

# GameBuilder

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# The Team

## Final Project Team

- Samuel Tokheim
- Karthik Reddy Vadde
- Philip Foeckler
- Contributor: Vimal Kini

## Final Project Advisor

- Prof. Tapan Parikh / Advisor

## Contributors from INFO213 UI Design & Development

- Prabhavathi Matta
- Kyung Mi Park
- Shaohan Chen

## GameBuilder Focus

- Help people play more and higher quality games
- Build sports-centric social networks
- Reduce the burden and streamline the process of organizing games
- Promote life-long fitness and well-being by playing sports

## Problem statement and motivation

The core problem that motivates the creation of GameBuilder is the fact that it is hard to discover and organize good [sports] games. Players struggle to find games in their local area with other players of similar skill. For game hosts, the logistics of organizing games is complex and tedious. Game hosts have difficulty balancing the tension between getting enough people to play, getting too many people to play and finding players with appropriate skills and current technology does not adequately address these issues.

Social networking sites like Meetup.com and Facebook.com are too general to provide the level of granularity needed for sports game coordination and other sports-coordination sites like Sportsvite and Timu are feature-rich but complicated, un-engaging and focused more on league coordination. The lack of a quality web application to address the sports game coordination problem and our desire to play more sports motivated the creation of GameBuilder.

## Phase I

Phase I of the GameBuilder project began in the Fall 2012 semester in I213: UI Design and Development where the where the initial idea was researched, refined and tested. Throughout the process, we employed a user-centric design approach that follows these steps:

### User-Centric Design Approach

- 1 Talk to users and find out what they need
  - 2 Build a prototype
  - 3 Get feedback from users
  - 4 Refine the prototype
- Repeat Steps 3-4**

### Interviews/Contextual Inquiry

Initially, we conducted eight contextual inquiries/interviews to discover how people currently organize games and find games to join. Of the interviewees, four hosted games in addition to playing and four were players but did not host games. From these interviews we built personas, affinity diagrams, work models and storyboards.

#### Key Findings

##### Too much email

Game hosts, in particular, complained about the number of emails that need to be sent out in order to get a single game scheduled. For example, one game host mentioned that it can take between 15 and 45 emails to organize a single game of beach volleyball doubles. And for game players, the quantity of emails exchanged can feel like spam.

##### It's tough to get the right number of players

Generally speaking, there are two types of game hosts, the kind who invite everybody to join their game and the kind who are very particular about who they invite and seek a precise quantity of players. But both types suffer from the problem of getting the right number of players. For inclusive hosts, games can become unwieldy as too many people show up. One such host commented that, 'I just started out wanting to play, and it just kind of mushroomed into this'.

For more exclusive hosts, the pool of potential players is smaller and, therefore, scheduling the right number of players, with appropriate skill levels at an agreed upon date and time can be difficult.

##### Scheduling complexity leads to missed opportunities for playing

Especially for exclusive game hosts, finding a start time that will result in a quorum is difficult. One game host commented that the biggest problem with game coordination is "sending out a message and then waiting by the computer to see if the game is on or not". Too often a quorum will not be met and the game will be cancelled at the last minute to the dismay of all the players who had RSVP'ed and blocked off time on their calendars.

##### Finding a game near you appeals to players

One item that seemed universally popular among interviewees, was the ability to find ‘nearby’ games anywhere. One couple mentioned that, ‘the only thing we try to do EVERY time we travel [looking for games]. It’s difficult and we usually don’t find a game.’

Playing a ‘quality’ game is more important than socializing

For the users that we interviewed, playing a ‘quality’ game was more important than socializing with friends. Regarding this topic, users said:

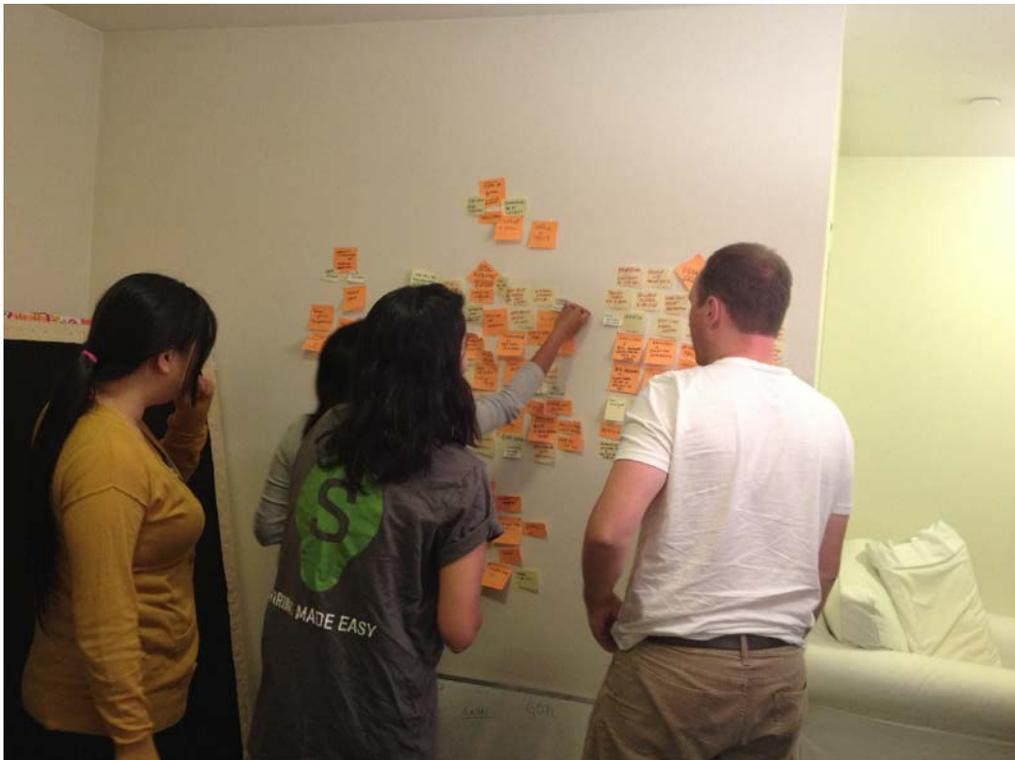
- *"I've weighed those out and social is less than play."*
- *"It's extremely important" to play quality games, socializing will be there regardless..."*
- *"Everybody wants to play at a higher level, nobody wants to play down"*
- *"I prefer spending my time with my 6 month old baby than playing a 'boring' game"*
- *"The line's behind me. I am content being the worse player on my net"*

Sports-based social networks are distinct from friend networks

Building on the point that quality games trump socializing, we discovered that while Users may play with some of their friends, a significant portion of their player network may not be connected as ‘Friends’ on Facebook.

## Affinity Diagram

After the initial round of contextual inquiries the team from I213: UI Design & Development grouped ‘Needs’ and ‘Problems’ using Post-It notes.



## Personas

Out of the contextual inquiries, two main types of Personas emerged. One type, exemplified by Tom Rogers, is a 'hard core' player who spends a lot of time either trying to put together a good game or finding one to join. The David Craig persona represents a slightly more casual player, who appreciates finding a good game, but probably is not going to go through the effort to put one together himself.

### Tom Rogers



- Organizing games is a lot of work and he ends up doing most of it
- It's tough to consistently organize the right number of high-level players
- It takes Tom between 15-45 emails to confirm a game
- People usually don't RSVP on time, so he never finds out if the game is on until the last minute.

### David Craig

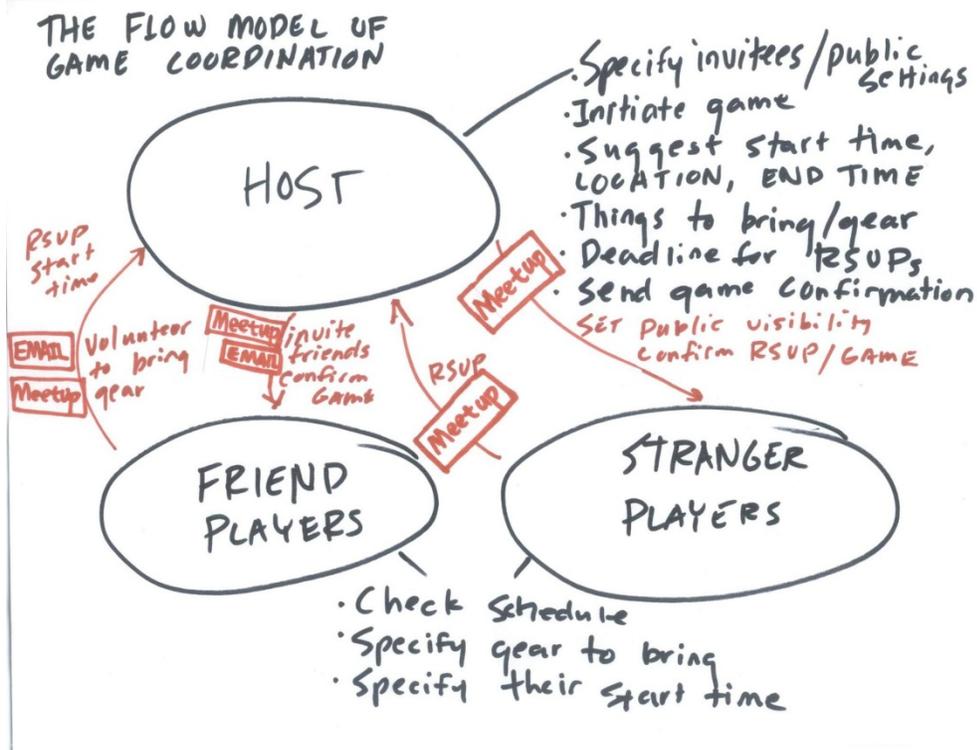


- Marketing professional from Santa Cruz, works in St Louis, MS
- David loves to play games but he doesn't know where to look for games
- David slightly uncomfortable playing with strangers.

## Work Models

### The Flow Model of Game Coordination

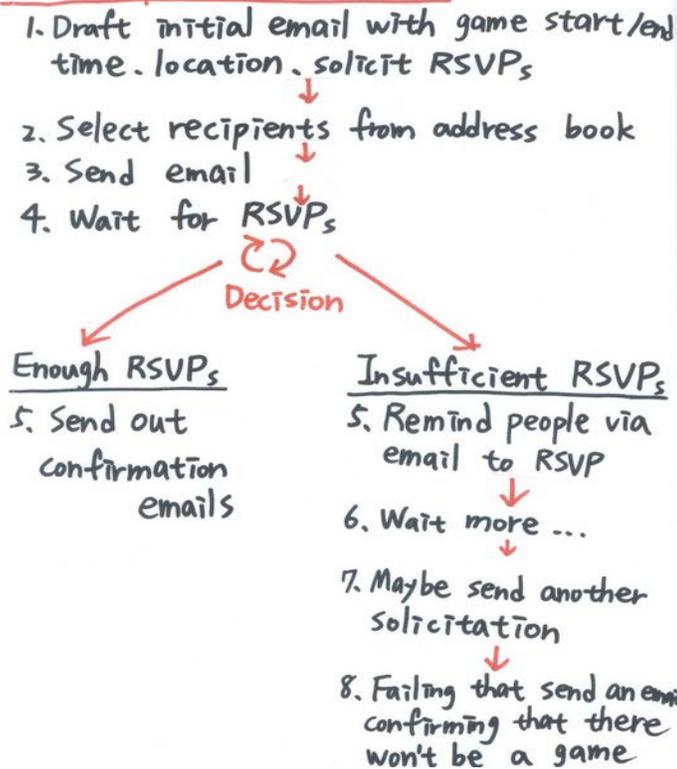
The following graphic illustrates the flow model of game coordination as observed in contextual inquiries. As you can see, hosts are key to this flow as they initiate the process. Without hosts games would not exist. As you can see in the diagram, hosts also play a critical role in acting as hub for communication. Hosts invite players, players RSVP and then the host communicates back to the group whether or not a game has been confirmed. Hosts also play a role in curating games. Hosts decide who gets invited, whether or not it's a public or private game, where the game will be played and other criteria that may or may not be specified.



#### Sequence Model for a Game Host Organizing a Game via Email

Despite email's many inadequacies, we discovered that many games are organized via email. This workflow model describes the typical flow of a game host organizing a game by email. The numbering in this diagram indicates a sequence of steps that occur for the host. At step four, the host will either have enough RSVPs or not. In the case of the latter scenario the host must recursively go through the steps listed under 'Insufficient RSVPs' until the minimum number of RSVPs is attained or the host gives up and cancels the game.

### Host Sequence for Email

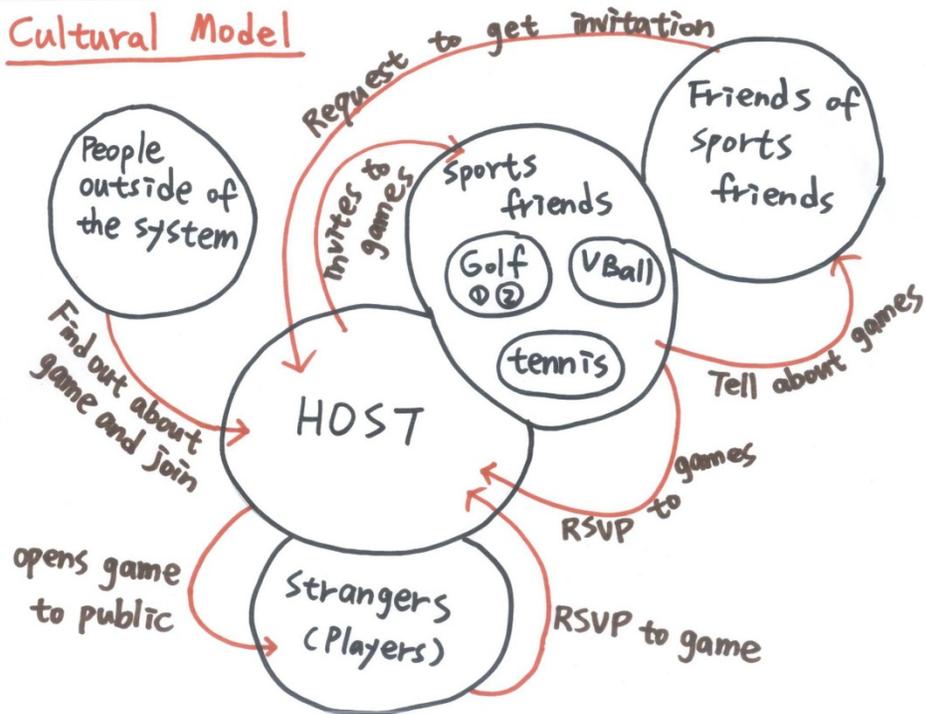


### Cultural Model of Game Coordination

This is a typical cultural model of game coordination. We discovered that hosts generally will have 'sports friends' who may or may not be their friends in other social contexts. And within their group of 'sports friends' they may have different segments of sports. And within each of those sports segments, they may have different segments based on skill level. A host's sports friends, of course, will also have friends who they may learn about games and want to join. This can, potentially, cause a problem for the host because people who they do not know want to join their game.

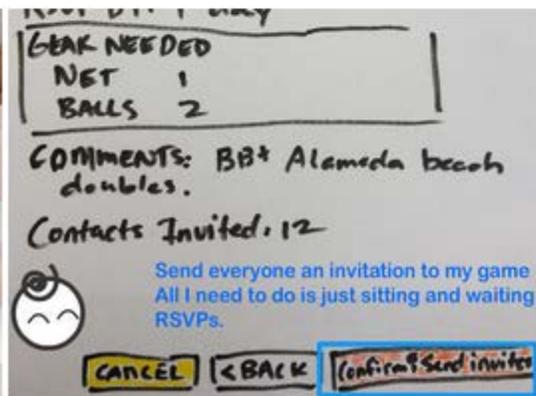
We also discovered that there is a double-edged sword to promoting games to the public. The benefit is that there won't be a problem getting enough players to join. The downside, however, is that the quality of play can suffer which leads to a higher level of player attrition. Moreover, the deluge of players that will join a public-facing game can greatly increase work for the game host.

# Cultural Model



# Storyboards

## Host a game



## Join a game

The Game Builder

Scenario 3

Join a game!



Game Builder

ALL SWITTED RSVP OPEN

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **VIEW**

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **VIEW**

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **JOIN**

Awsome Tennis **JOIN**

It seems Tom needs someone to bring a net and 2 balls to the game on Sunday.. I can bring mine from home!

Hummm, not so perfect weather on Sunday, but Tom is my buddy and I really want to practice my skills with advanced players.

OK, I will join!

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **JOIN**

Awsome Tennis **JOIN**

It seems Tom needs someone to bring a net and 2 balls to the game on Sunday.. I can bring mine from home!

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **JOIN**

Awsome Tennis **JOIN**

In line with text | Fixed position

Go!!

Volleyball at Santa Cruz Beach Sun 7<sup>th</sup> Oct 11am **JOIN**

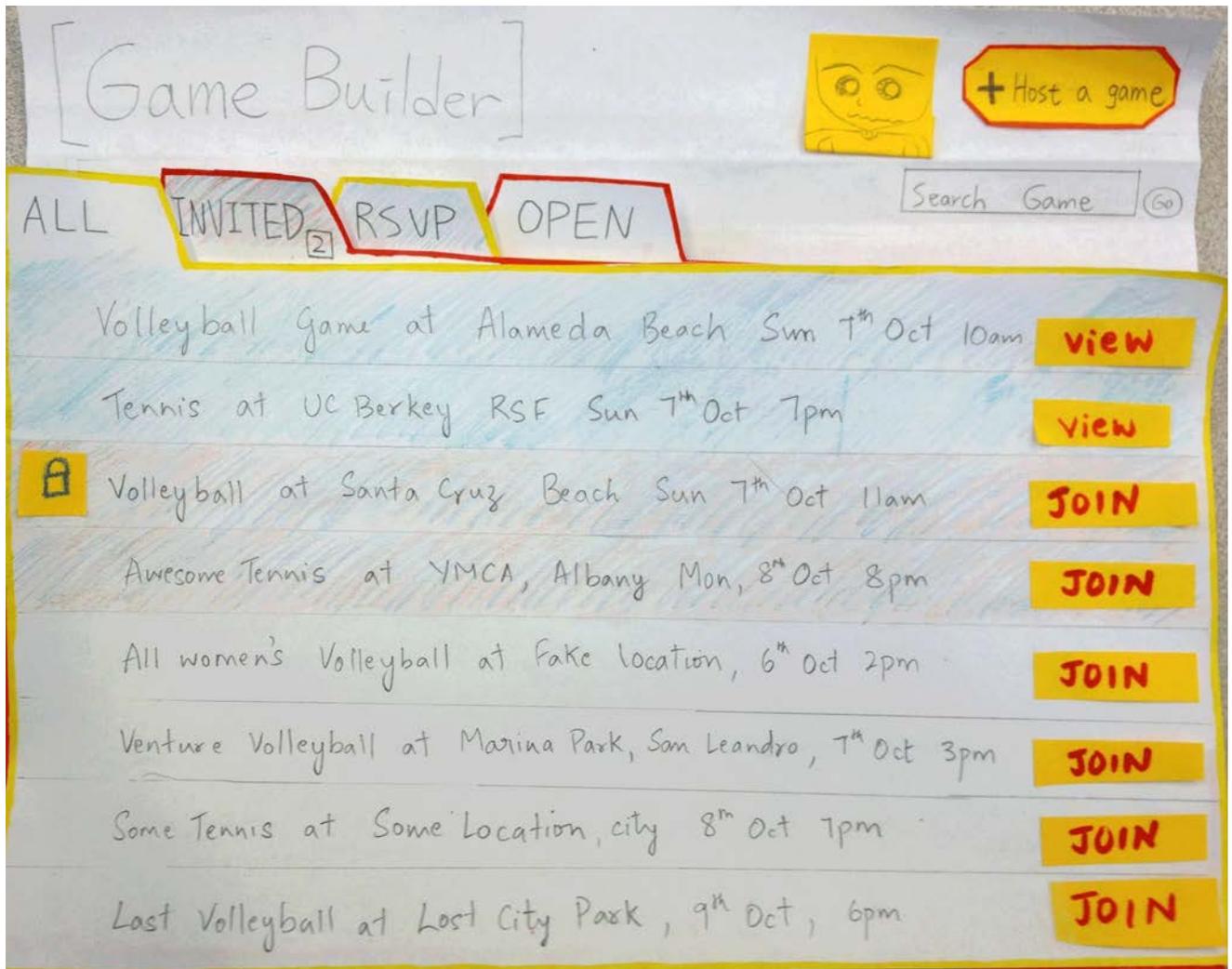
Awsome Tennis **JOIN**

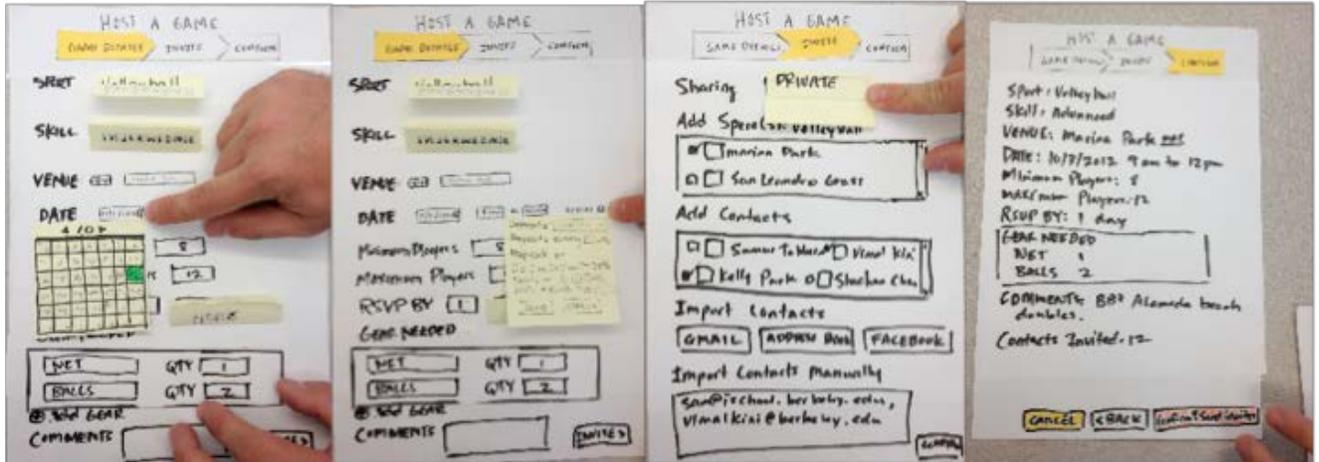
## Low Fidelity Prototypes

### Paper

After interviews and affinity diagrams, the team built its first prototype. This prototype was paper-based and included feedback from our previous investigations. We created three main functions for user testing:

- Landing page (which including sign up an account)
- Host a game
- View an existing game

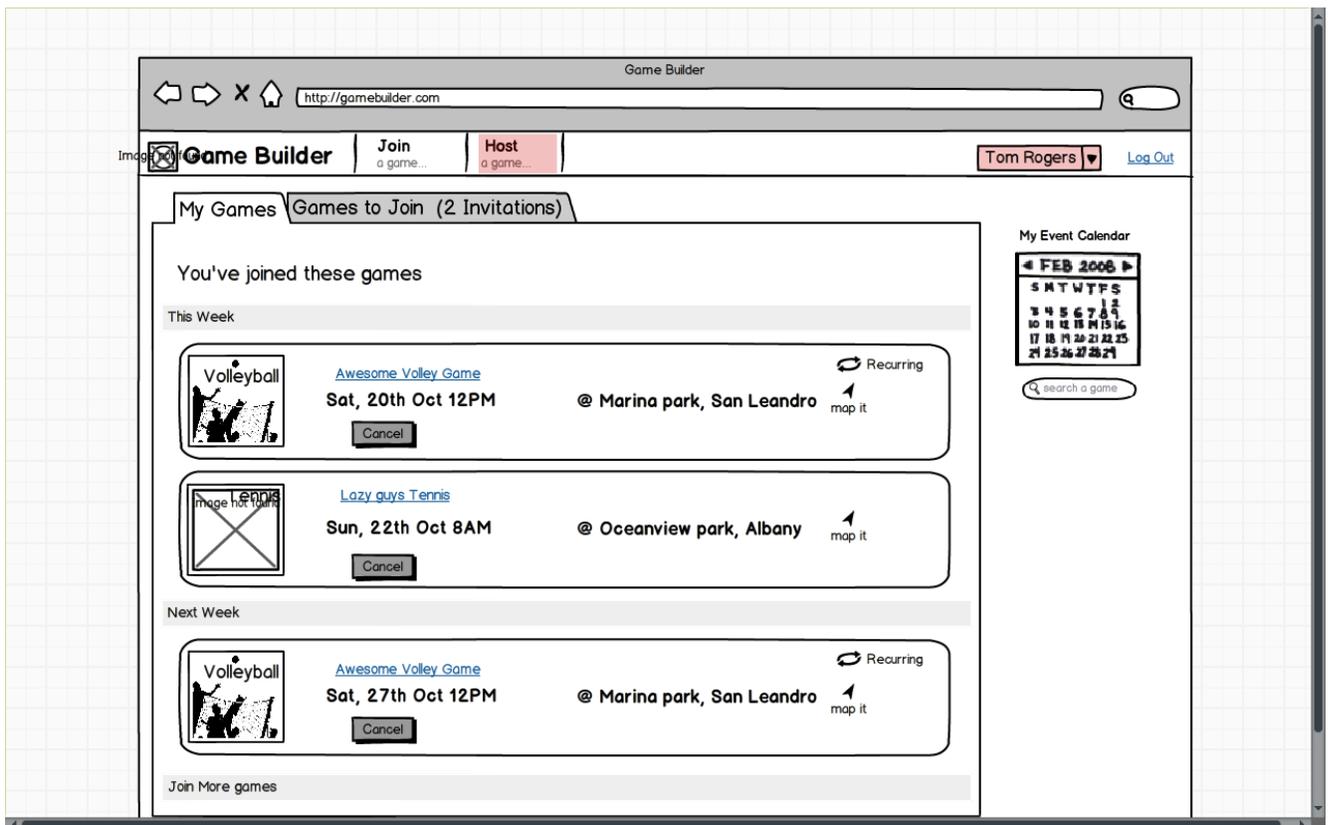




Balsamiq

After receiving feedback from the initial paper prototype, we created a slightly higher-fidelity prototype using Balsamiq and conducted another round of user testing on:

- Joining a game from the landing page
- Hosting a game



Create a new game

Name

Details

Sport  Beach Volleyball

Skill Level  Beginner  Intermediate  Advanced [x](#)

Where

Gear Needed

<input type="checkbox"/> Net	<input type="text" value="1"/>	
<input type="checkbox"/> Balls	<input type="text" value="3"/>	<a href="#">x +</a>

From

To   [x](#)

Repeat: Weekly on Saturday from 8:00 am to 1:00 pm. [Edit](#)

Privacy  ▼

Quorum: a minimum of 4 and a maximum of 5 players. The deadline for achieving quorum is 10/23/2012. If quorum is not met by then, remaining spots will be opened to the public. [Edit](#)

[Invite Friends](#)

Axure

Our last non-functional prototype was created in Axure. Again, we tested 'Host a Game' and 'Join a Game' functionality.

Join a game...

Create Game

Date	Category	Skill Level	
This Week	Volleyball	Beginner	<input checked="" type="checkbox"/> Co-ed
This Weekend	Baseball	Intermediate	<input type="checkbox"/> Mens
Next Week	Tennis	Advanced	<input type="checkbox"/> Womens
<a href="#">More categories...</a>	<a href="#">More categories...</a>		

- All
- Invited
- Going
- Hosted

- 

**Beach Volleyball & Sam's Birthday Party**  
 When: November 11, 2012 12:00 PM  
 Where: Alameda Beach  
 Hosted by: Tom
- 

**7th Annual Mom's Badminton Game**  
 When: November 12, 2012 03:00 PM  
 Where: People's Park  
 Hosted by: Bob
- 

**Awesome Volleyball Game**  
 When: November 23, 2012 01:00 PM  
 Where: UC Berkeley RSF Center  
 Hosted by: Tom
- 

**BBQ and Volleyball!**  
 When: Decmber 2, 2012 12:00 PM  
 Where: Santa Cruz Beach  
 Hosted by: Sam

November 2012 [View Month](#)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				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	



Create a Game



Title

Game options



Sport

+Add skill level?



Nov 13, 2012

5:00 PM

Add end time



Repeats

Venue

Ask players to bring gear (optional)

Quantity

+Add

Details (optional)

Game Requirements

Minimum # of Players (optional)

Add maximum # of players?



RSVP BY

Nov 12, 2012

5:00 PM

If Game Requirements are unmet by RSVP-by Date...



Cancel game



+ Invite more players, spheres or email addresses



EXTEND RSVP BY

Nov 13, 2012

5:00 PM

+ Invite players, spheres or email addresses



Invite

# Phase II: Functional Prototype

## Technology

The primary goal for choosing a technology framework for our team was to build the product quickly and then iterate over the product based on the feedback from user testing. Our technology stack consists of Python/Django framework with postgres database as the main backend storage. On the front end, coding was primarily done in HTML/CSS, javascript and jquery. We also employed elasticsearch as the search engine to enable users to search for players and invite them for a game.

### Python/Django

Python/Django is an open source MVC(Model, View and Controller) framework used to rapidly build websites. Python was the natural choice of product development as every team member was familiar with it. The biggest advantage of Django was the availability of packages like authentication, csrf verification, django-haystack which are essential to building a websites. We were able to simply install these applications and focus on the core functionality of the product.

### Elasticsearch

Elasticsearch is an open source search engine which indexes the data and enables search. We used Elasticsearch to search for players to view their profiles or invite them to a game. Player names were indexed to achieve rapid player search. Django modules such as django-haystack and pyelasticsearch, were used in the web application to interact with the search engine.

Unfortunately we could not create multiple indexes to enable users to search for games due to economic constraints on our production environment.

### Git for version control

To achieve remote collaboration and version control, we used git, a popular open source tool. The code was hosted as a private repository on the Github website. Issues and enhancements were managed using Github's issues page of the project repository.

### Heroku

Our initial goal of the project was to develop a minimum viable product that was built of scalable technologies and could be tested with real users. To achieve this we hosted the website on Heroku. One reason for choosing Heroku was to develop the product on production quality environment with no additional cost and then scale as required. Moreover, most of the applications we required were easily deployable on Heroku. The code was deployed to Heroku on a regular basis to check for production level issues.

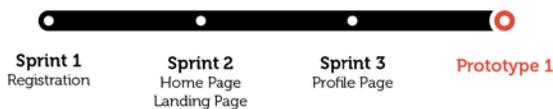
To follow the standard process adopted in industry we created two levels of production. The first was the staging environment, an intermediate level to check for issues that arise when code is tested before deploying to production. After the user level testing was performed on the website in staging, the code was deployed to our production website.

## Project Management

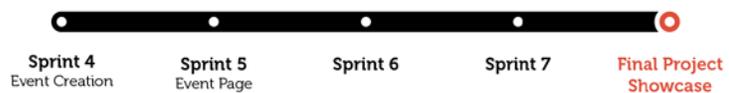
To achieve the targeted minimum viable product our team prepared a plan based on agile methodology. We followed a 2 week sprint cycle to build the product based on user stories. The team met on a weekly basis to track the progress of the project. At the end of each sprint cycle the team came up with user stories to be implemented for the next sprint cycle while placing unfinished stories in the backlog.

Apart from the backlog tracking which occurred during each meeting, we also kept track of bugs and enhancements on Github. This enabled us to manage the issues in the project effectively. The below diagram shows the timeline of our project.

### Prototype 1 Milestones

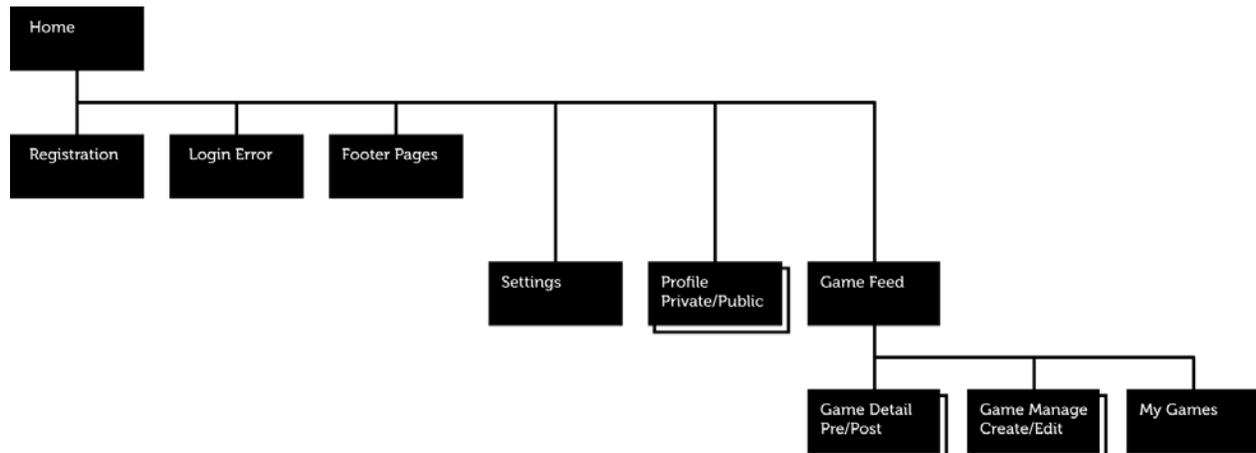


### Prototype 2 Milestones



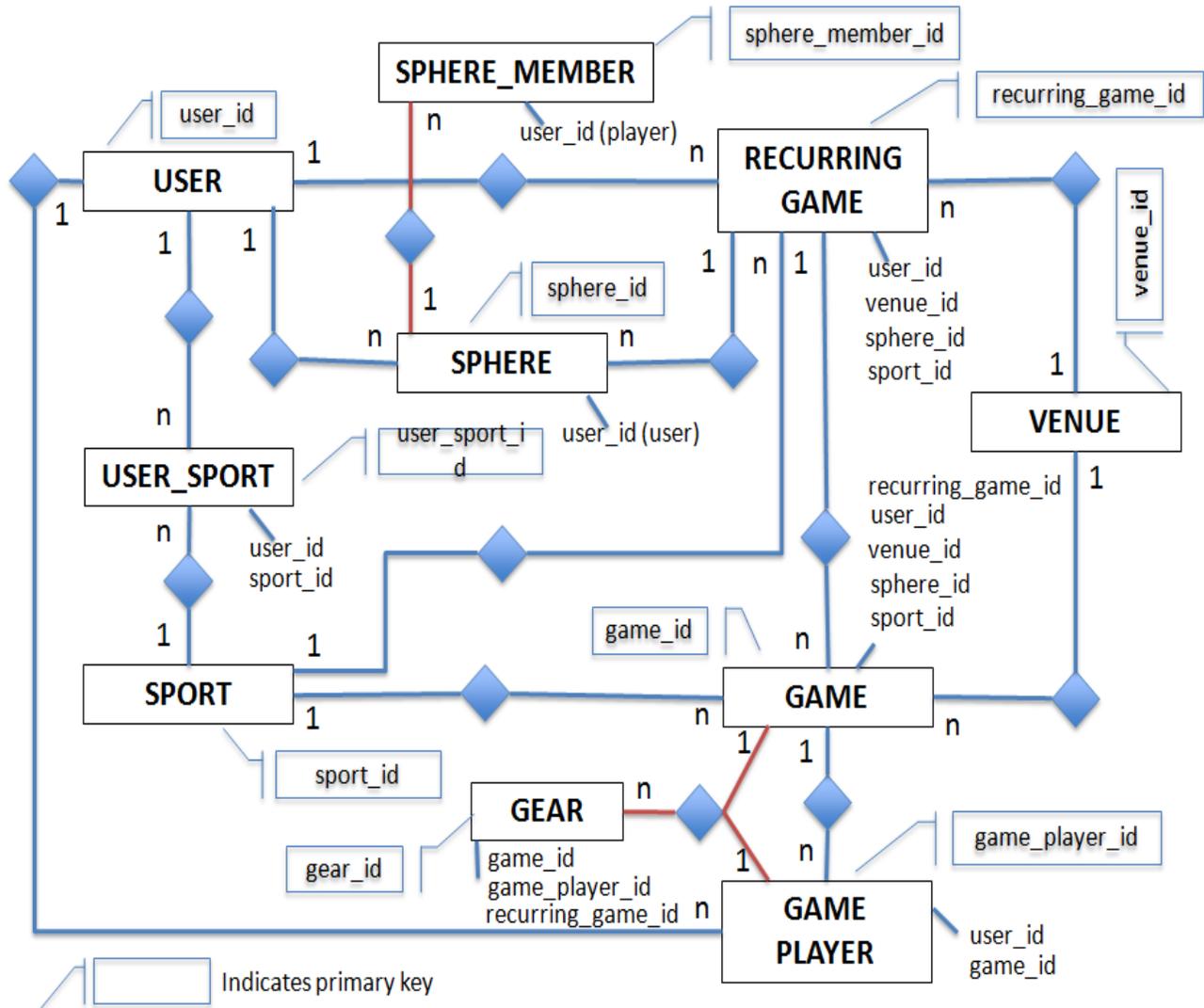
## Information Architecture

High-level overview of the information architecture.



[Entity relationship for the GameBuilder](#)

The entity relationship diagram below displays the key tables and the relationships between these tables. Django provides a model for storing user login information in a secure way by salting and hashing the password. For example in the below ER diagram the USER table is created by the auth application within Django. Django's models package provides a method that defines the relationship between the different tables as specified in the diagram.



## Visual Design

The visual design was created hand-in-hand with development. Many of the original visual designs and user-experience features had to be sacrificed in order to get the Minimum Viable Product (MVP) built in time. To focus on the aspects of the design that would differentiate GameBuilder, we leveraged open-source patterns like Bootstrap and creative commons icon libraries like The Noun Project, instead of reinventing the wheel.

## Registration

The main registration page for new users to sign up for the GameBuilder website.



 Hello, I'll be your sign-up form for the next 60 seconds. Let's start!

**What's your Name?**

Phil | Lastname

**What do you play?**

Basketball Bowling Dodgeball **Football** Soccer **Volleyball**

Football: Beginner, Intermediate, Advanced  
Volleyball: Beginner, Intermediate, Advanced

**Where do you play?**

Start typing...

**Let's replace my mug with yours!**



**What's your Email?** *This will be your login*

**Find games and players in your area**

Small batch sartorial forage, mustache meh plaid post-ironic terry richardson actually farm-to-table carles retro organic blue bottle. Selvage godard american apparel fingerstache, intelligentsia Austin meggings.

**Choose games at the level right for you**

Gentrify church-key cray raw denim. Wolf twee, fashion axe aesthetic stump-town four loko. Cardigan occupy thundercats flannel flexitarian, tofu lo-fi wes anderson deep v blog brooklyn whatever craft beer.

**Save your favorite games and players**

Kale chips before they sold out butcher Austin, sustainable brooklyn VHS sel-vage polaroid etsy. Messenger bag shoreditch chillwave, organic cosy sweater pour-over try-hard thundercats tonx lo-fi twee.

### Landing Page

The landing page is the immediate page displayed when a user visits the GameBuilder website. The games displayed will change based on whether the user is authenticated or not. An authenticated user will be shown a similar page but more personalized in terms of his gender, place and sport interests. It lists all the public games as well as the games that the current user has been invited to. It also contains options to filter based on sport, gender and place.

LOG IN  JOIN FREE

# Gamify the Real World™

Play Sports. Make Friends. Be Happy.

**PLAYERS**

Find games, courts, and players at your level.

**PLANNERS**

Organize repeating games in minutes.

**EVERYONE**

Gain new friends. Loose old pounds. Enjoy life.

FIND ANY SPORT ▾ FOR ANY GENDER ▾ IN BERKELEY ▾

Thursday, Feb 23

**MORNING MAYHEM**

**PLAYERS WELCOME**  The Field Berkeley, CA 10 AM  Volleyball Advanced  Organized by Sam Tokheim  >

---

**BRUNCH BATTLE**

**PLAYERS NEEDED**  The Field Berkeley, CA 10 AM  Volleyball Advanced  Organized by Sam Tokheim  >

---

**LUNCH LUNACY**

**GAME IS FULL**  The Field Berkeley, CA 10 AM  Volleyball Advanced  Organized by Sam Tokheim  >

## Build a Game

Users will be able to create new games and invite people using the below form page. The build game page provides options to make a game private or public.



Philip

My Games

Create Game



Find Players



# Let's Create a Game

## 1 Describe the Game!

### Game Title

e.g. Morning Madness

### Sport

Pick a sport

### Date

dd/mm/yyyy

### Time

Start Time (hh:mm) to Optional End Time (hh:mm)

Repeat...

### Location

Venue (Optional)

Enter Street Address

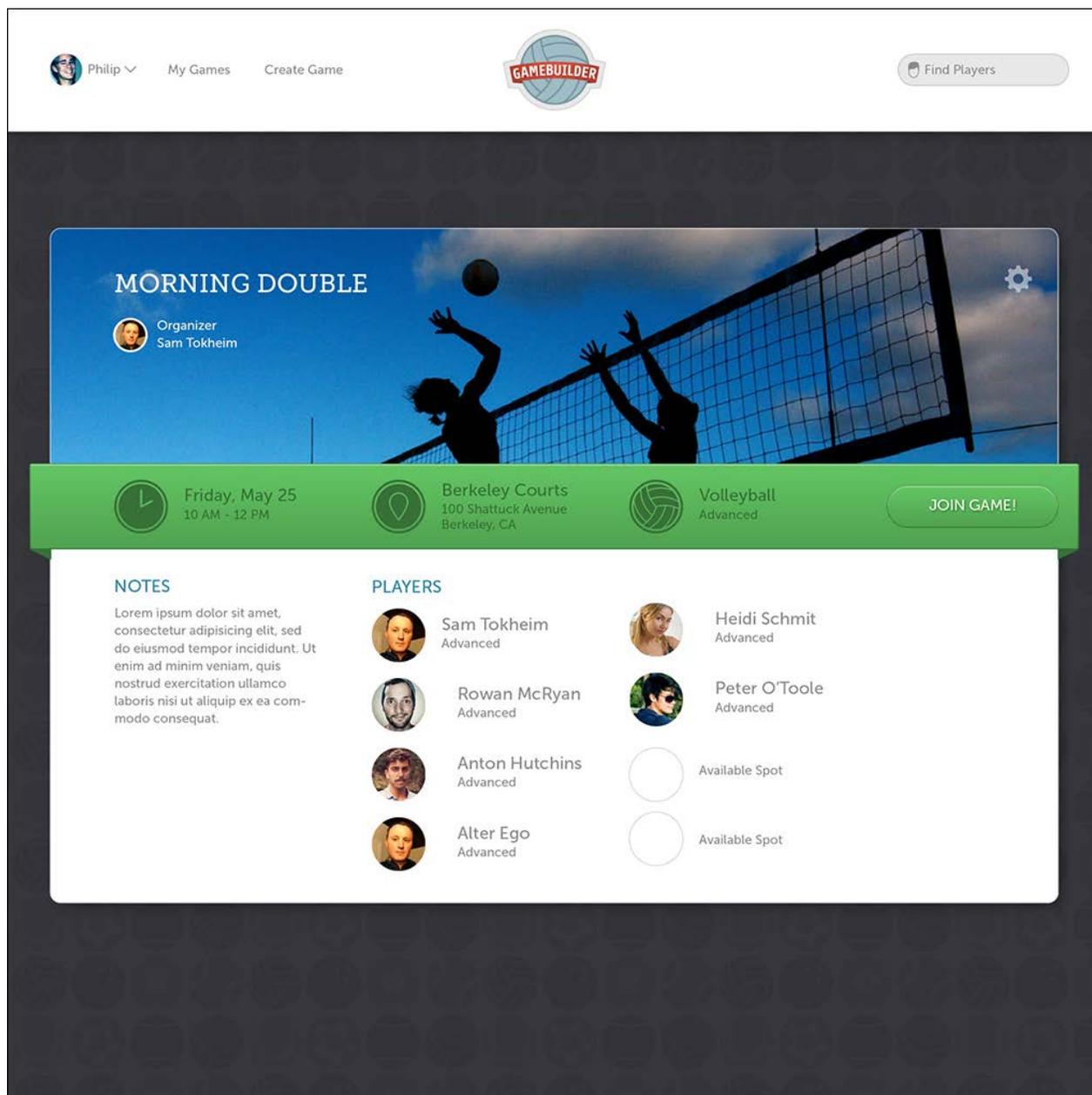
Pick a city

### Description

e.g. you can ask players to bring gear

## 2 Who Can See the Game?

The game detail page lists out specific details of the game like the time, place, and players invited or going to the game. If the current user is the host of the game, the game detail page provides an option to the players to changes the settings of the game. Otherwise, if the current user is a player who is invited or if the game is public, an option to join the game is provided to the user.



### Game Edit

A game host has the option of changing any detail of the game using the game edit page.



Philip ▾

My Games

Create Game



Find Players



# Edit Morning Madness

PS: You need 2 more players by 10am on May 15  
Invite players or loosen the requirements



## 1 Describe the Game!

### Game Title

Morning Madness

### Sport

Volleyball ▾

### Date

05/07/2013



### Time

10:00 am



to

12:00 pm



Repeat...

### Location

Berkeley Courts

100 Shattuck Avenue

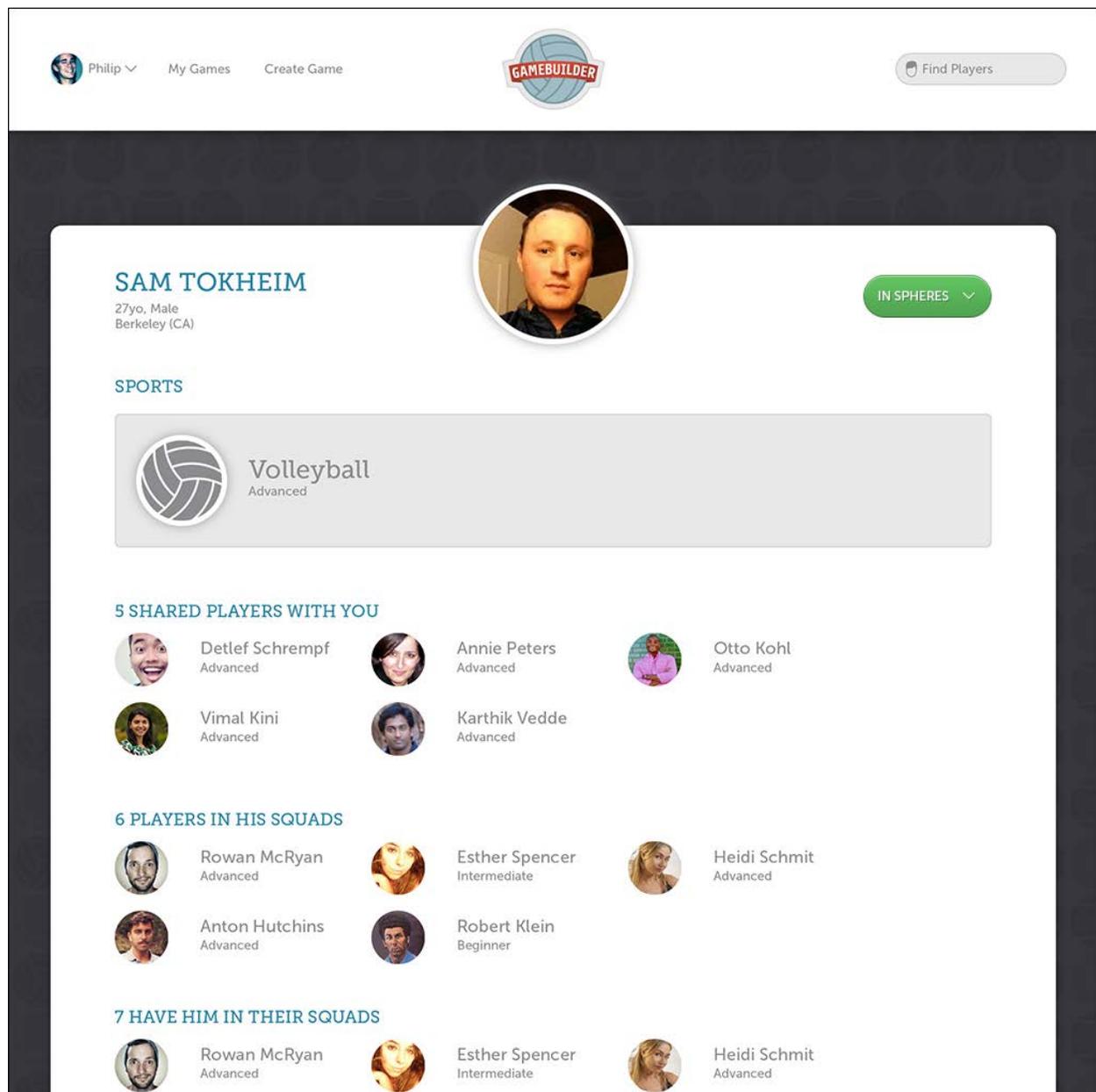
Berkeley ▾

### Description

Bring your own...

Player Profile

A logged in user can search for a player and look at his public profile page. This helps a user to connect with other users on the website and invite them to play a game if they are interested. A Sphere is similar to Google circle where a user can add any player to his Sphere. This helps a host in communicating with players efficiently.



## Usability Test Procedure

Tasks for our usability testing of functional prototype

Task 1: Sign up for GameBuilder

Task 2: Find a game and join

Task 3: Host a game

### Think Aloud Protocol

For this usability test, we will ask participants to think aloud about what they are 'thinking, doing and feeling' as they perform the test tasks. Pending the test taker's consent, we will record their observations for review by the GameBuilder team. Each task will include a qualitative 'Feedback' section which test administrators will use to record the 'think aloud' observations of test participants.

### Participants

- 2 'Game Hosts' as exemplified by the 'Tom Rogers' persona.
- 4 'Players' as exemplified by the 'David Craig' persona.

### Methods

#### **Task 1: Sign up for GameBuilder**

Register as a new user at the GameBuilder site.

**Experiment end condition: User successfully reaches the authenticated landing page.**

Quantitative method: How easy was it to sign up?

Qualitative method: Feedback on the sign up process

#### **Task 2: Find a game and join**

Scenario A: Browse available games and just join one

Scenario B: Filter games by a particular sport and by User gender, then pick a game and join it.

Quantitative method 1: How easy was it to find and join a game?

Qualitative method 1: Feedback on browsing, filtering, and evaluating games.

#### **Task 3: Build a Game**

1. Create a coed, volleyball game for intermediate and advanced players.
2. The venue of the game should be located at 'Alameda Beach'.
3. The game should require a minimum of 4 players but no more than 6
4. Players should expect to RSVP to the game 1 day before the start time.
5. The game should be open to all.

Quantitative method 1: How easy it was to create a game?

Qualitative method 1: Other feedback?

### Data Acquisition

When possible we will record the video/audio of test participants. Test administrators will use a standard set of questions. Quantitative scores will use the Likert scale.

#### Fatigue effect

We will ask test participants if they would like to take a break after the second task and we will inform, at the outset of the test, that they should feel free to take a break whenever they like.

#### Location

The test will be administered on a laptop, in a reasonably quiet environment using a Chrome browser to access the GameBuilder web site. All users will use the same version of the GameBuilder website located, currently, at <http://peaceful-brook-2393.herokuapp.com/>

#### Conditions of Success

##### **Task 1 - Sign up for GameBuilder**

A user will have completed this task when they have successfully registered and have been redirected to GameBuilder's authenticated home page.

##### **Task 2 - Find a game and join**

This task will be completed when the user has successfully joined a game as described in Scenario A and Scenario B.

##### **Task 3 - Host a game**

This task will be completed when the user has created a game that meets the specifications from the task description.

#### Usability Test Findings

##### Host #1

**Age:** 43

**Gender:** Male

**Occupation:** Nurse

**Sports:** Intermediate Volleyball

**Hosts games?:** Yes

**Attends a Recurring Game?:** Yes

##### **Task 1 - Sign up for GameBuilder**

**How easy was it to sign-up?**

- 2/5 - Easy

#### **Findings**

- The User definitely wanted the 'Join' button to be bigger and more obvious.
- Would like a guest feature and not have to register. Doesn't like to register. This further supports the need for an unauthenticated home page view with a list of public games.
- Likes photo functionality where it previews the photo and allows edits to the photo on the same screen.

## Task 2 - Find a game and join

### Findings

- The User had issues with the gender terminology. It was not immediately clear that 'Any Gender' meant coed. And the User pointed out that sometimes 'Coed' is a very specific and required designation and that another type like 'Doesn't matter' might be needed.
- The user wanted an option to join the game from the landing page and kept trying to click on the 'Players Needed' flag to try and join the game. Eventually he discovered the arrow that leads to the detail view but it was not intuitive for him.
- Likes the colors
- We found a bug during testing, it appears that you can join a Game twice if you try hard.
- Generally speaking, he liked the client-side filter options but wanted to see a time frame option like 'Today' or 'This Weekend'.
- Thought that it was really easy to find a volleyball game and liked the fact that the game feed was pre-filtered based on his Volleyball preference.

## Task 3 - Host a game

### How easy was it to create a game?

- 3 / 5 - Average

### Findings

- The 'Register' link is way too small and it needs to be way more obvious.
- The current skill-level select definitely needs to be improved.
- There may be a problem with the game gender options. The User would like to see a list that looks something like this: Men only, Women only, Coed, Doesn't matter - correctly pointing out that sometimes 'Coed' is required for some games.
- For recurring games, the user would like a screen before the Build a Game screen that asks whether this is a 1-off or recurring game.
- Game end time needs improvement. For example, the user should not have to pick the date a second time. Also, it wasn't immediately clear that the input date fields had JavaScript calendars. So, maybe the addition of a calendar icon within the input might help with that. Also, the date/times should be pre-populated based on the start time.
- For Venue, the user just wants to type it in and not have to select from a list.
- The user likes Description, but immediately envisioned it as a place to put an informational piece about the group - and really we haven't set up GameBuilder in a group format like Meetup.com.

- The wording on 'Set Requirements' needs some work. The user also wanted options for actions that would occur if a game met the minimum number of players or failed to achieve a quorum. Options might include: Auto-notify group that game is on, Auto-notify group that game is off, Remind me to send a note to the group and 'F\*\*k it, I'm showing up!'
- The user prefers a Group/Subscriber model, which follows the model that Meetup uses. He also seemed to like the 'feed' approach of Facebook, but didn't say that Facebook was a good place to organize games. The user would prefer a page with the Group Name and people could subscribe to that group for Game announcements. He said that he would almost always choose to host Public not Private games and would only use the Private option for special occasions like a birthday party where he just wanted to put together a game with close friends. The user did not like the idea of searching for players to add to the game and said that he probably wouldn't do it. He called it a laziness issue. Rather he prefers that people to subscribe to his group.
- The Users take on Spheres: "Spheres is a stupid name - call it 'Teams' or 'Squads'". Also, the User would not differentiate between different groups of Users (e.g. A-list, B-list, etc...). Rather, he would have one list of players and he would invite everybody to the game.

#### Host #2

**Age:** 46

**Gender:** Male

**Occupation:** Day Trader

**Sports:** Intermediate Volleyball, Golf and Tennis

**Hosts games?:** Yes

**Attends a Recurring Game?:** Yes

#### **Task 1 - Sign up for GameBuilder**

##### **How easy was it to sign-up?**

- 1/5 - Very Easy

##### **Findings**

- Thought that the process was simple and appreciated the lack of clutter.
- Said that he liked meetup, but said that they require too much info/a photo before you can join and requires a review of the information before proceeding.

#### **Task 2 - Find a game and join**

##### **Findings**

- Likes the look and simplicity.
- Liked the ability to leave and join a game within Game Detail.

- The user spent a lot of time talking about communication options/notifications. Mentioned that Meetup does a pretty good job in this regard. Specifically, mentioned their new feature 'Good to see you'.
- Thought it would be really good to have a feature that allowed players to RSVP directly from an email without having to login to the Site. He also mentioned for non-savvy Meetup users, the communication preferences are too hard to figure out and, as a result, users get inundated with email message. Also, mentioned that it would be good to have an 'atomic option' (my term not his) for sending out a message to all players that cut through all of their restrictive communications settings.
- Mentioned that GameBuilder would be good for people who want to set up sub-games/differentiate between players.
- Mentioned that there would be a big, probably prohibitive, switching cost of moving his [large] group from Meetup to a different service (like GameBuilder).

### Task 3 - Host a game

#### How easy was it to create a game?

- 3/5 - Average

#### Findings

- The placeholder on Game Title was confusing. The User kept trying to delete it out of the input field.
- The User expect to be able to choose from any sport rather than just the sports that they had signed up for. Interestingly, both of the Hosts that I interviewed, didn't even explore the possibility of signing up for more than one sport during registration.
- The gender terminology continues to be non-ideal. The User said that 'Coed' worked better for him than 'Any Gender'. For some reason he thought that 'Coed' sounded more PC.

#### Player #1

**Age:** 28

**Gender:** Male

**Occupation:** Self-Employed

**Sports:** Intermediate Tennis, Advanced Cricket

**Hosts games?:** No (but in past)

**Attends a Recurring Game?:** No (but in past)

### Task 1 - Sign up for GameBuilder

#### How easy was it to sign-up?:

- 1/5 - Very Easy

#### Findings

- Wanted to be able to use Facebook Connect to make sign-up quicker and to bring their friends to the service.
- Encountered software bug when trying to add a sport

## Task 2 - Find a game and join

### How easy was it to find a game

- 1/5 - Very Easy

### Findings

- Overall the user interpreted and navigated the website with ease. There were some minor issues around terminology, buttons, and a larger feature request about adding filters for friends and time.
- Game Feed
  - Using filters was clear and easy. User wanted to filter games by people and by time. "Show me games between ... and ... with my friends"
  - Finding game details was clear and easy. Button hit state should be increased.
  - Green check mark was a clear indication of being in game
  - Confusion around gender terminology: "What is Co-Ed?"
  - Confusion around inconsistency of terminology and color use between Game Feed and My Games: user thought that the game indicators indicated if they had been approved for the game, rather than whether the game had enough players. "Pending means, that I am pending approval by the host"
- Game Detail
  - User had slight hesitation about going back to Game Feed. In the end, they used the browser back button, instead of the "GameBuilder" logo. Improve this by adding a back button.
  - Adding a game was quick and intuitive (Note: In each session I thought the button could be more prominent. Regardless, it can be improved.)
- Player Detail
  - Wanted to see history with that player
  - Was confused about what spheres are but eventually figured out that they are circles/groups. Inconsistent usage of terminology.

## Task 3 - Host a game

### How easy was it to create a game?

- 2/5 - Easy

### Findings

- It was immediately clear to him that "Build Game" would let him create his own game. Had no trouble at any point and thought that seeing their created game show up after going through the flow was "awesome". Wanted to make an edit to game after creating it and intuitively clicked on the gear icon.

- Found that skill level selection was not precise enough (defined himself as an “Intermediate-Advanced, previously more Advanced” player)
- Note on privacy: Thought that public was visible to web
- Note on terminology: “Spheres are... circles”
- There was no confusion at any stage in the sign-up progress, but selection of multiple sports was slightly cumbersome and slow, because it required keyboard-shortcuts.

### General Feedback

- Best
  - Visual Design: “this looks so f... cute” and “it is visually pleasing” and “you better look good when you ask people to give their information”
  - It was very simple to get started and find and build a game. “The UX walked me through very well at each step”
- Worst
  - Nothing in particular.
  - I thought “pending” label was referring about me.
- Ideas
  - Add filtering for people and time
  - Notify me by email if there are games with favorite players
- Mobile
  - Did not feel a need for mobile in comparison to the other features he wanted.
  - Thought mobile was a natural tool for notifications.
  - (Note: I did not plant any ideas for mobile in the user’s head, but since we never discussed venues/locations in any depth, there may be a latent need)

### Player #2

**Age:** 27

**Gender:** Male

**Occupation:** Advertising

**Sports:** Ping Pong (State-Level), Soccer (Casual), Tennis (Beginner), Squash (5/10)

**Hosts games?:** No (but in past)

**Attends a Recurring Game?:** Yes (Tennis)

### Task 1 - Sign up for GameBuilder

#### How easy was it to sign-up?

- 1/5 - Very Easy

#### Findings

- While he found signing up very easy, he does not like creating new accounts and would not have signed up because of it. “I would not have signed up to enter that much information”
- Wanted to be able to use Twitter/Facebook Connect to make sign-up quicker and to bring their friends to the service.

- Was doubtful about the value of some of the questions. In particular thought that self-assessing one's level was too biased.

## Task 2 - Find a game and join

### How easy was it to find a game?

- 2/5 - Easy

### Findings

- Overall, the user found it very easy and intuitive to filter the feed, get game and player details, and join a game.
- Questioned emphasis on skill levels "It is not just about skill... Sometimes it is just about finding players for fun"
- Thought that he got all the information he need for making a decision about a game, except that he wanted to be able to see more details about the people and be able to filter for his friends.
- Overall, very confused about the game status indicators and labels. A large part of the problem was that he thought that his request to join a game was pending, rather than the game itself. Need to make labels consistent and clear. (He suggested "how about saying 2 more players needed")
- Again, there was no confusion at any stage in the sign-up progress, but selection of multiple sports was slightly cumbersome and slow, because it required keyboard-shortcuts.

## Task 3 - Host a game

### How easy was it to create a game?

- 1/5 - Very Easy

### Findings

- He found creating and editing the game very easy.
- While the form asked a lot of questions, he thought it was fine in this context.
- Note on privacy: Thought that public meant public to web.
- Note on spheres terminology: "Why make up another word for groups or circles. Just use something that people already use and understand"
- Thought recurring games would be useful for him.

### General

- Best
  - He thought that the visual design was very clear and aesthetically pleasing.
- Worst
  - Sign-up process asked too many questions
  - Thought vocabulary was confusing (game labels, spheres)
  - Thought we should have used better dummy content (e.g. current dates)

- Ideas
  - Add filtering for friends, time
  - Would want a tour during/after signup
- Mobile
  - Was not interested organizing games on mobile.
  - Would use emails on mobile for handling notifications (e.g. about game status)
- Other
  - Thought the website had a huge network problem. If that could be solved, then he would actually use it himself.
  - "It is like Meetup... but since it focuses on sports it can offer more [sports] specific features"

Player #3

**Age:** 25

**Gender:** Male

**Occupation:** Student

**Sports:** Basketball (Intermediate), Ultimate Frisbee (Beginner)

**Hosts games?:** No (but in past)

**Attends a Recurring Game?:** Yes

### **Task 1 - Sign up for GameBuilder**

**How easy was it to sign-up?:**

- 1/5 - Very Easy

### **Findings**

- Liked the prominence and positive active language of the submit button
- Thought terms of service could have been more prominent
- Thought the sign-up was pleasant, easy, and quick: "That looks nice... there should be a 60 second timer"
- Does not like Facebook Connect: "what happens with my data... what if they stop that service... what if someone hacks them... single point of failure... "

### **Task 2 - Find a game and join**

**How easy was it to find a game?**

- 2/5 - Very Easy

### **Findings**

- Navigation
  - Thought the header was the primary link to the game detail page but had no trouble to navigate to it through the chevron.
  - He did not miss back buttons on detail pages. He said that he uses the browser buttons and gestures for that.

- Filters
  - Wanted to filter for games that needed players, since he thought this would increase his odds of being accepted.
- Game Status
  - He understood the “Players Needed” and “Players Welcome” labels as intended. Note: Most other users did not.
- Game Details
  - He liked the overall visual design aesthetic and hierarchy: “the banner is nice”
  - He thought the color switch of the banner from green to red was not enough and wanted some kind of confirmation statement on screen.
  - Appreciated that he could add special rules in the notes.
  - Wanted more information about the venue, such as whether it is indoor/outdoor.
- Player Details
  - Did not initially see the player’s home location
  - Understood the meaning of spheres: “it is fine... circles, groups”

### **Task 3 - Host a game**

#### **How easy was it to create a game?**

- 1/5 - Very Easy

#### **Findings**

- He had a minor struggle with the multi-select for levels. He suggested to add a note on how to use it.
- Privacy: Thought that public is site-wide.
- Thought there should be "an invite for public games"

#### **General**

- Best
  - Overall, he liked the clarity, simplicity, and aesthetic of the web site. In particular he liked big call-outs, elements like the photos, banner, and typography.
  - Liked the concept of groups and would like to be able to keep people in his groups in the loop through invites.
  - He would use this website and much preferred it to his current tool “IMTrackOnline” which he hated.
- Worst
  - Not being able to invite players even if it is public
- Mobile
  - He wanted mobile for access to venue / game information and notifications, when on the way to a game or when on the go and looking for a game.
  - He would not want to create games on mobile.

Player #4

**Age: 26**

**Gender:** Male

**Occupation:** Student

**Sports:** Tennis(3.5 / Intermediate), Ultimate Frisbee (Advanced), Golf (Beginner)

**Hosts games?:** Yes

**Attends a Recurring Game?:** Yes

### **Task 1 - Sign up for GameBuilder**

**How easy was it to sign-up?**

- 1/5 - Very Easy

#### **Findings**

- Thought the sign-up process was “pretty standard”
- Thought that the TOS was less noticeable than normal, but did not want a check-box and would not have clicked on it. (Not sure if this means anything).
- Would have preferred to use Facebook Connect to bring along his friends.

### **Task 2 - Find a game and join**

**How easy was it to find and join a game?**

- 1/5 - Very Easy

#### **Findings**

- Game Feed
  - He was confused by the game status terminology: “Pending... does that mean that I am not approved yet?”
  - Thought we need to have a better empty state for games, but was not able to articulate an expected behaviour.
  - Thought the game title should be clickable in addition to the chevron.
- Game Details
  - “Spheres... same as friends, circles, but categorized by sport?”
  - Finding and joining a game were easy. He thought that the color change when joining a game as a bit drastic.

### **Task 3 - Host a game**

**How easy was it to create a game?**

- 1/5 - Very Easy

#### **Findings**

- Thought it was easy to setup game
- Privacy: Thought that public was within the website only.

- Was unsure on how he would communication with people that joined the game, in particular on the day off. Suggested that usually there is a single point of contact that is available to help with traffic/parking questions.

### **General**

- Best
  - Thought it was very easy to find and join games.
  - Thought that across the board the right amount of information asked for and shown to the user.
- Worst
  - Was confused by the multiple game states and was questioning if they were really useful to the user.
- Mobile
  - Would want mobile on day of coordination, checking status of games, and looking for new games.

## **Conclusion**

The main goal of the project was to ease the pain involved in discovering and organizing games. To achieve this goal we followed a user-centered design approach to product development. We encourage you to visit the product of our work which is a website available at [peaceful-brook-2393.herokuapp.com](http://peaceful-brook-2393.herokuapp.com).

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