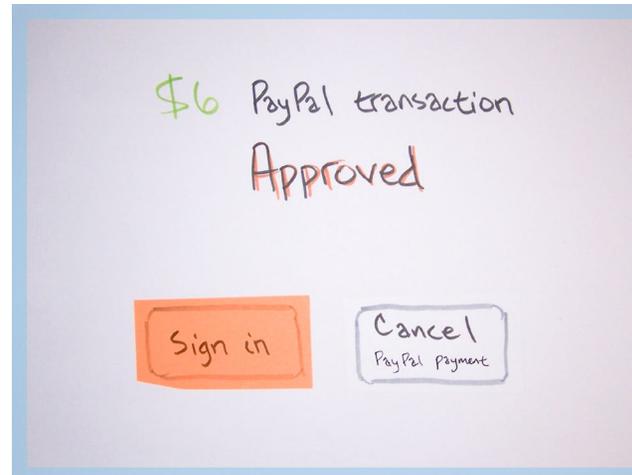
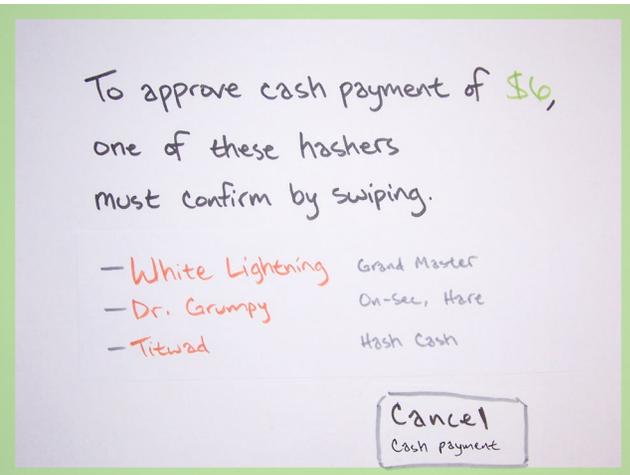
A digital payment system was explored in this prototype to resolve the issue of hashers feeling uncomfortable handling the cash purse without oversight and Mismanagement suspecting some hashers failed to pay. As hashers check-in (**FIGURE 26**), they would be prompted to either pay later as a tab or pay now via credit card, PayPal or cash (**FIGURE 48**). If cash, the Hash Cashier confirms payment by swiping his/her identification with the device. Such alternative means of payment would provide less frustration for hashers tending not to carry excess cash on hand in favor of credit or digital compensation.



**FIGURE 26:** Basic instructions guide hashers to initiate check-in by swiping their whistle lanyard, containing their digital identification.



**FIGURE 48:** After swiping to check-in, hashers indicate their preferred payment method.



As a way to test the possible interaction with this payment system, during the January 19 hash, five hashers tested a paper prototype featuring several sequences of potential flows. Using their personal whistle lanyard, they swiped it across the prototype, and I updated the UI with the appropriate interface sketch via the Wizard-of-Oz technique.

While the interface itself was understandable, the interaction was quite invasive for the participants, as all kept the lanyard on their neck and bent almost parallel to the paper interface, resting on the trunk of a parked vehicle. The whistle is so apart of some hashers that even temporarily removing it is more of a hassle than awkwardly bending over. Also observed, some lanyards of non-participants were instead pocketed or buried under layers of clothing, some were nonexistent or forgotten and a few tethered whistles without use of a lanyard. Therefore, while the form of identification may be non-obtrusive, the scanning interaction is cumbersome and must be more versatile.

Nevertheless, this feature was primarily dictated due to Blooming Fool's honor-based payment process. Upon consulting Mismanagement about this issue, they were willing to implement alterations to ensure more accountability. As of March 2011, all cash is handed to the Hash Cashier rather than personally placed in the purse, and upon payment, the hasher is stamped with BFH3 lettering, indicating they are permitted to freely take beverages from the coolers (**FIGURE 27**).



**FIGURE 27:** Being stamped with “BFH3” indicates a hasher paid for the hash and is permitted to drink. Photo by John Wayne Hill.

## Check-in interaction

To test on larger scale the swiping interaction regardless of a user interface, 13 participants during the snowy February 5 hash in Brown County State Park were provided RFID key fobs<sup>43</sup> to “check-in” at various waypoints (**FIGURE 29**). A RFID reader<sup>44</sup> and circuit board<sup>45</sup> were incased in a plastic container for protection and powered via a USB to 12-Volt car adapter into a portable jump-starter (**FIGURE 28**). When a fob is placed over the reader, it automatically beeps as confirmation of the scan. Each hasher scanned the device as an initial test before starting trail.



**FIGURE 28:** The RFID reader is enclosed in a tupperware container for protection and powered via a USB to 12-Volt adapter.

- 
- 43 <http://goo.gl/672Pq>  
[http://parallax.com/Store/Accessories/Hardware/  
tabid/162/ProductID/503/List/1/Default.aspx](http://parallax.com/Store/Accessories/Hardware/tabid/162/ProductID/503/List/1/Default.aspx)
- 44 <http://sparkfun.com/products/8628>
- 45 <http://sparkfun.com/products/9963>

Since the trail was pre-laid, the device was transported by the hares along with coolers and snacks to the Beer Check and the On-In. For every hasher, scanning wasn't the priority when arriving to the waypoints but rather acquiring refreshments. However, even despite the bulk of the jump-starter, most hashers didn't notice the device in order to be reminded to scan. If anyone directly asked me where the device was located, I would inform them, but I would never prod anyone to scan. The few who actively sought the device (which was placed wherever the hares chose to rest it) found success and often reminded or asked others if they scanned. Some participants noticed others scanning in the periphery and were reminded to do the same. Those who knew they should scan but couldn't find the device seemed anxious, as if they would be punished if not finding it quickly; they were also the hashers who seemed the most rewarded when hearing the feedback beep.

Throughout the test, no key fob was lost and all hardware mostly worked as intended. The scanner beep was slightly muffled for this test, since in at least an indoor setting, it seemed obnoxiously loud. However, in an outdoor setting among rambunctious and loud hashers, the beep was too soft, requiring the hasher to intently listen for feedback. Even though the reader was cabled with 4-feet of give, no one was comfortable grasping the device and scanning themselves; they preferred to bend low to the device and scan with the fob attached to their necked lanyard. Their interaction reconfirmed the behavior experienced in the prior tests (see **“Payment paper prototype” page 55**). Additionally, the reader enclosure should better suggest a single side to scan, as its current cylindrical form doesn't insinuate scanning along a particular side. Only one hasher failed to remember to scan at the Beer Check, and though counter-cultural, no one considered the key fobs as too much “tech on trail” (see **“No tech on trail” page 45**). All agreed the device needs to be more obvious to find. As refreshment is hashers' immediate focus upon arrival, perhaps placing the device closer to the coolers would garner more attention.



**FIGURE 29:** A RFID key fob secured to a whistle lanyard digitally identifies the hasher. Photo by John Wayne Hill.

## Wireframes

After streamlining the check-in interaction to no longer demand confirmation of payment within the system, a number of sketches of the user interface explored how to list those checked-in (**FIGURE 49**), how to create new check-in waypoints (**FIGURE 50**) and how to categorize down-downs (**FIGURE 51**). These guided Keynote wireframes further exploring the interaction (**FIGURE 52**) and a slimmer navigation (**FIGURE 53**). With at least two check-in waypoints for any event (i.e. before and after running the trail with any number of Beer Checks in-between), the system would need to be scalable to however a hash could be structured.

Another goal with this iteration was to make all information accessible within a click or two. In such a design, it allows multiple parties to derive relevant information at a glance, rather than necessitating physical interaction. At any time, one can notice the number and names of attendees, the number and names of those missing on trail (i.e. those who haven't checked-in yet), the number of violations for any statistical down-down and any relevant information concerning the currently checked-in hasher. Ideally, hashers checking-in would notice, for example, that two hashers should be named during that hash; thusly the person would actively ask questions to the two during the hash rather than merely at the end, giving the parties more time to brainstorm names and answer more creatively. To dissuade casual users from (accidentally) making drastic system changes, state-changing features, such as toggling the down-down lists require a single click, while more administrative features, such as adding or switching a check-in waypoint are buried within two clicks.

The wireframes were presented to three members of Mismanagement during the February 18 hash. With generally positive feedback, it seemed stronger critiques would be reserved for a higher fidelity prototype, as most of the interaction with the device involves scanning tags, rather than navigating the UI.

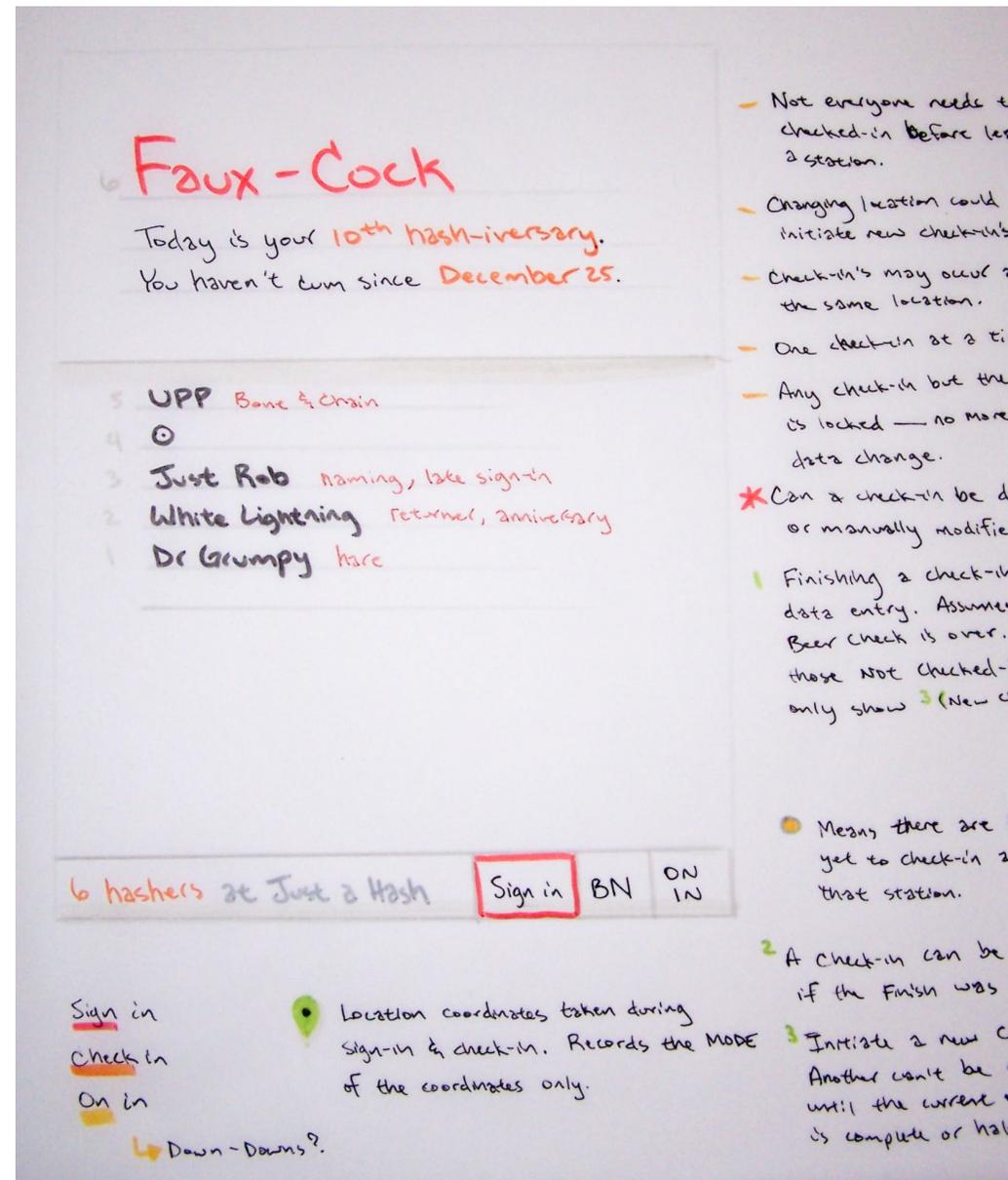
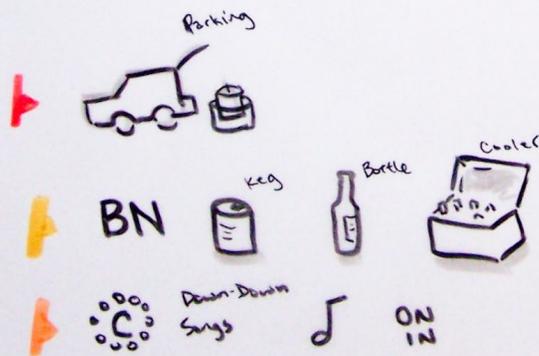


FIGURE 49: Sketches explore how to list names and secondary information about hashers as they initially check-in at a hash.

everyone needs to be checked-in before leaving station.

location could be new check-ins.

check-ins may occur at the location.

check-in at a time.

check-in but the latest check-in — no more change.

check-in be deleted or manually modified?

adding a check-in halves entry. Assumes check is over. IF not checked-in is 0 new 3 (New check-in).

there are hashers to check-in at station.

check-in can be resumed if finish was accidental.

to a new check-in. can't be created if the current one is complete or halted.

Not checked in 2	Checked in 4
White Lightning	4 Dr Grumpy 10 min ago
Just Rob	3 @ 14 min ago
	2 UPP 14 min ago
	1 Faux-Cock 15 min ago

Check in at  
**Beer Check**  
 On-in

Finish Check-in

Resume Checkin +

Check in 1 2 3

SIGN IN CHECK IN ON IN

6 hashers attending  
Just a Hash

Permit multiple check-ins, one for each Beer Check. ~~Do~~ Do check-in data need to be retained, or can it be reset? Help to determine FRB & DFL status.

Specify location type when creating a new check-in point. May be too much repetitive tasks. \* Pre-set # of Beer check

### Beer Check #1

Check in at  
**Faux-Cock**  
*Just now*  
 UPP  
 @  
 Dr Grumpy  
 Nsdig *late sign-in*

Sign in  
 Beer Check #1  
 Beer Check #2  
 On-in

EXIT

+

Just Rob  
 White Lightning  
 Sweet Ho Alabama  
 Pussy Hater  
 Just Ammar

Check IN

DOWN-DOWNS

- Obvious. Call-out. Nice to know?

- Hashers don't as they come.

- Mention in H. No need to r

- Call-out. Wh in system?

- This should call-out.

Check-ins care about who is missing, not who is present at the check.

FIGURE 50: Sketches explore how to create new check-in waypoints and compare those who've checked-in to those yet to check-in.

Down-Downs	Hashers
Anniversaries 6	
Returners ☆ 18	
Visitors 1	
Virgins 3	
Names 2	
FRBs 3	
Bone & Chain 1	
Hashit 1	
Birchdays 4	
Hares 2	

☆ = Social

- Obvious. Call-out. Nice to know?
- Hashers don't always sign-in as they come. Not priority.
- Mention in HashTough. No need to record?
- Call-out. Why better integrity in system?
- This should be obvious. Call-out.

Check IN    Down-Downs

Just 2 Hash Beer Check ✓ 2 / 34 Not checked in

Tab Button bar 34 attending 2 missing 6 returners 1 visitor 2 virgins 5 Anniversaries

Flash when updating

7 returners

You last hashed on Oct 30, 2011

You're visiting from **IndyScent**

You're celebrating your **10th Anniversary**

This is your **First hash**

Today is your **Naming**

FIGURE 51: Sketches explore how to list down-down categories, as either within a dedicated state/page (left) or persistently in the UI (right).



**FIGURE 52:** Wireframes designed in Keynote demonstrate how to create or switch to a different check-in waypoint. Any hashers yet to check-in are listed in the right column.

Sweet Ho Alabama  
Hot 'n Juicy  
Son of Gucci  
Upright Position

## Faux-Cock

Untouched Private Panther

Just Rob

White Lightning

Dr. Grumpy

Titwad

Bareback late sign-in

Just Chris

Titty Symbol

Loose Meat

Jizz Hands

Dowelrod

**FIGURE 53:** The final wireframe slims and repositions the navigation to the top of the UI. The down-down list is hidden to give more prominence to the list and number of names.

## Functional prototype

Taking advantage of 10 years of web development expertise, I desired to produce a functional prototype. The most critical aspect to accomplishing such a feat was interfacing the hardware with my limited knowledge of desktop programming. Optimizing my time dictated much of the technology. Since HTML, CSS and JavaScript would be the fastest way to design a front-end UI and the fullscreen mode of the browser would mimic the experience of a native application, I needed to develop a local backend that could interpret the USB serial stream and service the local client. Open-source project NodeJS would allow such capabilities by enhancing the functionality of native JavaScript to interact within the file system.<sup>46</sup> Within a few days of acquiring the RFID equipment, I published<sup>47</sup> a proof-of-concept video<sup>48</sup> and code<sup>49</sup> showcasing a NodeJS program reading from RFID key fobs (**FIGURE 30**).

The client and server seamlessly communicates via a socket connection. All data stores as JSON (JavaScript Object Notation) flat files, eliminating the need for a traditional database and simplifying the maintenance. Data automatically saves, so even if the program crashes, the system state persists. Developing locally, code is pushed to a \$170 refurbished ASUS Eee PC netbook running Ubuntu Linux, as the device to be used for live testing.

Since the Blooming Fools spreadsheet is publicly available on Google Docs, exporting it as a CSV file would grant the system a way to always utilize the latest data. The CSV

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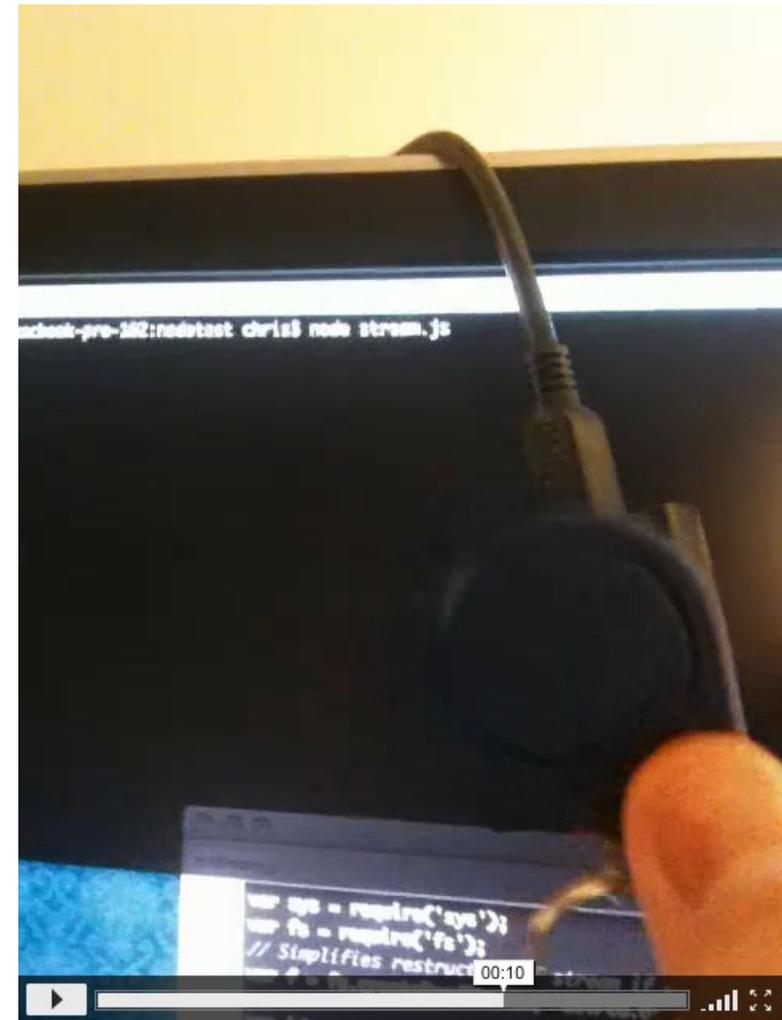
46 <http://nodejs.org>

47 <http://goo.gl/PXQk3>

<https://twitter.com/#!/chrisbasham/status/32538396593233921>

48 <http://flic.kr/p/9eWAmG>

49 <https://gist.github.com/806605>



**FIGURE 30:** Screenshot of the initial proof-of-concept video demonstrating a NodeJS application reading a RFID serial stream.

is parsed by a secondary NodeJS script to extract from the approximately 520 entries in the roster (as of March 2011) (FIGURE 31) and convert them into JSON objects for later use (FIGURE 32). Since there is no unique or universal numerical identifier (i.e. a primary key) assigned to hashers in the roster, it would be difficult to adequately manipulate the data. Converting a full legal name to a hexadecimal hash string would act as a unique-enough key. As a result of necessitating the full name, approximately 10% of entries are currently rejected for inclusion. Any excluded name could be manually added later as needed.

For the sake of redundancy as the system is tested, participants are asked to check-in to both the paper roster and this functional prototype. As the primary output of the system, whenever anyone checks-in, their name appends to a generated CSV file. This CSV is manually forwarded to the On-Sec after the hash as a secondary reference to update the spreadsheet. Ideally, the system would update an online database during use, but without persistent Internet access, this prototype can't accomplish that task.

```
Initials,Name,Hash Name,Addy,Phone,Hashes,Last Hash,Hares
_____, "Basham, Chris",Untouched Private Panther,, ,16,2/19/11,1
```

```
{ "firstname": "Chris",
  "lastname": "Basham",
  "hashname": "Untouched Private Panther",
  "hashes": "16",
  "hares": "1",
  "lasthash": "2/19/11",
  "id": "55a7d7166c840b6cd05cf03e055462b90cba7015" }
```

**FIGURE 31:** Sample CSV data extracted from the Blooming Fools spreadsheet roster.

**FIGURE 32:** CSV data is converted to a JSON object for easier use.

# Evaluations & Testing

The functional prototype iterated after each of five lives tests.

## Assigning RFID tags

After two weeks of development, the functional prototype premiered during the March 5 hash. As it was raining, two one-gallon plastic Ziplock bags encased the netbook and another protected the RFID reader. Positioning the netbook under a raised car trunk hood, I crouched and swiftly assigned tags to hashers using an autocomplete feature hooked into the local roster database. While it took less than 10 seconds to assign each tag, hashers assumed when the tag was assigned, they were also checked-in. However, as a way to assign tags without necessitating a check-in, it was purposeful to require a second swipe to actually check-in. Though this assignment process did cause a bottleneck, it would happen only once, as all future check-ins could utilize these same RFID assignments. Though not everyone immediately participated, all were surprised and happy to keep the tags as minimally a memento. After 38 hashers were provided tags (**FIGURE 33**), I joined two others to lay the live trail, as we were the day's hares. Another hasher volunteered to drive the prototype and the beverage coolers to the single Beer Check before returning to the start of trail (**FIGURE 34**).

Arriving at a roofed shelter house for Beer Check about four minutes ahead of the chasing hashers, the hares quickly unpacked the coolers, and I setup the prototype for the check-in. About half of the incoming pack saw me next to the prototype and checked-in. A few of the frontrunners actually competed to be the first to check-in, while many I still prompted to check-in. Five hashers checked-in to the system late,

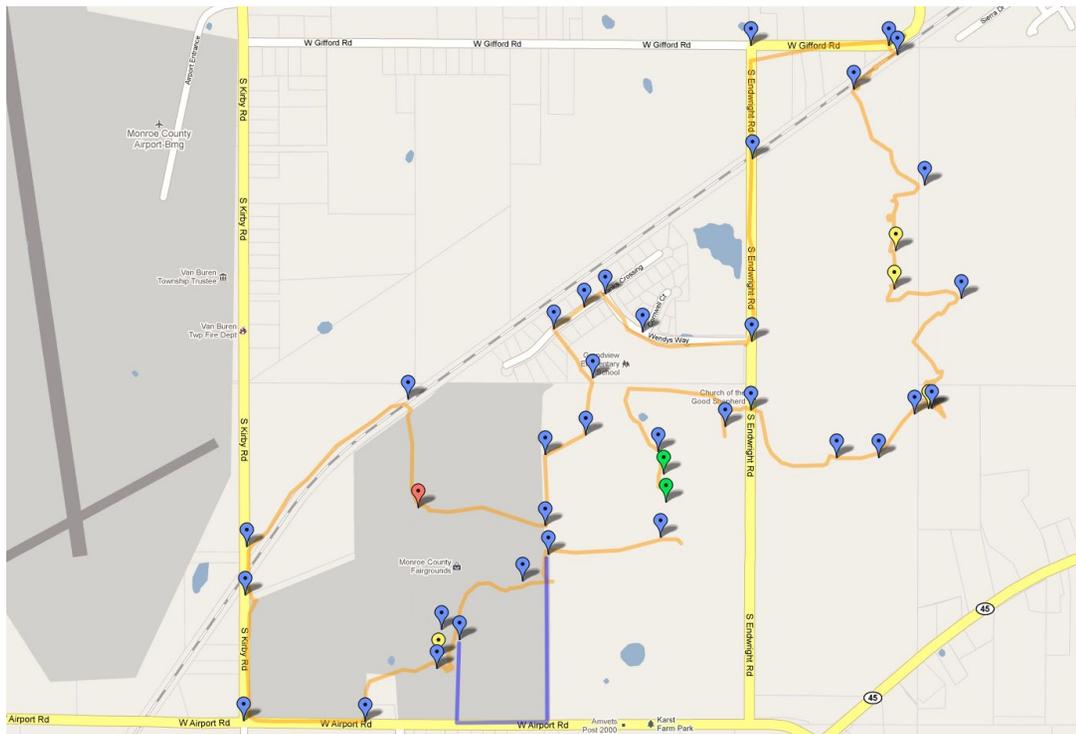
and due to a software bug, a refresh of the browser window caused a majority of the check-ins at the Beer Check to not save. Knowing I needed to confirm everyone's arrival so I could finish laying the last half of the trail and get cold, wet and shivering hashers running again, I walked the prototype to everyone and scanned them in again. Given a 4-foot cable connecting the reader to the netbook, it was easy to scan the tags no matter where they were stashed, be it on a lanyard or wristwatch or in a pocket. Though only 33 of the now 43 attendees were marked as present, I could mentally adjust for the last 10, not bothering them for a check-in. Since the only two who were legitimately missing left early for the hospital (one accompanied a hasher who jumped a muddy creek and embedded a 2-inch stick in his wrist), the hares were confident to continue laying trail.



**FIGURE 33:** After signing the paper roster for redundancy, hashers without a RFID key fob are assigned one. Photo by John Wayne Hill.

After arriving at the On-In, hashers casually checked-in as they acquired additional beverages and redressed in warm clothes. This time, no one else was missing. While no RFID key fob failed to scan, one hasher's encasing popped off during trail, exposing the inner circuit. If the fob later dies, it will simply be replaced.

Soon after, the Hash Mouth commenced the On-On ceremonies with the list of down-downs as provided by the prototype. While the list of Anniversaries and Namings were accurate, the other three categories were problematic. Usually, the violation of a late sign-in means the person didn't arrive at the beginning, but rather at one of the Beer Checks. However, the prototype only knows when a person checked-in, not when they arrived; only one of the listed five were legitimately a late sign-in. As for the list of Returners, the problem was with the source data. Since one hasher arrived late for the



**FIGURE 34:** The March 5 hash started in Karst Farm Park, directing northeast before circling the Monroe County Fairgrounds following Beer Check. Parking/Circle, Checks and Beer Check.

prior hash on February 19, she failed to sign-in and her attendance was accidentally never credited to her by the On-Sec. Consequently, she was erroneously marked as a returner. Finally, the system calls out anyone who hasn't hashed with Blooming Fools for the Virgin down-down. However, it should only label virgins as those who have never hashed before. One named and one no-named hasher from the Indianapolis IndyScent kennel visited for the first time and were erroneously labeled virgins.

The interaction with the netbook form factor was also cumbersome for the Hash Mouth, despite it being relatively easy to hold. As he held it and called out down-downs, he himself celebrated an anniversary. Quickly, he rushed it out of the circle, resting the netbook in an adjacent car trunk, grabbing a beer and rejoining the ritual. Following the song and drink, he ran back out of the circle to re-holster the netbook. Especially without comprehensive keyboard support, navigating an unfamiliar interface with a 4-square-inch trackpad in the rain was a difficult task. Even despite these problems, hashers did notice the ceremonies took less time than average and the Grand Master expressed great fondness and appreciation for the prototype.

Reflecting, I was surprised even I as the designer failed to use the prototype strictly as designed. I naturally adopted the responsibility of prompting others to check-in, even to the extreme of bringing the prototype to them to lower their burden and barrier to the system. While I desired to have an accurate listing of those who were missing at certain waypoints in the data, I disregarded data accuracy once I was able to mentally adjust for anyone yet to check-in. The test reenforced the only output needed by the system is a comprehensive list of all attendees, and any excess data is consequential only during the hash. One of the fundamental problems exposed during this testing was the design of the trail was affected by the presence of the prototype. Since Blooming Fools primarily dead hares, this isn't normally an issue. However, the relatively bulky form factor and external hardware doesn't provide an effortless way to integrate with live trails.

## Rehousing the reader enclosure

For the April 2 hash, I sought to change the form of the RFID reader enclosure to better instruct hashers where and how to swipe during check-in. Since the original enclosure was cylindrical, there was no obvious side to scan a key fob. Repurposing a rectangular cardboard business card box,<sup>50</sup> the larger flat side would naturally face up while resting (**FIGURE 35**). A sketched illustration of the check-in action accompanied the instructions, “Swipe to check-in.”



**FIGURE 35:** The enclosure switched from cylindrical to rectangular, imprinted with check-in instructions. Photo by John Wayne Hill.

50 <http://us.moo.com/accessories/minicard-box.html>

Upon setting up the device to check-in everyone at the start of the trail, it was apparent the RFID assignments didn't maintain from the March 5 hash. I would later discover the parsing application overwrote that data when importing the new CSV roster information for that hash. As a result, I reassigned everyone's key fobs back to themselves, causing an unintended bottleneck. In so doing, not everyone participated in checking-in, as it took too long for the approximately 45 attendees.

Since the new enclosure was hastily prototyped, it wasn't noticed until the event that the enclosure prevented a secure connection between the reader and the USB cable, forcing me to jam and hold them together during all check-ins. Additionally, during the second beer check, it took nearly 10 minutes for the system to properly recognize the reader, almost persuading me to abandon it for that check-in. It is unknown if that issue was a result of the enclosure or not; the error has yet to reoccur or be duplicated.

Utilizing the same code as the March 5 hash unsurprisingly resulted in similar consequences. At the On-In, the same bug that lost the check-in data did so again, requiring a number of hashers to check-in a second time at the same waypoint.

As a result of the poor enclosure, the buggy software and the large number of attendees, I was more comfortable bringing the prototype to the hashers and quickly checking-in them myself than relying on them to responsibly check-in themselves, if they even remembered to do so (**FIGURE 36**). By not patiently expecting hashers to self check-in at their leisure, I interrupted their socialization (albeit even briefly) for the sake of the system. If a purely self check-in process can't be trusted to work under all circumstances, then at least one responsible hasher (perhaps someone from Mismanagement) needs to have the ability to manually check-in others. As I knew the names of 90% of the attendees and could check their attendance by mere considerate observation, there was no reason, besides the missing feature, I couldn't check-in a



**FIGURE 36:** To speed the process, I often carried the prototype to hashers, prompting them to check-in. Photo by John Wayne Hill.

majority of attendees. Therefore, it may be a worthy compromise to have the burden of one hasher slightly raised in order to eradicate the small burden on all hashers.

Even despite the issues, the prototype provided us a means to confidently know who was missing. After nearly 30 minutes after arriving at On-In, the device correctly informed us of two missing hashers, who were quickly sought and found. For those few not participating in the system check-in, I mentally tracked their attendance. We were able to commence Circle ceremonies without worry.

## Manual check-in

The April 16 hash featured approximately 60 hashers running throughout the Indiana University Bloomington campus during the Little 500 event,<sup>51</sup> enduring low 40s temperature, 22-miles-per-hour wind and persistent rain. Even despite encouraging all attendees, including virgins and visitors, to check-in with the digital system, about a half-dozen chose not to, probably unsure of its intention. Many cold and wet hashers just desired to advance to the trail, rather than fiddle with assigning tags. Since the only means to sign-in someone is by RFID scan, for the few hashers who forgot their key fob, a new one was needed to be assigned.

In order to protect the prototype, it rested in the open trunk of a vehicle during sign-in and both Beer Checks, partially hidden and secluded from the hashers. Essentially the weather prevented positioning the prototype with the hashers. However, since implementing the ability to check-in those who have already signed-in, I was able to manually and quickly reduce the list of potentially missing hashers without forcing nonparticipating hashers to comply.

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51 <http://iusf.indiana.edu/little500/>

By also resolving the software bug which occasionally failed to save data, I was tremendously more confident in the system's ability. Nevertheless, without a comprehensive list of attendees, I was only partially confident in knowing who was lost. By virtue of witnessing two hashers deviate from trail to leave due to the harsh weather, I was able to account for their absence following the first Beer Check; however, since they didn't inform anyone of their intentions, their actions could have produced unnecessary stress on the kennel.

By the time the system was stored in the vehicle after the first Beer Check and the kennel advanced along the trail, two additional hashers joined the pack. With a more portable system, they could have been checked-in immediately, instead of it occurring at the second Beer Check.

Since the second Beer Check was within 10 minutes of the On-In and the last leg of trail was straightforward, I chose not to bother checking-in everyone for a fourth time. The prototype's down-down list once again proved essential to quickening the cold and wet Circle ceremonies.

During the On-after, I discussed the prototype with several of the seven hashers visiting from the IndyScent kennel. While most recognized the value in such a system and surmised its potential use in their kennel, at least one seemed very critical of the swipe-in interaction, almost to the point of dismissing the entire concept.

## Manual sign-in

For the first time, during the clear evening hash on April 17, all attendees (25 in total) signed-in to the prototype, either by signing-in themselves (**FIGURE 54**) or indirectly by me via a new manual sign-in feature. As a result of this new capability, I could avoid bothering non-participating hashers to sign-in and avoid assigning new key fobs to those who forgot them.

However, with the ability to sign-in others comes the mistake of accidental sign-in. Three hashers arrived at the start of the trail just to socialize and weren't planning to hash. One I knew wouldn't hash, one I signed-in only to later discover he wasn't hashing and the third said he wasn't going to hash and changed his mind after it was too late to sign-in him. With no means of undoing a sign-in, the one hasher erroneously remained signed-in, while the other wasn't signed-in until the end, causing him to be erroneously labeled as a "late sign-in."

Given the event's short distance and live trail, there was no Beer Check and the prototype wasn't delivered to the On-In. Luckily, with the end only a few blocks from the start, I was able to run back to my vehicle, secure the prototype and return before the start of Circle. Knowing I could manually check-in others, I didn't bother toting the external reader. Within a minute, I was able to reduce the list of missing hashers to a single remaining hasher, who arrived 10 minutes behind the last of the pack. Even if the prototype wasn't available at the On-In, it at least provided an accurate total number of attendees, enabling us to minimally head-count attendees.

While manually checking-in saved time and reduced individual responsibilities, it also robbed hashers of the experience of their check-in. While I was focused so much on the efficiency of the system and getting hashers back to the socializing of the event itself, I failed to recognize for about half of the hashers now accustomed to checking-



**FIGURE 54:** After several hashes with the prototype, hashers feel more comfortable handling the reader to ease scanning their fob. This hasher secures his fob to a necklace spelling his hash name. Photo by John Wayne Hill.

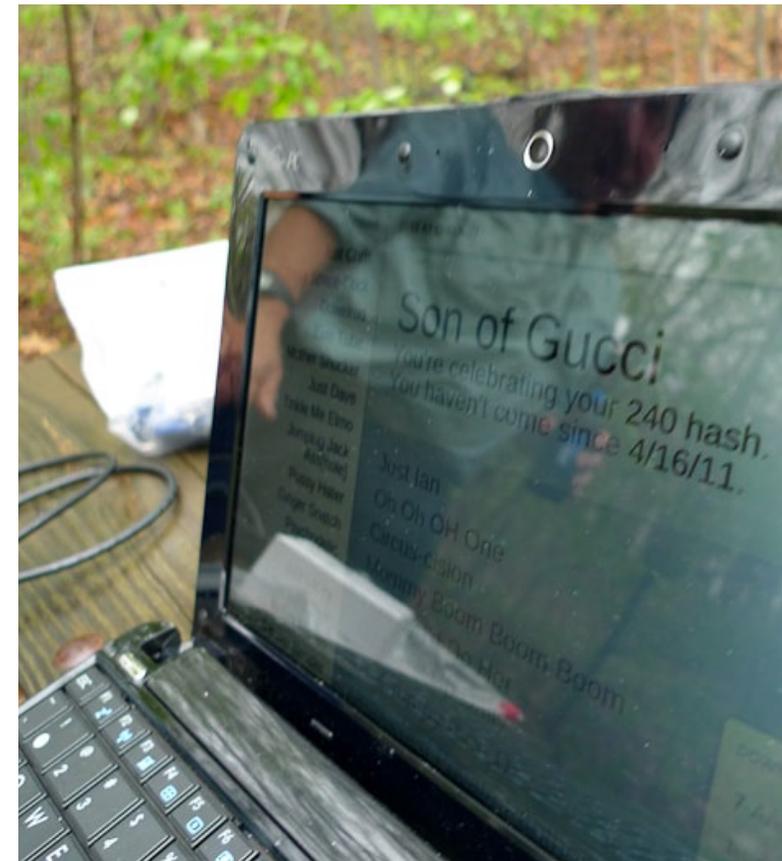
in with this prototype, their hashing experience was itself enhanced by the self check-in experience. Hearing the loud beep of the reader coupled with seeing their name and accomplishments large on the netbook screen produced a simple and satisfying reward for their efforts. Without that reward as an option, they disappointedly walked away from the held prototype, stricken with a countenance of sadness.

With an accurate digital attendance, it reliably acts as a check-and-balance to the paper roster. Three attendees didn't initial the paper roster, and the single virgin failed to write her full name. The attendance list generated from the prototype allowed these errors to be noticed and corrected.

## Altering group behavior

With a break in the weather and without alterations to the prototype from the last test, the April 23 hash provided a perfect opportunity to test how the consistency of bringing the prototype to the hash affects the behavior of the check-in process. Unintentionally, a linear flow for the check-in process emerged. Hashers initialed the paper roster and signed-in the prototype as they rested on the hood of a truck, and then hashers shuffled left to pay the fee to the Hash Cashier and were stamped by an assisting hasher (**FIGURE 38**). Even after I put away the prototype, one emphatic hasher actively approached me, persuading me to re-setup the system for his check-in.

At the Beer Check, I resisted the urge to manually check-in attendees. Throughout the 30-minute break, all 37 hashers checked-in themselves. While check-in wasn't quick, it was the first time hashers all checked-in themselves. After five hashes, it was obvious how the presence of the prototype substantially altered group behavior, encouraging every hasher to be more self-responsible.



**FIGURE 37:** The interface is difficult to see despite fully brightening the netbook screen on an overcast day. Photo by John Wayne Hill.

However, since the second half of the trail oddly and rapidly looped back to the location of the Beer Check, about only half the hashers even considered checking-in. At the prompting of the hare who wanted to know if anyone was missing, I manually checked-in the remaining hashers. As a few noticed me interacting with the prototype, they shuffled forward to check-in, in sudden realization of their neglect; some were surprised and a little confused when I told them they were already checked-in.

During Circle, even without the Hash Mouth never using the interface beyond checking-in, he was able to discover how to navigate to the list of down-downs within a few seconds. Despite overcast conditions and the screen set to full brightness, it was very difficult for users to read the glaring screen (**FIGURE 37**); enlarging relevant text and increasing contrast should assist readability at a distance.



**FIGURE 38:** Hashers sign-in digitally and on paper before paying the event fee and stamped as a receipt. Photo by John Wayne Hill.

# Final design

## Signing-in

Upon manually indicating the start of a new hash in the functional prototype (there is no UI to accomplish that, yet), an initial waypoint is automatically created, labeled as the Sign-in. Those already registered within the system scan their RFID key fobs to sign-in (**FIGURE 55**). Any unrecognized key fobs are assumed they are to be assigned to a hasher. A modal box appears, enabling the typist to input participants' first, last and hash names (**FIGURE 56**). By default, the hash name automatically completes as the first name is typed, though it can be overwritten; thusly, inputting "Joe" as a first name auto-assigns the hash name "Just Joe ." Additionally, as the form is filled, the input is compared to the 500 names within the Blooming Fools database. Since a keyboard-centric interface greatly accelerates efficiency (and thus alleviates a bottleneck), one navigates these auto-completed names with the keyboard arrow keys and hits Enter to make the assignment.

As a hasher signs-in, their name appends large to a scrolling roster, prominently informing them about the quantity of their attendance, if they're celebrating an anniversary, have missed recent hashes, etc. Statistics automatically update along the outskirts of the interface, informing the total number in attendance, current number at the given waypoint and the number of violators for each categorical down-down. Appearing from the lower frame, a notification system gently informs the user of errors or alerts to the current system state (**FIGURE 57**). Signing-in or registering a hasher without assigning to a RFID implements another modal box, triggered by a function key and closable by the Escape key (**FIGURE 58**).

1 AT SIGN-IN

1 AT THE HASH

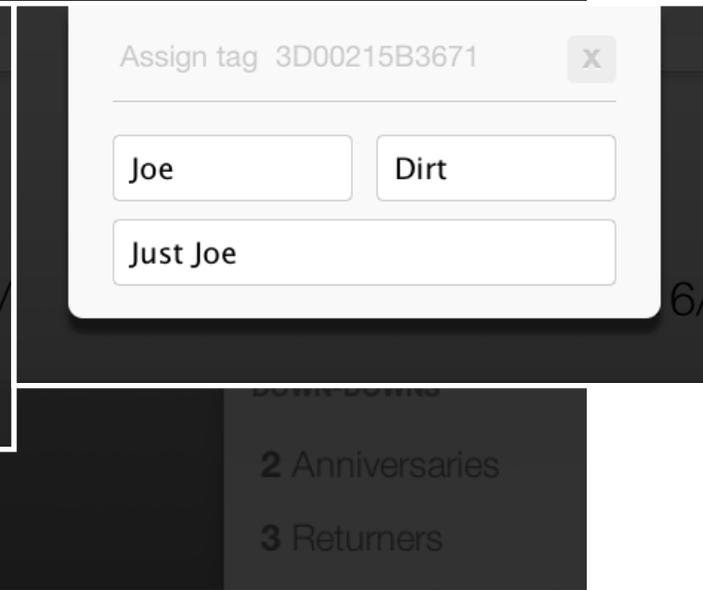
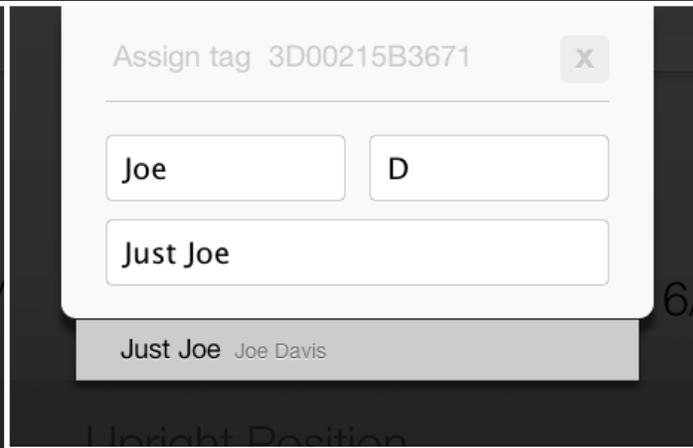
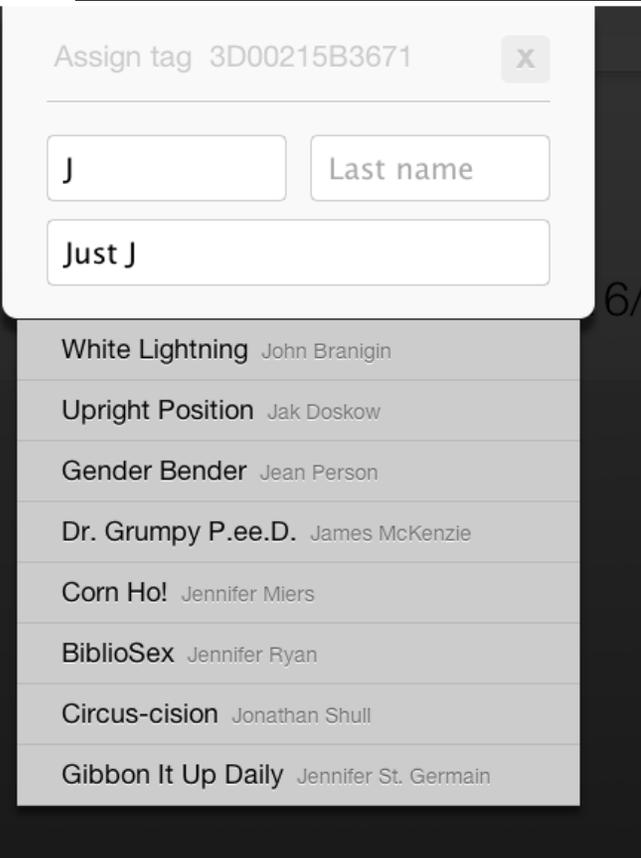
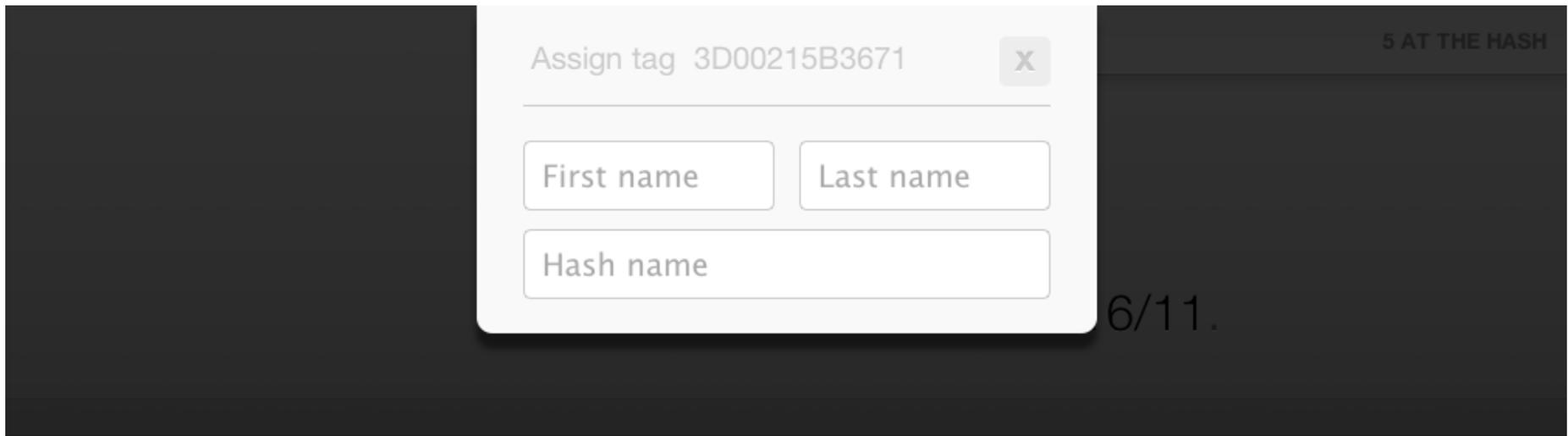
# Untouched Private Panther

You're celebrating your 20 hash.

DOWN-DOWNS

1 Anniversary

**FIGURE 55:** The first waypoint is automatically generated upon initiating the prototype. Untouched Private Panther is the first hasher to sign-in to this hash.



**FIGURE 56:** When not recognizing a RFID key fob, the system assumes it should be assigned. Autocomplete features for both the hash name and name matches speed input.

# Just Joe

Today is your virgin hash.

Just Jeremy

Upright Position

Just Lacey

Gibbon It Up Daily

Untouched Private Panther

Assigned tag to new hasher, Just Joe.

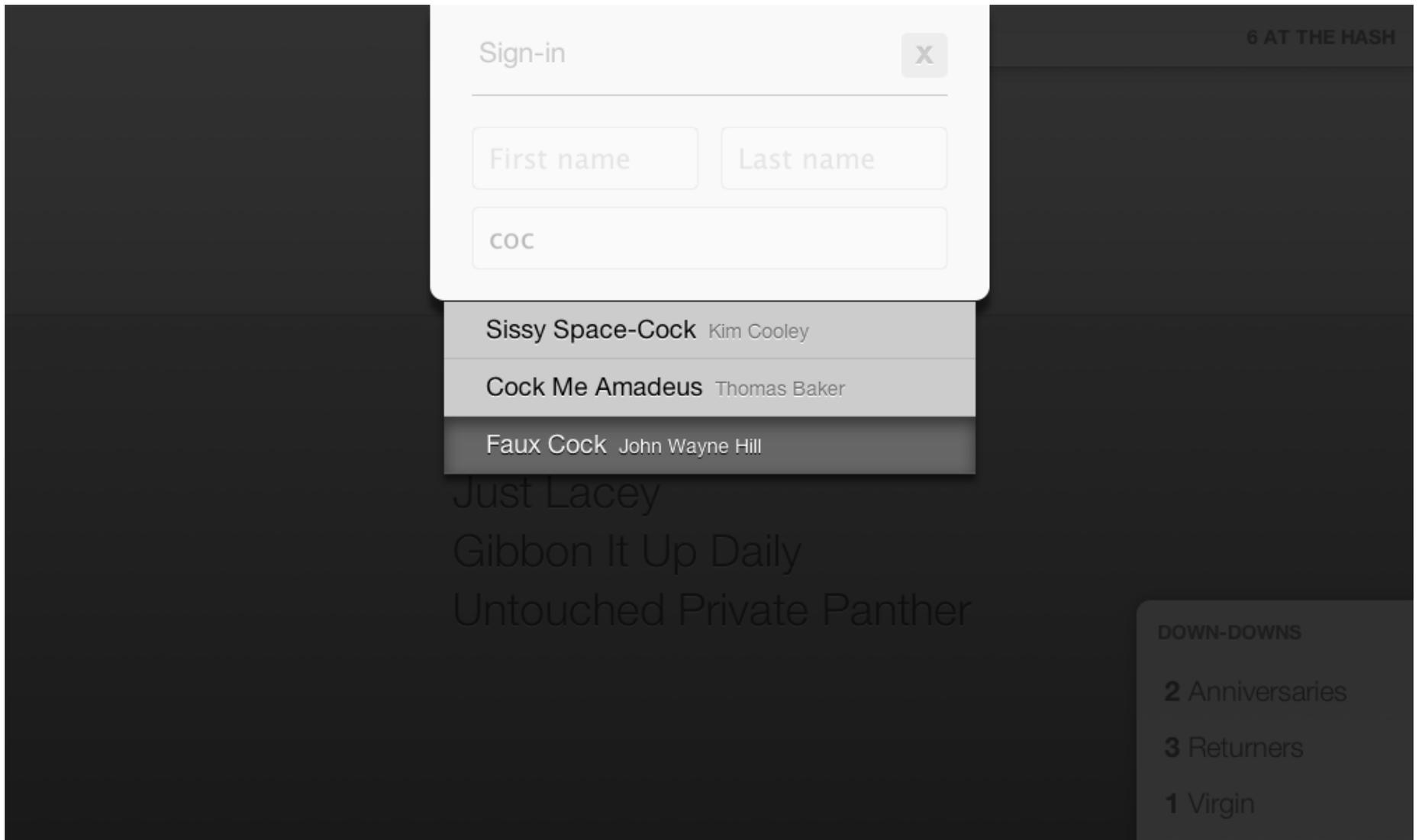
#### DOWN-DOWNS

2 Anniversaries

3 Returners

1 Virgin

**FIGURE 57:** A notification confirms the assignment of an unused RFID key fob to Just Joe, as the modal also closes. Just Joe signs-in and the system recognizes the event as his first, virgin hash.



**FIGURE 58:** Pressing a specified function key will allow manual sign-in for those without a RFID key fob. Suggested names are navigatable with keyboard arrows.

## Checking-in

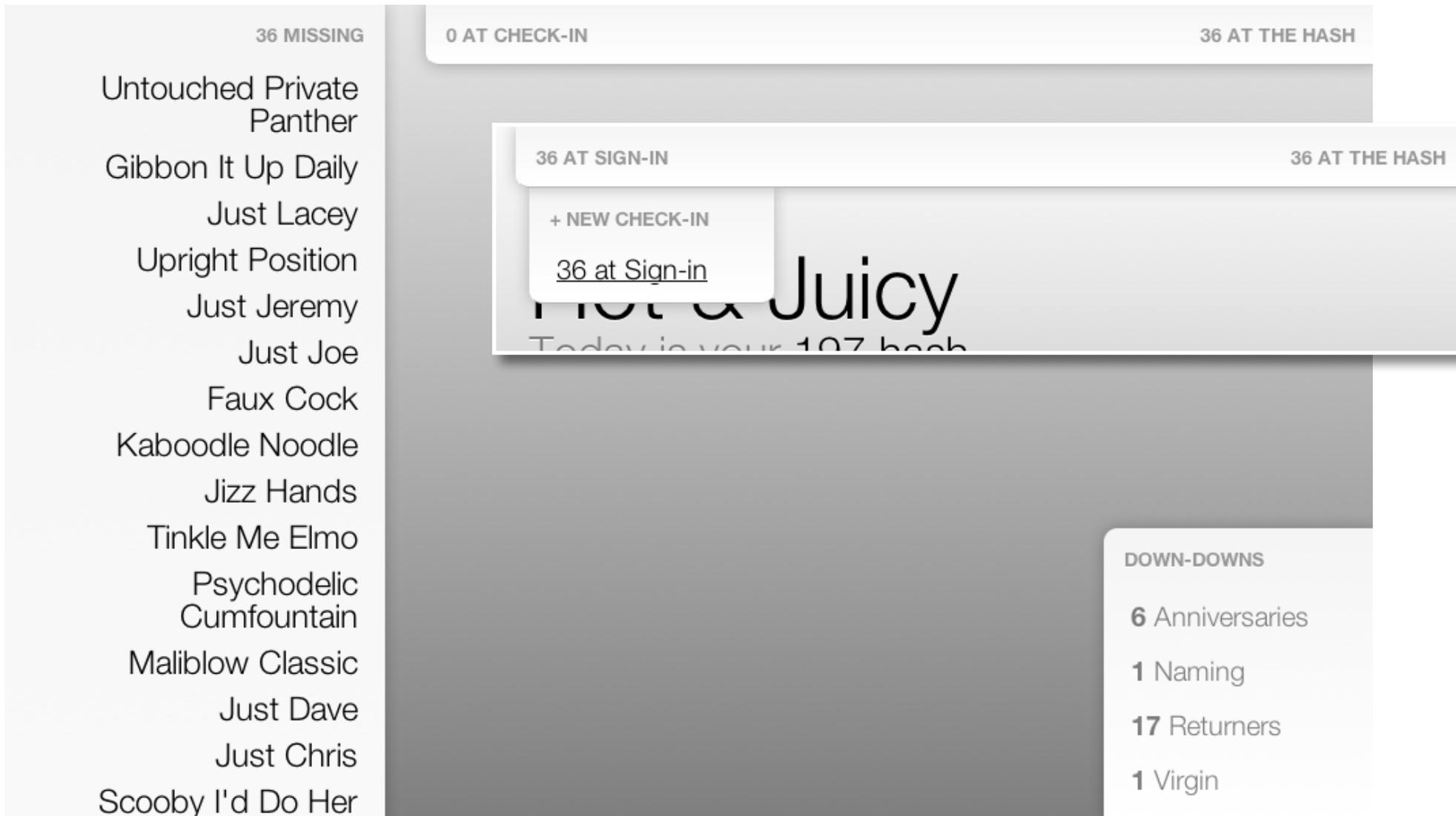
Once everyone signs-in, the pack is free to initiate the trail, and the system is transported to the next waypoint (most likely a Beer Check) along with coolers and food. At the next waypoint, the administrator clicks the name of the current check-in waypoint to create a new check-in waypoint or reopen an old one. All participant names initially list in the left column (**FIGURE 59**). As they scan to check-in or the names clicked to manually check-in, the names shift to the primary checked-in roster. Thusly, anyone in the left column are those yet to check-in and possibly lost on trail (**FIGURE 60**). Any number of waypoints can be created to accommodate any hash.

## Down-downs

During Circle, the Hash Mouth clicks on one of the down-down categories to toggle the appropriate list, so qualified hasher can be called out for their respective down-downs (**FIGURE 62**).

## Layout

The interface was designed and divvied for users of various needs. The Sweeper cares about who's missing, so their focus is the left column; the On-Sec cares about who's in attendance, so their focus is the lower center; the Hash Mouth cares about down-downs, so their focus is the lower right; and the hasher who just checked-in focuses on the upper center (**FIGURE 61**). Since this prototype wasn't concerned with aesthetics, color was purposefully not introduced in the interface.



**FIGURE 59:** Clicking “36 at Sign-in” pops-up a menu listing all waypoints. Clicking “+ New Check-in” creates a new waypoint, listing all those not checked-in at the new waypoint in the left column.

10 MISSING

Just Joe  
Kaboodle Noodle  
Just Dave  
White Lightning  
Ewe Tube  
BiblioSex  
Just Robert  
Cock Me Amadeus  
Just Ian  
Titty Symbol

26 AT CHECK-IN

36 AT THE HASH

# Circus-cision

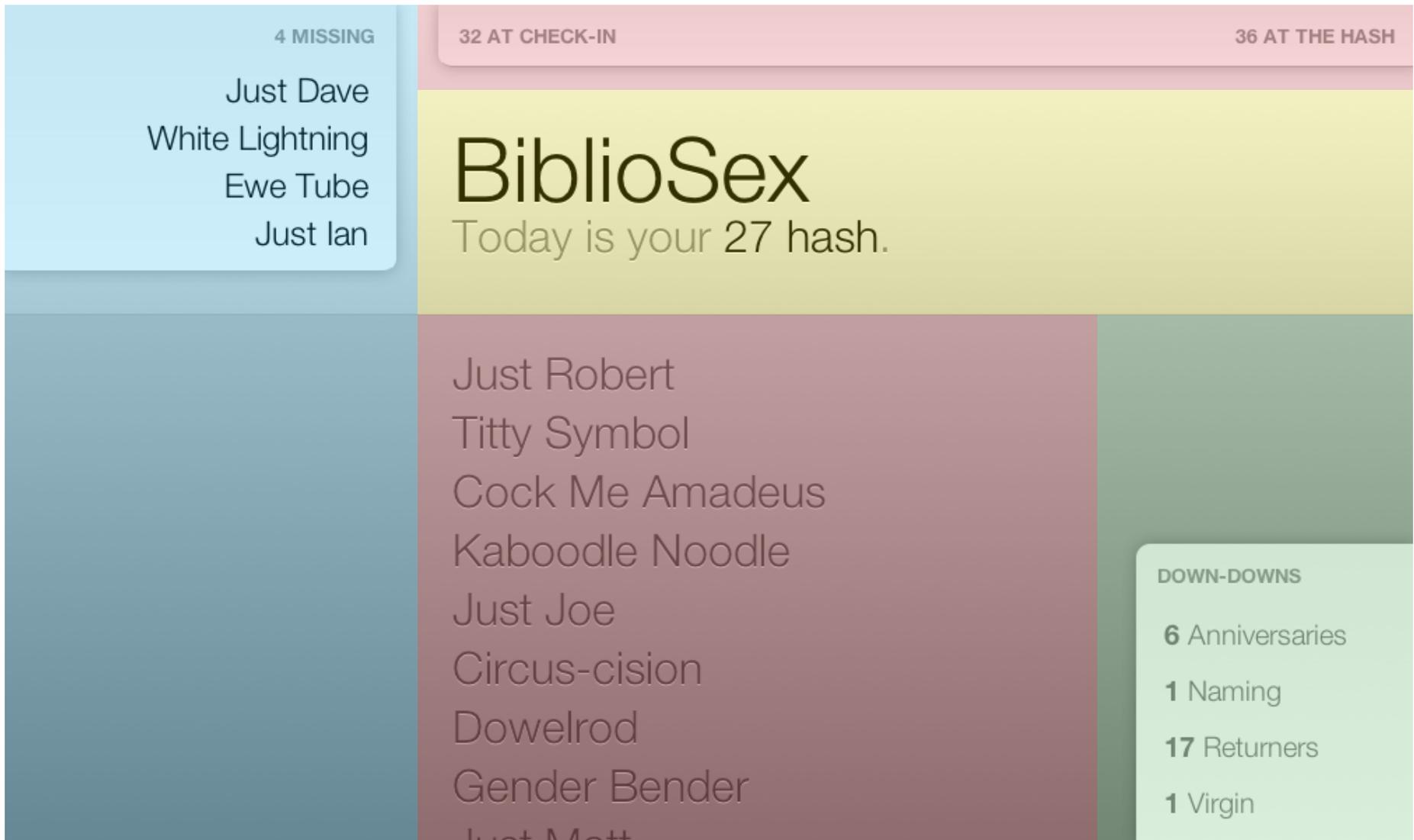
Today is your 23 hash.

Dowelrod  
Gender Bender  
Just Matt  
Dr. Grumpy P.ee.D.  
Hot & Juicy  
The Love Butt  
Just Chris  
Sissy Space-Cock  
Ducky Hater

## DOWN-DOWNS

**6** Anniversaries  
**1** Naming  
**17** Returners  
**1** Virgin

**FIGURE 60:** Names from the left column push to the center list when either scanning participant key fobs or manually clicking the name.



**FIGURE 61:** The layout segments according to the intended user.

The **Sweeper** looks for missing hashers; the **On-Sec** is responsible for the setup of the device and cares about who's attending; checked-in **hashers** like to see personal statistics; and the **Hash Mouth** calls out down-downs.

- 20 • Gibbon It Up Daily
- 20 • Untouched Private Panther
- 15 • Pvt. Hairy O'Toole
- 10 • Mommy Boom Boom Boom
- 5 • Just Chris
- 5 • Kaboodle Noodle

## DOWN-DOWNS

**6 Anniversaries**

1 Naming

**17** Returners

1 Virgin

**FIGURE 62:** Toggling the Anniversaries Down-Down category lists all eligible hashers along with their number of Blooming Fools hash attendances.

# Strategies

## Technology strategies

### Mobile

While the netbook form-factor was purposefully chosen as a pseudo tablet device, the interactions for which the larger screen real-estate was purposed no longer seems appropriate. The original intention was to allow hashers to be more self-responsible for their individual check-ins. In such a way, the device rests unmanned at a check-in waypoint, and the hasher approaches the device on their own. The larger form enables it to be noticed more easily and permits a casual interaction of approach-swipe-leave.

However, the bulk of the form also curses its consistent or proper use. During the prototype's premiere on March 5, the trail itself was altered for the sake of logistically arranging how the device would be transported among the waypoints. On April 17, the prototype still had to be transported from the start to the finish once reaching the end, since the trail didn't loop. Simply, the system should never dictate or constrain the happenings of a hash.

In only one check-in waypoint among five hashes did all participants check-in themselves without prompting. In this case, it took nearly the entire Beer Check for everyone to check-in, and as the administer of the device, I persistently interrupted my social time to check the progress of the check-ins. If my time would be interrupted, I'd prefer to do it once rather than in unpredictable spurts.

While encouraging hashers to be more self-responsible is noble and changing behavior on a group scale could self-reinforce over time, conquering such a feat may not really be necessary. The bulky form could shrink to a mobile handheld, giving the authority to check-in the group to one responsible hasher and eliminating the problem of its cumbersome transportation. A widespread obligation becomes a slight duty to one, and the system is integrated into hardware already brought on trail (i.e. a smartphone), rather than introducing a specialized device.

## Printable IDs

While the key fobs have worked with little complication during testing (e.g. a few IDs were duplicates or were never scannable), their use is still a future solution. Tethering a RFID reader to a netbook was appropriately tolerable for a prototype, but it is too complex for a production device. Perhaps the hardware and mobile requirements could be solved within the smartphone platform. While it's rumored Apple's iPhone 5 may include native Near Field Communication,<sup>52</sup> dozens of capable Android smartphones are scheduled for market release in 2011.<sup>53</sup>

Nevertheless, if NFC isn't commonplace in consumer devices and assuming scannable IDs is still an appropriate design direction, then perhaps the IDs could be altered to work within the limitations of current smartphones. Simply, the camera could read a barcode and the phone could interpret, acting as the primary system interface. Two-

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52 <http://goo.gl/jYzkM>  
<http://macrumors.com/2011/03/21/more-claims-of-nfc-capabilities-in-coming-iteration-of-iphone/>

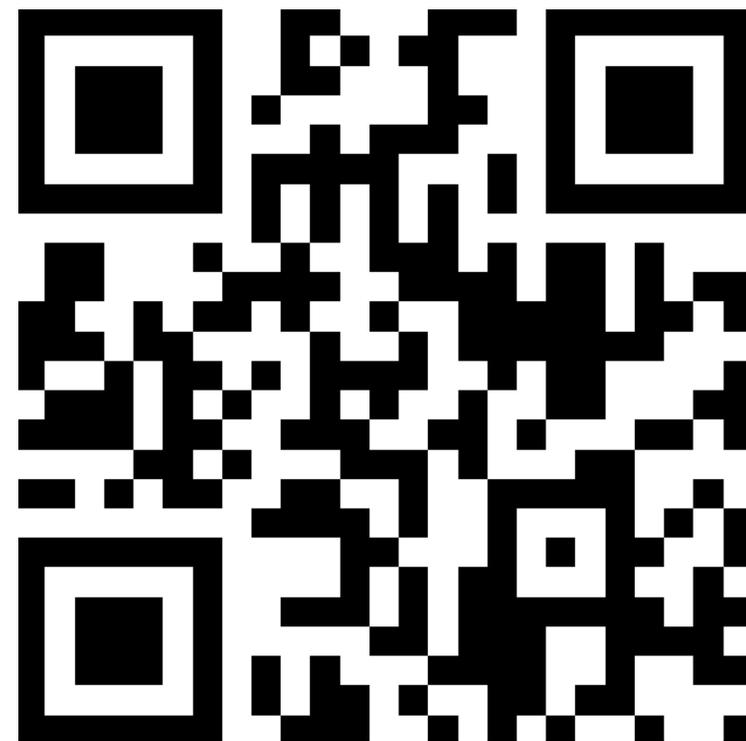
53 <http://goo.gl/yHfpK>  
<http://nearfieldcommunicationsworld.com/2011/05/11/37340/google-dozens-of-nfc-phones-in-the-pipeline-for-2011/>

dimensional barcodes, such as the open-standard QR specification, can encode over 4,000 alphanumeric characters, leaving an abundant cushion for unique identifiers (FIGURE 39).<sup>54</sup> Self-printing these IDs makes them easily replaceable and laminating them makes them just as durable as ABS plastic key fobs. Significantly, the price per unit reduces from \$0.70 to pennies. Assuming one hasher brings a personal smartphone to any hash (which already happens), the system diminishes from hundreds of dollars to a small fraction of the prototype cost.

## Cloud data

With a smartphone, data is no longer cumbersomely and dangerously stored locally but centralized in the cloud. Data becomes device independent, permitting complex interactions, such as multiple users simultaneously checking-in hashers or hashers checking-in themselves with their personal device of choice.

Consequently, a hasher's ID becomes universal. One can check-in at any kennel using this system and track their worldwide hashing history. One can discover with who they commonly hash or be able to reconnect with a one-time acquaintance. Yet, even kennels can start to understand their connections with the hashing community. For instance, because I hashed in Louisville on October 17, I hashed with a couple who hashed in China; therefore, Blooming Fools is two-degrees of separation from a kennel halfway across the world.



**FIGURE 39:** A printed QR code could act as the identifier for hashers. This code redirects to this project's homepage, <http://oncheck.in>.

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54 <http://goo.gl/4YcSe>

<http://www.denso-wave.com/qrcode/aboutqr-e.html>

# Marketing strategies

## Word of mouth

A primary method of marketing this design will be through word-of-mouth. Traveling hashers will naturally introduce this system to kennels not exposed to it by other means. With the identifier secured to whistle lanyards expected to be worn at even visiting hash events, the ID itself acts as a just-in-time advertisement and casual prompt when socializing with fellow hashers.

## InterAmerica's Hash

In order to gain exposure and test the system at large scale, the project will premiere at the largest worldwide hash event of the year.<sup>55</sup> In October, 1,500 hashers from all over the world will unite for five days in Savannah, Georgia for 16 hashes. The system could be used at the event and attendees could experience its value firsthand. Suddenly, hundreds of the most diehard and exuberant hashers from all over the world will bring that experience back to their home kennels and ideally advocate it when the service is officially launched.

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55 <http://savannah2011.com>

# Business strategies

## **Tiered freemium service**

In order to make this project a viable venture, it needs to be available for any kennel to subscribe as a service. Given 500 kennels are based in the United States (a quarter of the worldwide total), that market segment will be the easiest to immediately target. It would be a free service for small kennels as a way to promote their growth, while larger kennels would pay according to their size. In order to not nickle-and-dime kennels, any service charges would be according to tiered ranges, according to average number of attendees or hashes.

## **Customized ID tags**

Since hashers love customized memorabilia, identifiers could be manufactured per kennel or individual for a secondary revenue source. Otherwise, kennels could manually print the IDs via auto-generated downloadable PDFs.

## **Expand to other markets**

Even if this system is conservatively used by only 10% of the U.S. hashing market, any profit will most likely only keep the service operational. Therefore, once the service becomes stable and scalable, it should be adapted to broader markets under a different brand. The underlying codebase could be designed general enough as to make such an adaptation relatively easy without duplicating efforts. Other markets who may find such a group check-in service valuable could be outdoor adventure groups, teachers supervising school field trips or guides chaperoning tours.

# Conclusion

Despite unsure of what to expect given the outwardly crude nature of the House Hash Harriers, I dove headstrong into the community, and the more I remained embedded, the more the group's facade unveiled a loving, hospitable and spirited people. Through relentless participation, I gained trust, respect and friendships exceeding beyond the pages of this paper. The design process persistently reenforced decisions and propelled the project's momentum, never feeling as if the work was too tiring or heading along an inappropriate trajectory. I found a niche, tackled an unmet problem and utilized high-fidelity prototyping expertise to fashion a realized solution.

Perhaps because my firsthand approach to research was so enjoyably engrossing, I neglected to rigorously investigate how HCI could benefit. I never deliberately employed any external theories, frameworks or methodologies, yet I suspect there is an abundance of meaningful literature if only I reframed my inquiry. While I'm personally satisfied with the results of the primary research and final design, I wonder how the project would differ if more explicitly grounded in the field.

Future work will remold the design under more practical constraints in order to maximize its market potential. The current system will drastically streamline and mature as it is reborn into mobile consumer platforms.

# Contribution

As designers, because we're trained to understand people and solve problems, we're specially positioned to better the human condition. In understanding, we empathize with and design within lifeworlds not our own. In solving, we empower people to better their own world in ways only reachable by them.

While there are unfathomable number of methods, methodologies, theories and processes formulated to understand and design for people and situations, it's often easy to overlook the underlying purpose. Truly, in what way does an interaction designer better the human condition?

HCI, as defined by its title, examines the interaction between humans and computational machines; however, it fails to explain the reason for the interaction. People use technology not for technology's sake but for purposes of productivity, entertainment, utility, education, reference, etc. Ultimately, all these reasons are for the same aim: to live and work in a world of people. Networks built from the fibers of individual relationships weave and fortify communities, which in turn entwine into larger societies. If living, human relationships are the key, then one way designers foster such interactions is by engaging people within communities. Interweaving new threads or tightening all the threads strengthens the entire fabric.

In the case of this project, the relationships within the House Hash Harriers (and more specifically within the local Blooming Fools chapter), is one more akin to a contentedly dysfunctional family, united by rambunctious misadventure. The design fosters this family's interrelationships by streamlining administrative processes to remove social hindrances and exposing critical, just-in-time information to maintain

member safety. While the executed expression of this design is steered by technological limitations, the solution to the framed problem supersedes any tangible medium. In essence, perhaps human relationships are the medium interaction designers should master. Such a practice begins within our own everyday lifeworlds.

# Reflections

## Constraints empower creativity

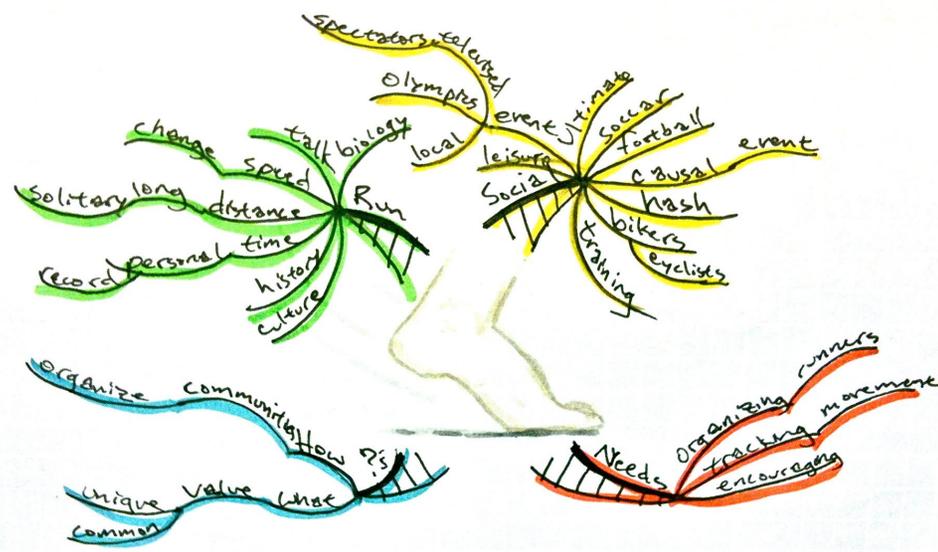
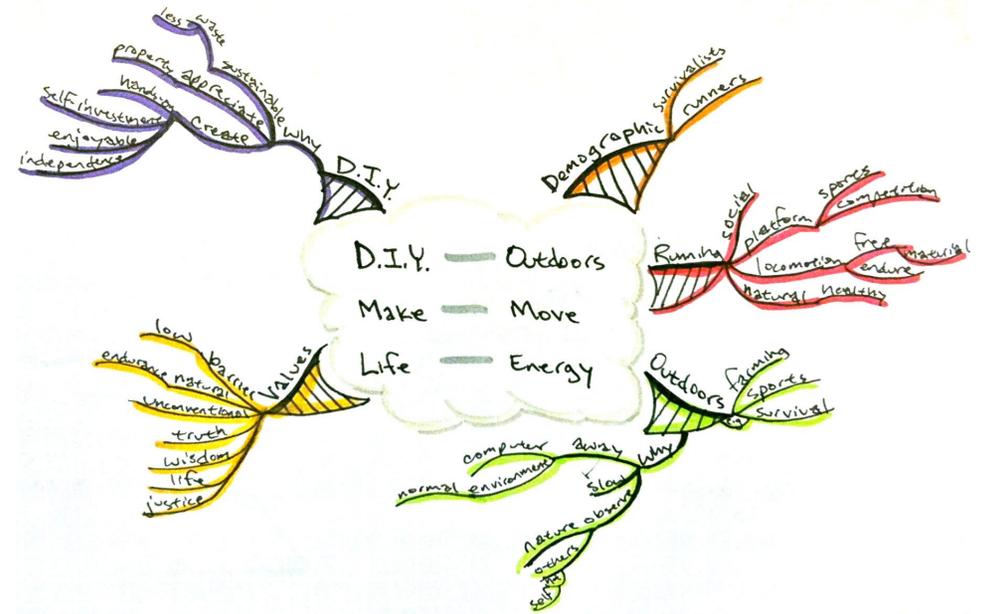
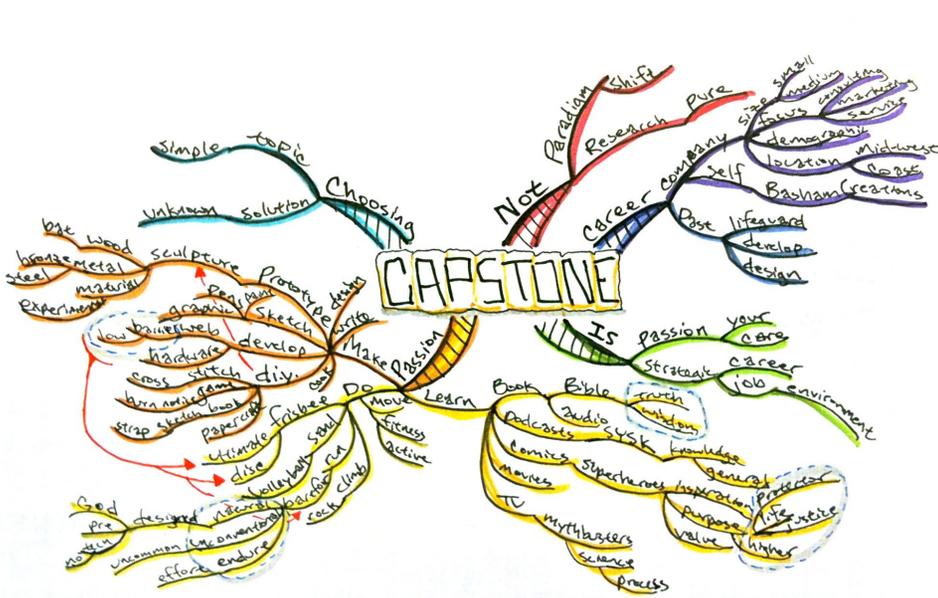
When initiating this project, I didn't start knowing the focus would concern the House Hash Harriers, but rather derived values from activities about which I'm passionate (**FIGURE 63**). Commonly, I'm attracted to activities with low barrier to entry. I pursued an early career as a web developer because the knowledge base was relatively shallow in the early 2000s and entire projects encompass mere kilobytes; in contrast, I strayed from 3D modeling, animation, sound and video because they demanded steep hardware requirements. In terms of physical activities, I enjoy Ultimate frisbee, disc golf and sand volleyball, because the equipment and play costs are insignificant; in contrast, golf demands hundreds of dollars in equipment and every game costs a fee. This low barrier magnified in the form of my newly invigorated passion for running, in which the person is the equipment and the outdoors is the playground. After adopting the barefoot running philosophy in mid-2009, as proclaimed in Christopher McDougall's *Born to Run* bestseller,<sup>56</sup> I started to appreciate the brilliant complexity of human biology and was distraught in the revelation of how running barefoot has been branded appalling to even dangerous by a culture seemingly manipulated by corporate initiatives. While I still purchase hundred dollar Vibram FiveFingers<sup>57</sup> as my minimalist shoe of choice, protective forms of barefoot running can still be accomplished with much less.<sup>58</sup>

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56 <http://chrismcdougall.com>

57 <http://vibramfivefingers.com>

58 <http://lunasandals.com>



**FIGURE 63:** Three mind maps continually refined the direction of the capstone project. An initial exploration revealed my passions, the purpose of a capstone and how the capstone may direct my professional career (above left). A second mind map compared potential directions of running, the outdoors and the Do It Yourself movement to personal values (above). The final map examines aspects of running in historical, cultural and social contexts (left).

Enjoying the naturalness and whole-bodied engagement of running in non-stifling and diverse outdoor environments, I delved deeper into the social and historical repercussions of the activity, exploring how it splintered from a necessity of survival into more contemporary specialities of physical training, health, recreation and sport. With much of the competitive running world already commercialized through training programs, globally broadcast events, corporately sponsored athletes and high-tech biological tracking systems, it seemed like much of the love for the fundamental activity itself is being overshadowed and forgotten. Mark Remy, executive editor of *Runner's World* magazine, argues stripping oneself of all these complicated, artificial layers is a form of physiological freedom called “running naked” and should be performed regularly by runners.

The House Hash Harriers intentionally removes these layers, establishing physical fitness and non-competitiveness as core tenets in a socially accountable context. With it being largely an underground organization grown by word-of-mouth, its covertness blatantly contrasts to the flaunter of traditional sport activities (FIGURE 40). While some kennels are sponsored by brewing companies, it's done to lower event fees and encourage membership growth.

Through examination of passions, I was able constrain this project from general categories of activity according to a set of values and discover a demographic embodying such qualities. In such a narrow and vigorous focus, it empowered and blossomed creativity as a significant and intentionally meaningful force working alongside and for the target group.



FIGURE 40: Hash Boy Issue #44 conservatively cautions about the consequences of commercializing hashing.

## Consider design ecologies

For the first several months of this project, I struggled with accepting any concepts because they were generated for the wrong motivations. My initial approach to hashing was to look for a problem to solve. With this program seemingly presupposing computers as the solution, it felt as if technology would be infused for technology's sake. With the hashing culture already bias against technology, any efforts seemed fruitless.

When no longer looking for a problem (for as Hash Boy says, "Hashing is fine the way it is!") but rather an opportunity, the question reframed from "What's something wrong with hashing?" to "How could technology enhance the hashing experience?" Under this restatement, concepts seem much more meaningful and the bias against all technology seems more like a bias against *poorly designed* technology which hinders the hashing experience.

With numerous concepts appropriate under this new reframing, choosing only one as this project's focus felt as if Blooming Fools would be unknowingly cheated as a result. However, I failed to examine these concepts in a broader context. Though not all immediately implementable, many of the concepts could integrate well later as a long-term strategy. The check-in concept is merely the foundation of much more ambitious and systemic design for the House Hash Harriers.

# Dictionary

## A

A-to-A Trail ending where it starts.

A-to-B Trail not ending where it starts.

AmbASSaWhore Mismanagement position responsible for organizing road trips to other hashes; also called Road Whore.

## B

Bad Trail Section of or mark ending a dead-ending trail.

Beer Check Intermediate waypoint to regroup and refresh hashers.

Beermeister Mismanagement position responsible for supplying beverages.

Beer Near Trail mark indicating close proximity of beverages.

## C

Chalk Common medium for marking trail on concrete; also called Flour.

Chalk Talk An explanation of what to expect on trail.

Check Trail mark intersecting where true trail may deviate.

Circle Ceremony at the end of the trail in which to conduct down-down rituals; also called On-On or Religion.

Competitive Behavior Acting competitively, often by taunting or outrunning slower hashers.

## D

Dead Fucking Last (DFL) Hasher positioned at the end of the pack.

Dead Hare Hare who lays trail before the start of the hash.

Down-Down Ritual of chugging a beverage after the pack sings a song.

## E

Eagle Trail Optional, longer and more difficult section of trail.

## F

Flour Common medium for marking trail on open ground.

Front Running Bastard (FRB) Hasher positioned near the front of the pack.

## G

Grand Master (GM) Lead Mismanagement position of a kennel.

## H

Hare Hasher who designs the trail.

Hare's Arrow Trail mark always indicating the direction of true trail.

Harrier Male hasher.

Harriette Female hasher.

Hash Single running event, often organized at least twice a month by a kennel.

Hash Cash Kennel's financial resources.

Hash Cashier Mismanagement position acting as the treasurer.

Hasher Any participant of a hash.

Hash Flash Mismanagement member photographing a hash.

Hash Haberdasher Mismanagement position responsible for designing, ordering and selling merchandise.

Hash House Harriers (HHH or H3)  
Global community of hashers.

Hashing Running trail.

Hash Mouth Any hasher leading Circle ceremonies. Most likely the Religious Advisor, Grand Master or another Mismanagement official.

Hash Name Nickname bestowed to a hasher by the kennel.

Hash Scribe Mismanagement position authoring the Hash Trash.

Hash Trash Editorial writeup of a hash.

Home Kennel Kennel in which a hasher primarily hashes.

## J

Joint Master Mismanagement position assisting the Grand Master.

## K

Kennel Hash House Harrier chapter.

## L

Live Hare Hare who lays the trail a few minutes ahead of the following pack.

## M

Mismanagement  
Elected officials of a kennel.

Mother-given Name  
Legal name of a hasher.

Mother Kennel Kennel in which a hasher was bestowed a Hash Name or the previous kennel of a kennel's founder.

## O

On-After Post-hash party; also called On-On-On.

On-In Symbol marking the approximate end of the trail.

On-Sec Mismanagement position responsible for maintaining the attendance roster and receding hareline.

## P

**Pack** Group of hashers pursuing the hare; also called Hounds.

**Pack Arrow** Mark indicating the direction of the pack.

**Paper** Common medium for marking trail in high grass; also called Flour.

**Pre-Lay** Marking the trail before the start of the hash; also called Dead-Lay.

## R

**Racist Behavior** Any verbal or non-verbal mention of racing; also called Racism.

**Receding Hareline** Calendar of upcoming hashes.

**Religious Adviser (RA)**

Mismanagement position responsible for leading songs and establishing traditions.

**Returner** Hasher who didn't attend the prior hash.

## S

**Shiggy** Any obstacle on trail, though often implies brush, briar, thorns, thick vegetation, rocks, streams, mud, etc.

**Sweeper** Hasher responsible for finding lost hashers. If not explicitly designated, this duty falls to the hares.

## T

**Trail** Any route laid by a hare.

**True Trail** Trail correctly leading to the On-In.

**Turkey Trail** Optional, shorter and easier section of trail.

## V

**Violation** Any infraction of hash etiquette or tradition; also called a hash sin or crime.

**Violator** Hasher guilty or accused of a violation to be punished by a down-down.

**Virgin** First-time hasher.

**Visitor** Hasher visiting from another kennel.

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# Biography

Before graduating in IUPUI's New Media program, I realized I didn't want my career to solely be defined or constrained by my decade of web development experience. My skills could supersede the artificial barriers of the web browser and venture into new application domains. A three-semester exploration into physical computing enabled me to prototype a hardware and software gaming platform; construct the hardware for a multitouch display; develop color and symbol tracking algorithms; and design an interactive art installation.

As a user experience designer instructed by Indiana University's Human-Computer Interaction Design masters program, I've learned how to conceptualize through prototyping, facilitate small teams and design for people.

Besides designing and coding, I love pursuing God, quoting movies, reading classic graphic novels, listening to audiobooks, constructing paper craft, devouring blueberry muffins, running barefoot, launching Frisbees and hosting board game nights.

