



DRINKLY

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“Too much of anything is bad, but too much Champagne is just right.”
— F. Scott Fitzgerald

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Acknowledgements

“Drinking makes uninteresting people matter less and late at night, matter not at all.”

— Lillian Hellman

This final project would not have been possible without the the significant contributions made by various individuals in the iSchool community. We thank you all for the time and feedback that you contributed throughout the semester.

Next, we want to thank our advisor Ray Larson. The direction and insight that was provided fundamentally changed the direction of our final project.

Finally, we would like to thank the entire iSchool staff for all their support throughout our studies. The admin office for the repeated final project deadline reminders. The IT staff for helping us make our final presentation a great success. Last, but certainly not least Meg St. John for making our iSchool experience one that will not soon be forgotten.

1 Executive Summary

“I distrust camels, and anyone else who can go a week without a drink.”

— Joe E. Lewis

1.1 The Problem

People want to hang out with their friends and coworkers over drinks, but deciding where to go is hard. Happy hour specials can be motivators and influence decisions, but this information is not easily browsable and integrated into the decision-making process. Instead, groups tend to make decisions about where to go for drinks based upon places they are already familiar with, rather than where they'll get the best deals.

1.2 The Solution

Drinkly makes it easy to schedule nights out with your friends, by creating simple polls that you share with friends to vote on where to go out. Information about food and drink specials is integrated into the Drinkly feed, making this information accessible during the decision making process. And since groups are using the site to plan future visits to bars and restaurants, businesses can benefit from intelligence about who their future customers and they can potentially offer targeted deals or messages to those groups.

The process of creating a poll involves three steps: (1) signing into Drinkly using Foursquare (2) Searching for bars and happy hour specials to create a list of potentially places to meet (3) Inviting your friends to vote. For our final project software deliverable, we completed a working version of our web application to create and vote on Drinkly polls; currently open to private beta testing. Additional non-implemented features have been mocked up and are described as next steps.

1.3 Next Steps

The implementation of a business dashboard, enabling bar and restaurant owners can review who is visiting their venues and offer unique deals directly to those customers.

1.4 Team Biographies

Michael Hintze is a designer. Following graduation he will be working at Apple as an Interaction Designer.

Dave Lester is a developer. Following graduation he will be working at Twitter as an Open Source Advocate.

2 Research

“They say the only people who tell the truth are drunkards and children. Guess which one I am.”

— Stephen Colbert

2.1 Background

We began working on our project by defining success, in order to set expectations for the rest of the semester. Since our project scope and roadmap was to be determined by us rather than external stakeholders, we used similar exercises throughout the semester to help guide our project. The three metrics for success we were defined were:

1. to have developed a product we can use ourselves
2. implemented a complete solution, rather than just design it
3. had fun along the way

At the time of submitting this report, we have succeeded in reaching all three goals. We had also identified two larger interests and motivations that helped focus our idea:

1. providing a dedicated channel for structured, real-time data about what is happening at businesses that can be used by consumers to make better decisions, and by businesses to reach new consumers
2. the difficulties of managing the discovery and planning of casual gatherings between friends and colleagues.

Drinkly was implemented as a web application providing access to a specific type of content (happy hour specials), and social interaction (organizing meetups). The decision to focus on happy hour specials instead of all deals/specials/events at businesses was made for two main reasons: it focused on a single type of content (drink specials), and was something that we would use ourselves.

2.2 Initial Concept

Going into the semester, the team had previously collaborated on a project called “InStore”, a mobile application for the discovery of nearby coupons and deals. Additionally, our experiments related to integrating various data sources would influence us to focus more on the social interaction that the app facilitates rather than focusing on access to the data. It’s more important that Drinkly facilitates positive social interactions than it is to have the best/most-exhaustive/up-to-date information.

Based on our past experiences with InStore, we recognized that it would be difficult to get businesses to offer drink specials on our product without first establishing a user base, and similarly difficult to attract users to our product without first having drink specials. We had a classic chicken and egg problem, and realized that our solutions were limited.

Our options were:

1. Find and manually curate the data ourselves: this would be an extremely manual process, time consuming, and there were a number of web services already doing just this. Additionally, it would be nearly impossible to keep the data fresh and scaling the service would be costly at best.
2. Crowdsource current drink specials from users: we thought it would be possible to have users add drink specials to our site when they go out. This would make it relatively cheap to amass a database of drink specials, but we required the right intrinsic motivations to get users to collect and upload the data for us. We struggled to find the right motivators.
3. Aggregate data from existing sources: we could collect data from various channels where bars were already publishing bar data, for instance Twitter, Facebook, Foursquare, Yelp, and their own personal websites. The data was fresh and other services had essentially already developed relationships with the businesses we wanted.

We ultimately decided that aggregating data from existing sources would be meet our needs, and provide the most value to new users. Little did we know how difficult it would be to cull semi-structured data from disparate sources. We spent a number of weeks trying to build an initial prototype and get the data in a useful format. We encountered two major issues. First matching bars across services was extremely difficult. We had no idea if “Sam’s Pub” on Facebook was also “Sam’s Pub” on Foursquare. Second the data that we were pulling had minimal structure. Most of the data we could access was

unstructured text, or we had no way to determine what the content was and what its value would be to users.. amounting to a large signal to noise problem.

At best, we could aggregate all of the data into one continuous feed and leave users to make sense of the mess (see Figure 1, 2, & 3). However, based upon the feedback that we received from potential users and our own intuition, we recognized that we had a serious problem. Practical problems of data integration led us to reconsider the value of the data to users. This led us to focus on several different ideas that were focused more on user interactions with our service than the need for comprehensive third-party data.

2.3 Idea Iteration

Flash Deals

We considered how constraints around deals delivered through our application could create incentives for users to act upon the data that our application was providing. For example, *flash deals* could be drink specials offered through Drinkly that appear for only a brief period, possibly limited to the first X number of people that redeem. We brainstormed related ideas with alternate constraints, such as progressive specials that would increase in value based upon how many friends you shared the special with, or diminishing specials that would be available to everyone but have greater value for the first X number of people who redeemed it. All of these ideas were collectively focused on making Drinkly more active and real-time, and also engaging businesses.

What we found by speaking to some local business owners is that these deals would need to be negotiated on a business-by-business level, which would provide a significant amount of overhead for our project. We needed a way to create engagement that didn't require us to become salespersons to local businesses.

Prepaid Coworker Meet Ups

Another early pivot was matching a user and group of their coworkers with coworkers at another company to have an informal meet up at a local watering hole. Users had the opportunity to hangout with their coworkers, network, and get a great special on their drinks. It gave businesses the opportunity to book large groups of customers in advance and have them pay upfront as well. After talking to some users we realized that some of the initial assumptions we made about the service were quite flawed. For instance, many people felt uncomfortable drinking with their coworkers. They felt that it could potentially damage their career opportunities. Additionally, the incentive to meet people from other companies simply wasn't there.

So we decided to go back to the drawing board only this time we felt we were onto something with the notion having groups chose a bar before in advance. After all this is what gave us the leverage with bars to offer lower price points.

E-Decision Platform

Rather than facilitating the match-making of different groups around drinking, we returned to our own experiences at graduate students at the iSchool. A previous master's project, called the e-Decision platform, allowed users to create generic online polls and share those with their friends. During our first year at the iSchool, this tool was used on a weekly basis to determine the time and location of "Thirsty Thursday"; a weekly school-wide night out. We saw an opportunity to combine the concept of group organizing around polls with drink specials.

2.4 Idea Selection

Parts of each of the project idea that we explored are present in today's Drinkly. In the end, we believe planning your night out with drink specials balance many of the needs of our project, creating engagement with our application that the other ideas lacked.

3 Implementation

“My dad was the town drunk. Most of the times that’s not so bad; but New York City?”

— Henny Youngman

3.1 Overview

We originally planned for separate design and prototyping phases, prior to starting development. However, due to delays in selecting and narrowing our concept, we pursued development in parallel with our design. One of us was able to design the web app and create the front-end scaffolding and interactions, while the other was working on the back-end services that power the app.

3.2 Back-end

Initial experiments in creating a backend for Drinkly were developed in Node.JS and MongoDB. Our rationale for this initial solution was that Node offered event-driven, non-blocking I/O; ideal for connecting from disparate/remote web services with potential latency issues. Mongo was the team’s first attempt at using a NoSQL datastore, and made it easy to initially capture data from third-party APIs including Foursquare and Twitter. We found, however, that the lack of structure in the data itself, and our lack of data model, was an impediment to making meaning out of our content.

The final backend solution we adopted is written in Python, using Tornado to connect to a MySQL database. For testing and provisioning, we deployed our application to Heroku but have also run it on other hosting providers including Linode. The final hosting solution for the project will be based upon the traffic and bandwidth the service requires in production, which is yet to be determined. To evaluate this in the future, we integrated New Relic monitoring to our application to ideally eliminate any performance bottlenecks.

3.3 Front-end

We leveraged Twitter bootstrap to provide basic scaffolding for the web app. This provided an underlying grid and along with basic Javascript interactions. We were able to modify existing templates instead of creating everything from scratch, which saved us considerable time. When developing pages we wrote as much of the visual styles as we

could using CSS3, but bitmap images were still required for certain elements, for instance the Drinkly logo. Also, since we knew users would be viewing our site on Apple devices with retina displays, we employ HiDPI images, so they appear clean and crisp when viewed.

We also leveraged pickadate.js to handle all the date and time inputs on the poll creation page. This plugin gave us considerable flexibility when handling date and time input across a wide range of screen sizes. Additionally, it provided an easy way for us to get date and time into one consistent format, thus reducing the amount of validation we needed to write.

All the other HTML, CSS, and JS was hand coded right here in Berkeley.

3.4 Visual Design

All of early design work and visual design was done in Adobe Photoshop, which allowed use precious control over each and every pixel. We also made use of Adobe Illustrator for some complementary vector assets that we needed at varying sizes, for instance our logo and marketing assets.

3.5 User Experience and User Interface

Throughout the semester we made use of a number of design methodologies that proved to be invaluable to the development of our final project. Constructing well formed design principles allowed us to articulate what the fundamental goals and personality of our product would be.

Design Principles

Delight and Surprise: The smallest details matter for a great experience. Use well placed animations when you can.

Have Fun When You Can: A beer mug filling up is more fun than a spinning circle, or beach ball of death.

Get to Know the User: Learn about our users over time. Don't make them input the same things over and over.

Images are Best: Use images whenever possible, they are more engaging than text.

Make Choices for Users: Decide for users whenever possible, but let them have the final say.

Be Consistent: If it looks the same, it should act the same.

Notify users sparingly: Notifications are disruptive. Only bother users when the alert is meaningful and significant.

Keep it Simple: People love brevity. Keep things short and meaningful.

Only Show What's Needed: Don't overwhelm users. Hide features and options that are not essential at the time.

Branding

Creating a compelling brand for our final project was something that was really important to us and we spent a number of weeks finding a compelling name, and creating a flexible logo. This may seem like it was time waste, but Walter Landor, the legendary designer behind the Coca-Cola script, once said that “products are made in the factory, but brands are created in the mind. And putting the product before the brand is like putting the cart before the horse.”

When designing our logo we instinctually knew that our product would need to appeals to a broad audience. Everything from the beer drinking Joe Sixpack, to the more refined cocktail drinker was a potential user for us. This helped us realize that we needed a flexible logo, one that could adapt to a broad set of needs.

(Show logos in progression- shot glass, beer mug, cocktail glass, wine glass, etc)

3.6 Design Considerations

Initial User Experience

One of the major barriers to getting started with Drinkly was that we were forced to require users to sign in using Foursquare in order to use their API and get access to the bar data we required. We thought this would be a major inconvenience to non-Foursquare users, since they would be taken out of the experience of using our product and taken to create an account on another service. In order to address these concerns we will continue to expand authentication options for users to more common platforms (Facebook, Twitter, etc.). This will help reduce the initial friction to using our service.

Multiple Screens and Devices

As we continued to develop our idea it became evident that we needed to support a large number of screen sizes and devices. We learned that users wanted to be able to create polls, and vote for their favorite bars on their mobile devices and tablets. More importantly we discovered that many people would have their first experience with Drinkly by opening a link that a friend shared with them via email, Facebook, or Twitter. And these users would try to view our website on a mobile browser on a phone or tablet. We knew that this first impression was a lasting one, so we chose to use responsive web design (RWD) techniques to make sure Drinkly looked great no matter where you choose to access it.

In order to create the underlying RWD structure, we needed to decide up front what information would be most prominent and how the display of that information would transition across the various devices. Since phones were the most limiting form factor we decided to go with the old “mobile first” mantra. Focusing on the phone form factor forced us to simplify our app and prioritize the information that was most important in a mobile context. For example, on our voting page we decided that it was important to prioritize bar options; so those elements are located above the fold. Also, it is a bit tricky to transfer static designs into flexible pages. So when we were prototyping we ensured to design for three primary form factors that cover the broadest range of our anticipated users: iPhone, iPad, and roughly a 15” monitor.

4 Final Product Walkthrough

“The trouble with jogging is that the ice falls out of your glass.”

— Martin Mull

Drinkly is all about making it fun and easy to plan a night out with your friends and get drink specials in the process.

4.1 Homepage

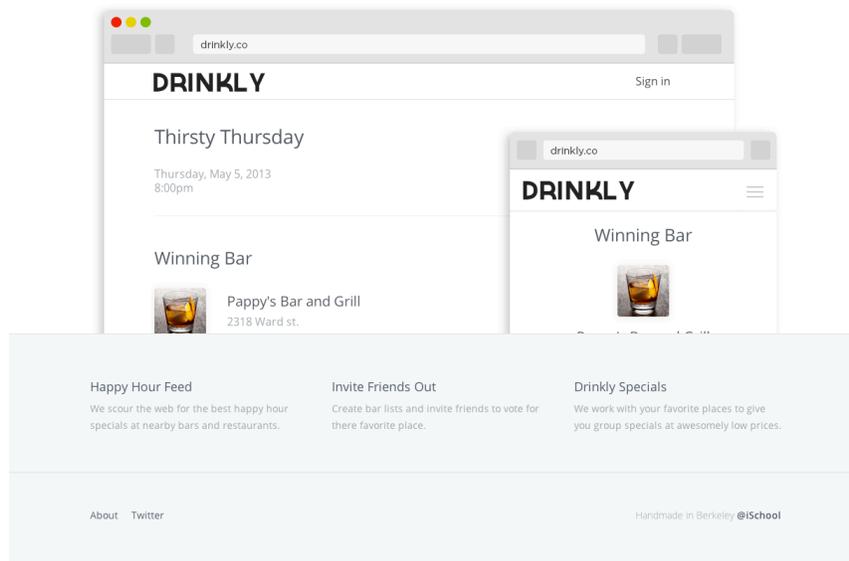
This page provides a brief product description, some information about our team, and a way for users to sign in via Foursquare.



Schedule your night out with Drinkly.

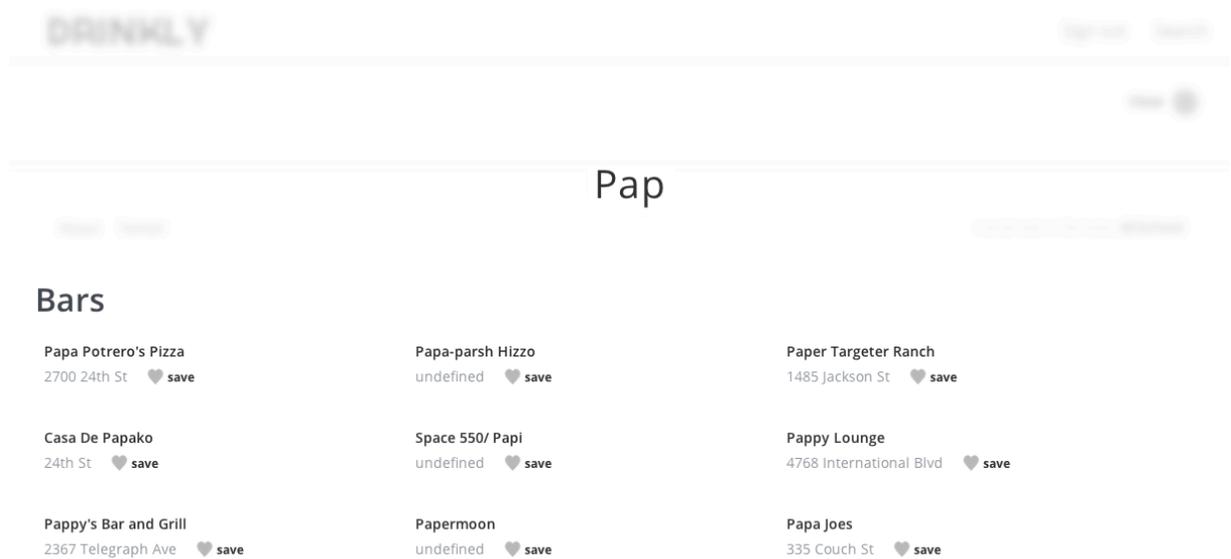
Bar meetups made easy. Sign up for early access and updates.

Request an invite



4.2 Browse / Search

Once users have signed in they are taken to the browse/search page where they can browse through currently trending bars, or search for a place they already had in mind. Users can also favorite bars they want to go to and those bars are saved in list on their account. We also pull in drink special information along with the bars basic information so users can see where they can get the best deal.



4.3 Creating a Poll

This page allows users to create a poll from bars they have favorited. This is the primary feature of our app and it allows users to get feedback from their friends on where they want to go out for a particular event. Once they have created a poll they can share a link with their friends that allows them to pick their favorite place.

DRINKLY Sign out Search Search

Create a Drinkly Poll.

POLL NAME

DRINKING DATE (WHEN YOU ARE GOING OUT)
 Midnight

POLL END DATE (WHEN VOTING ENDS)
 Midnight

May 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

▼ TODAY ✖ CLEAR

[SHARE POLL](#)

Currently Added Venues

Albatross Pub
1822 San Pablo Ave., Berkeley, CA, 94710 [View](#) 

Pappy's Bar and Grill
2367 Telegraph Ave, Berkeley, CA, 94704 [View](#) 

4.4 Voting

Users who are invited to vote are directed to the voting page. Here they can see the name of the event, the time remaining on the poll, and of course vote for their favorite

place to go out. It is also here that we can notify users of additional drink specials, which in turn can manipulate voting. This gives bars an opportunity to offer lower prices to sway groups to come to their establishment.

DRINKLY

[Sign out](#)

Thank God It's Friday

Friday, Apr 26, 2013
1:30 PM

Polls ends in
0 d 0 h 12 m 12 s

Choose your favorite Bar.

Jupiter

2181 Shattuck Ave, Berkeley, CA 94704 [View](#)



Comal

2020 Shattuck Ave, Berkeley, CA 94704 [View](#)



Pappy's Bar and Grill

2367 Telegraph Ave, Berkeley, CA 94704 [View](#)



Thalassa

2367 Shattuck Ave, Berkeley, CA 94704 [View](#)



Free House

2700 Bancroft Way, Berkeley, CA 94704 [View](#)



4.5 View the Winner

When the poll ends all users who have voted are sent an email notification letting them know the poll have closed and which bar received the most votes.

DRINKLY

Sign in

Thank God It's Friday

Friday, Apr 26, 2013
1:30 PM

Polls ends in
0 d 0 h 19 m 13 s

Winning Bar



Comal

2020 Shattuck Ave, Berkeley, CA 94704

Directions



The live site can be viewed at www.drinkly.co

5 Challenges

“One sip of this will bathe the drooping spirits in delight, beyond the bliss of dreams.”

— John Milton

Finding an Idea

We spent a considerable amount of time deciding on an idea that we were both passionate about. We continually diverged and converged throughout the semester often without focus. While we ultimately were able to find some common ground we should have spent more time testing our assumptions rather than going off instinct and gut feeling.

Lack of a process

Working as a two person group, we lacked a formal process or structure. We relied on mostly ad hoc processes for making decisions and getting things done, and would have benefited from more formalized milestones throughout the semester. It’s also possible that a third group member could have served as a tiebreaker to move decisions forward quickly and with less friction, and at times prevented consensus thinking.

Lack of time

From the very beginning we knew that time would be a major constraint. We had considerable goals and struggled throughout the semester to narrow them. This left us to continually reevaluate the scope of our project and change our design and development process to ensure we met the hard deadlines set by the program. Comparing our planned schedule with our actual schedule revealed some interesting findings.

Planned Schedule					
Task	Jan	Feb	Mar	Apr	May
Concept Generation					
Prototyping					
Testing					

Refinement					
Implementation					

Actual Schedule					
Task	Jan	Feb	Mar	Apr	May
Concept Generation					
Prototyping					
Testing					
Refinement					
Implementation					

Effort Creep

Our team was not able to accurately predict how long a given task would actually take. We would complete 80% of a task, but then spend the next three weeks trying to finish the last 20%. Since we had only a two person team we were unable to collaborate to get difficult tasks done more efficiently.

Scope Creep

As we continued to build out our product we struggled not to continually add features and functionality. Often we would find little things to tack on without any regard for how this feature would affect development time.

6 Next Steps

DEATH: "There are better things in the world than alcohol, Albert."

ALBERT: "Oh, yes, Sir. But alcohol sort of compensates for not getting them."

— Terry Pratchett

Businesses

We would like move beyond this initial phase of our user-facing application, and focus on building business tools to enable targeted marketing and specials. We currently have many of these ideas expressed in a prototype of a business dashboard for bars to manage the specials that they are currently offering (see Figure 4). And fully implementing and releasing the business dashboard will be key to Drinkly's long-term success by creating a revenue source for the service to succeed as a business.

We imagine the following workflow moving forward: bars will be able to create long term advertising campaigns to target groups who show interest in going to a bar (having added the bar to a poll). Creating a special will be easy (see Figure 5). Bars will let us know an objective they have in mind: get new customers, reward existing customers, or increase engagement with their venue. This allows us to target specific segments of our users and deliver the special in the most meaningful way. Additionally, bars will provide a headline, description, and image for the special. This is the information that will be displayed to users. Finally, bars will set a budget for how much they want to spend per day to run the special and a schedule for when they want to end the campaign.

User

We see tremendous potential for Drinkly to be used as a tool for social organizing, while saving people money. We hope to continue receiving feedback on the application, and do a public launch sometime in the future.

7 Appendices

“All of the things I really like are either immoral, illegal, or fattening.”

— Alexander Woollcott

Figure 1: Early Drinkly Mockup

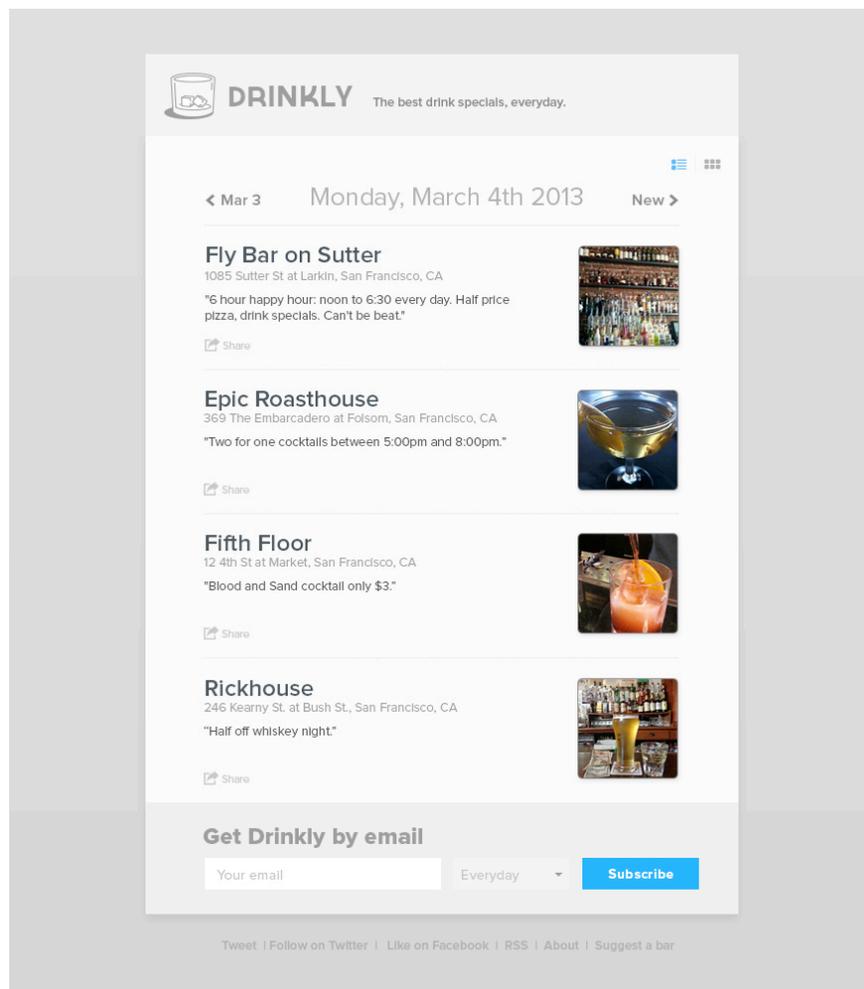


Figure 2: Early Homepage Prototype

DRINKLY TOP SPECIALS MOST SHARED JUST ADDED

Top specials in San Francisco

 <p>Sidebar & Grille 39 Dalton Street (Sheraton Boston Lobby) Special from  50% off all drinks from 5:00pm - 8:00pm</p>	 <p>Sidebar & Grille 39 Dalton Street (Sheraton Boston Lobby) Special from  50% off all drinks from 5:00pm - 8:00pm</p>
 <p>Hobson's Choice 1601 Haight St (at Clayton) Special from  50% off (\$20 max discount)</p>	 <p>Hobson's Choice 1601 Haight St (at Clayton) Special from  50% off (\$20 max discount)</p>
 <p>Iron & Gold 3187 Mission St. (at Valencia) Special from  Check in with three friends and get a round of R. Jelinek Fernet shots! Limit once per visit, with purchase.</p>	 <p>Iron & Gold 3187 Mission St. (at Valencia) Special from  Check in with three friends and get a round of R. Jelinek Fernet shots! Limit once per visit, with purchase.</p>
 <p>Pedro's Cantina 128 King Street (between 2nd St & 3rd St) Special from  Get free chips & salsa!</p>	 <p>Pedro's Cantina 128 King Street (between 2nd St & 3rd St) Special from  Get free chips & salsa!</p>
 <p>Swank 488 Presidio Avenue (California St) Special from  \$4 glass of Juniper Canyon Chardonnay when you check in at Swank</p>	 <p>Swank 488 Presidio Avenue (California St) Special from  \$4 glass of Juniper Canyon Chardonnay when you check in at Swank</p>

<p>Get Drinkly by email</p> <p>Get the best drink specials delivered right to your inbox.</p> <input type="text" value="Your email"/> <input type="button" value="Subscribe"/>	<p>Info</p> <ul style="list-style-type: none">About UsContactPrivacy PolicySubmit a Special	<p>Connect with us</p> <ul style="list-style-type: none"> Follow us on Twitter Follow us on Tumblr Like us on Facebook
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ESTABLISHED 2013  HANDMADE IN BERKELEY

Figure 3: Early Search Page Prototype

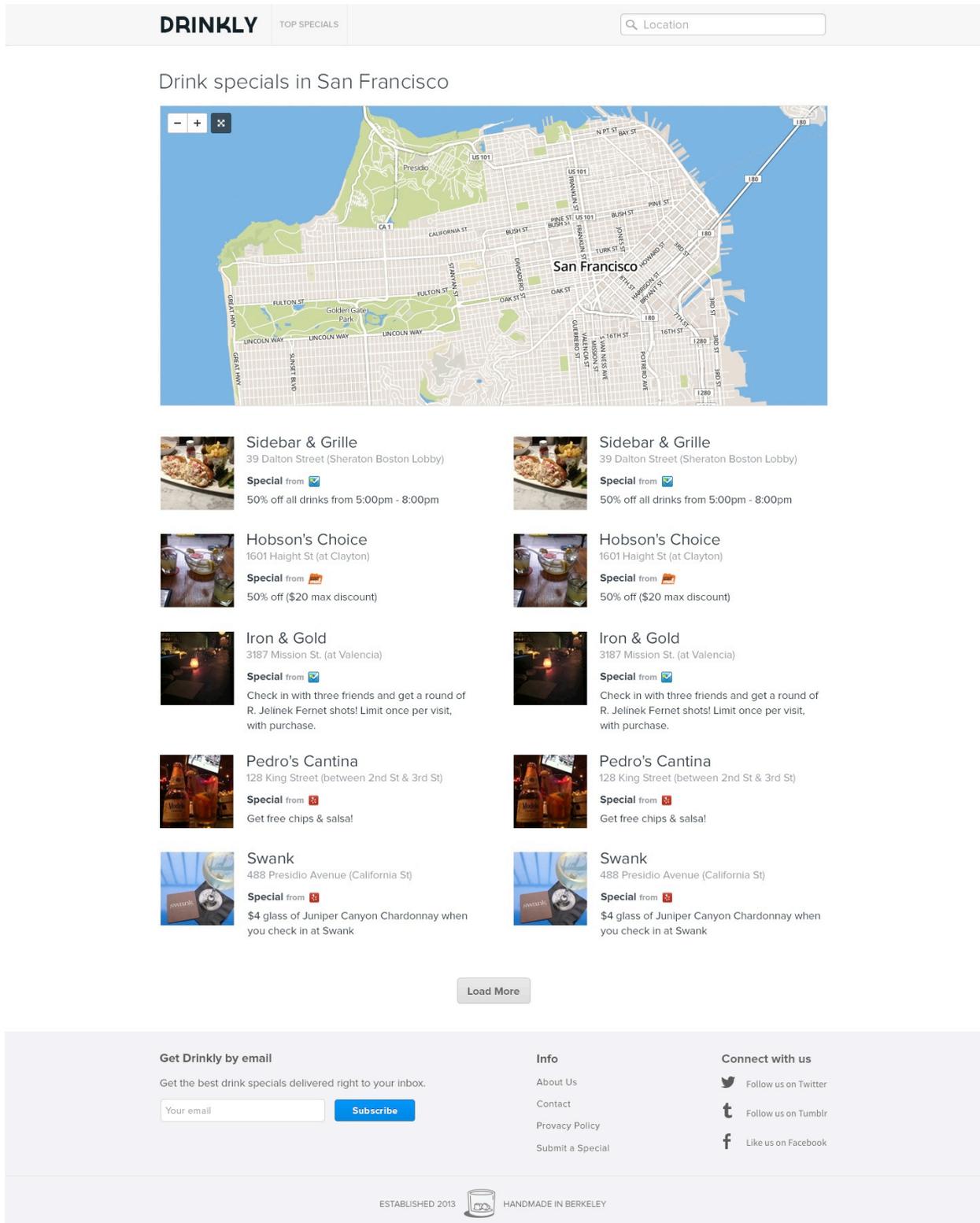


Figure 4: Business Dashboard

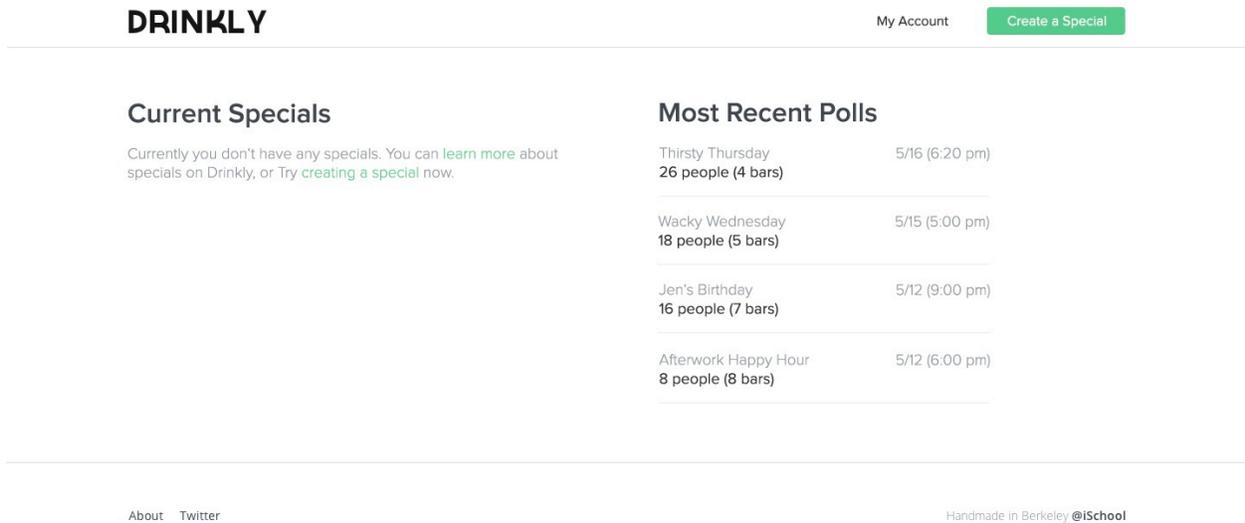


Figure 5: Creating a Drink Special

DRINKLY My Account Create a Special

What would you like your special to accomplish?

Increase Engagement
Your special will show to users who search for your bar on Drinkly.

Get New Customers
Your special will show to ongoing Drinkly polls your apart of.

Reward Existing Customers
Your special will show to polls you have won.

Your Special

Headline

Description

Image

Budget and Schedule

Budget USD

Schedule

Run continuously starting today

Set a start and end date

Preview

Headline

Description

Pricing: You will be charged every time someone sees your special.

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