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Software Engineering Assignment 2

CS400-01

Software Design and Development

Fall 2021

SmashApp—Developing Features, Scenarios, Personas and User Stories

I. Interviews

For SmashApp, we had the idea of meeting with three types of people: The inexperienced player, the veteran player, and the tournament organizer. Each person we met played into one of these roles. For our interviews, we interviewed Hazel Lyons for our outside perspective, Chris Barker for our experienced perspective, and John Hynes for our tournament organizer role.

A. Hazel Lyon Interview:

We kept the questioning largely superficial when it came to approaching the outside perspective. We asked her questions about the type of Smash content she has watched, the advertising she's seen, and how she interacts with Smash. Hazel has experienced what we've seen as the college filter of Smash Brothers. Smash is a popular game on college campuses, and due to its prolonged exposure with players, you're inevitably going to pull some of those people in. From experiences we've seen on University of Kentucky campus or University of Louisville campus, the game garners a lot of casual attention, which is reflected in our interview with Hazel. She has seen advertising online about our group member Aaron's weekly tournament, she follows a few high level smash players on Twitter such as TSM Leffen, and she not necessarily searching for smash content on a dedicated basis, but there's interest enough to watch clips of cool game mechanics, watch Twitch streams of tournaments, and keep up with the current culture of Smash.

What to take away:

- Their interest in Smash Brothers is casual, so bringing the content to them is essential. These are the people hardest to not necessarily get onto the app, but the hardest to retain on the app, because while they're aware of content and the online community, they do not feel acclimated to join. Creating pathways for them to easily enjoy content is a must, say something like Tiktok, where upon startup, there's no searching for content, it instantly appears in front. Maybe a notification system to highlight, "Top 5 combos of the day," similar to IFunny's, "Featured top 20."

B. Chris Barker Interview:

Chris has been a player in the Louisville scene for around 4 years. He's placed highly on the Kentucky Smash Power Rankings and attends tournaments frequently. This is a person whose social life, online content, and personal hobby all center around Smash—meaning they are primed for every aspect of this app, content, data analysis and event pages. Chris expressed interest in the data portion of the app. Going to an event as a ranked player, you're expected to play anywhere from 16 to 25 games per tournament. That's a significant chunk of information, and if that information is easily accessible, it builds a stat sheet extremely useful for say reviewing before a set at the weekly or at a national level tournament. Chris expressed interest in seeing other player's data, which hadn't been thought of before. If you were able to recall other player's data, you could find weaknesses in your opponent's play, or review a top player's play for expertise, both of which would lead to a much more detailed and prepared meta-game. Chris shared lots of excitement for something to record and analyze so much data, for someone like him, this information could mean getting first instead of second.

What to take away:

- Dedicated players go to a lot of events. Inputting the data for 16 to 25 games a week could get very tedious to someone who attends frequently. Creating a user interface that is responsive, accessible, and appealing is central. Inputting data has to feel like you're building towards a reward, not managing a chore.
- Veteran players are excited to see which aspects of their play they might be ignoring; it could translate into tournament winnings for them.
- The data analysis portion is valuable for multiple reasons outside of yourself. Players might not want to record their matches because it could be signaling to the world their weaknesses. Maybe a public/private option is worthwhile.

C. John Hynes Interview

John has been a tournament organizer for a couple months on University of Louisville campus. His weekly usually has around 20-40 players. He plays the game himself, but has a priority on his tournament first. When asked about the tournament process, he expressed a few issues. First is with setups, routing players to their setup can be a significant portion of the tourney's delay. The first round is chaotic, with 10 to 16 matches being called in the first wave—players get lost in finding their setup station, remembering which station they're on, finding their opponent, and all of these issues could be solved through device integration through smash.gg—the main tournament client. Recording sets instantly though this app would also make a big difference in delays, players often forget to come by the tournament desk, or they report incorrectly, or have to wait in line to report. Our app could instantly share their end result, filled with character data, stage data, and result. Advertising was also a big concern, advertising on Twitter or Facebook hasn't reached too many people.

What to take away:

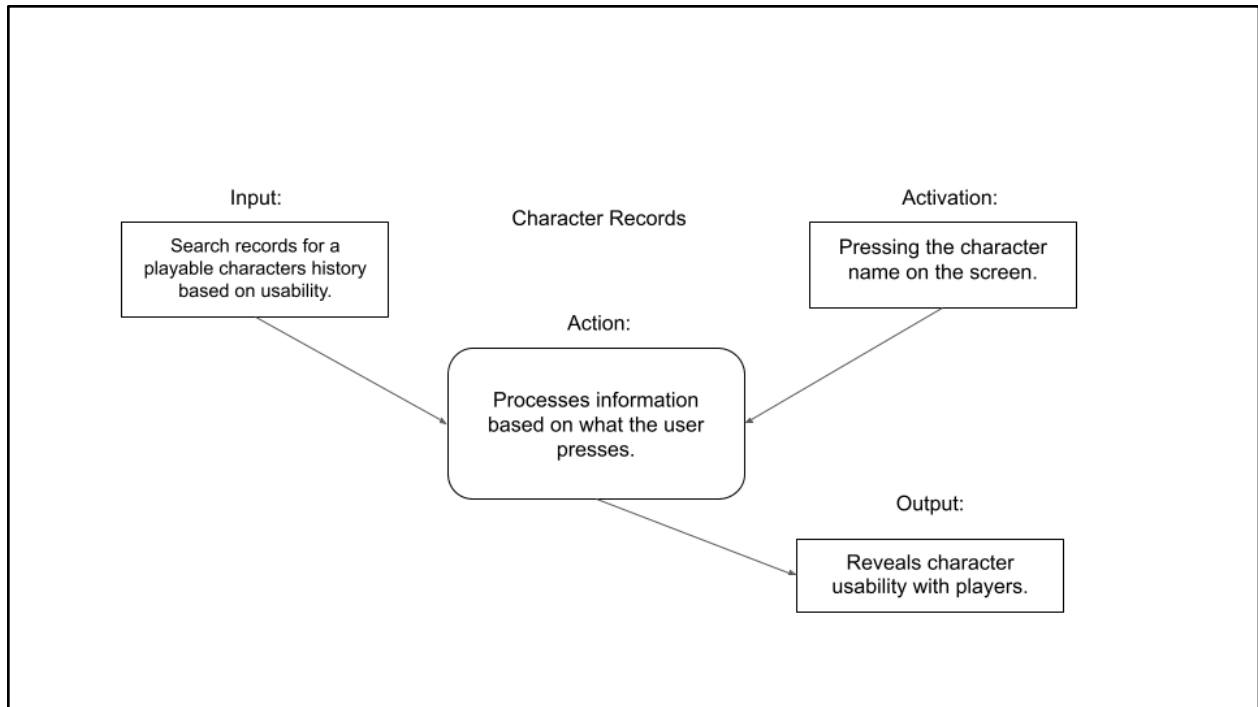
- Reduce tournament delay: Through sending people directly to their station and instant match recording.
- Collection of data could be used for advertising trends.
- Event advertising, giving direct access to active forum style groups would result in a much more active base of players.

II. Features

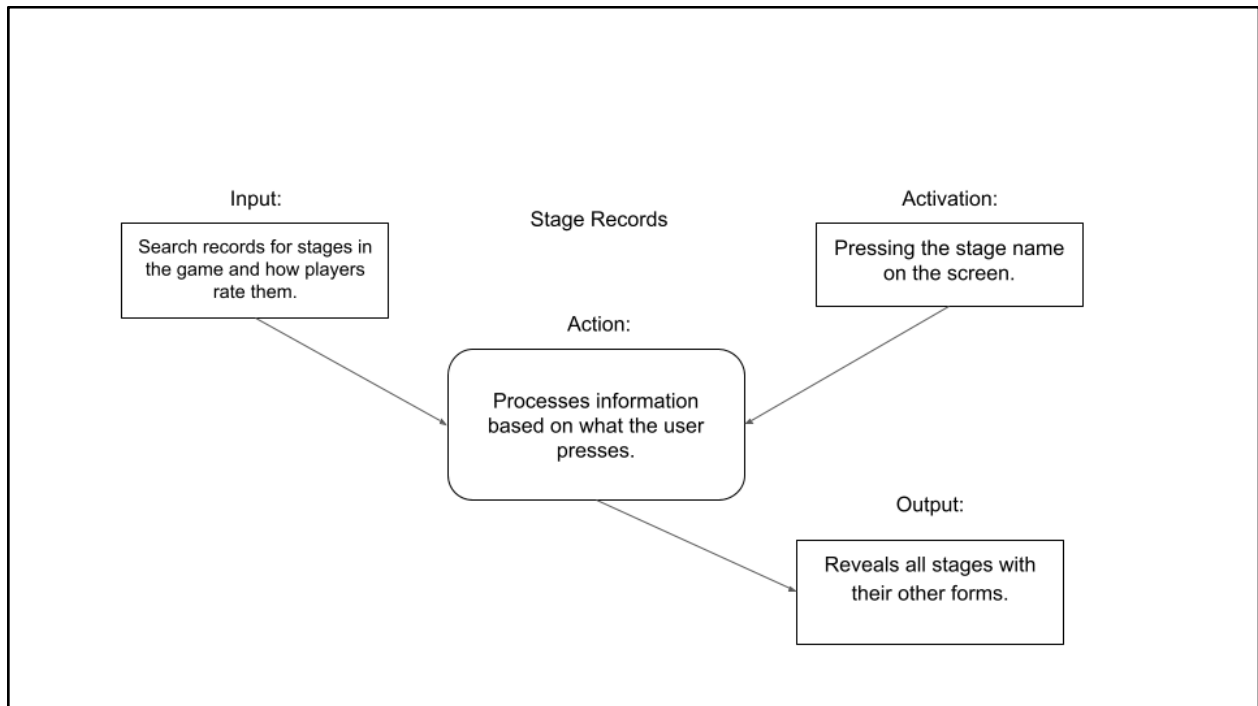
The features for our product, SmashApp, are centered around the tournament experience. The first thing this app should be known for is its communication with tournament records, so our most essential features come in creating an accessible service from which players can report their match scores without leaving their seats. Following that, we want to track our users' posts and then pre the next upcoming tournament, so features like social postings, group functions, and event advertisements have shown themselves to facilitate conversation, future growth, and retain attention. We are going to showcase these features in detail and highlight the people and instances where they are best going to be used.

A.) In-Tournament Data Recording:

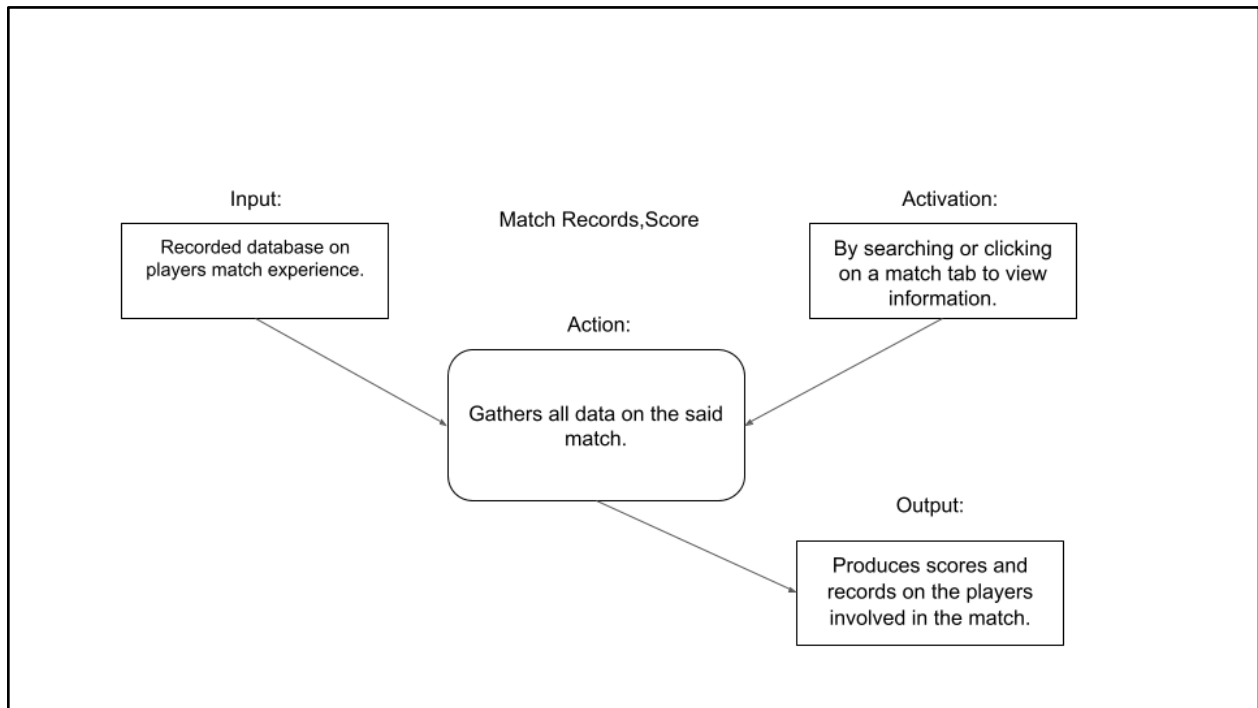
1.) Character Records



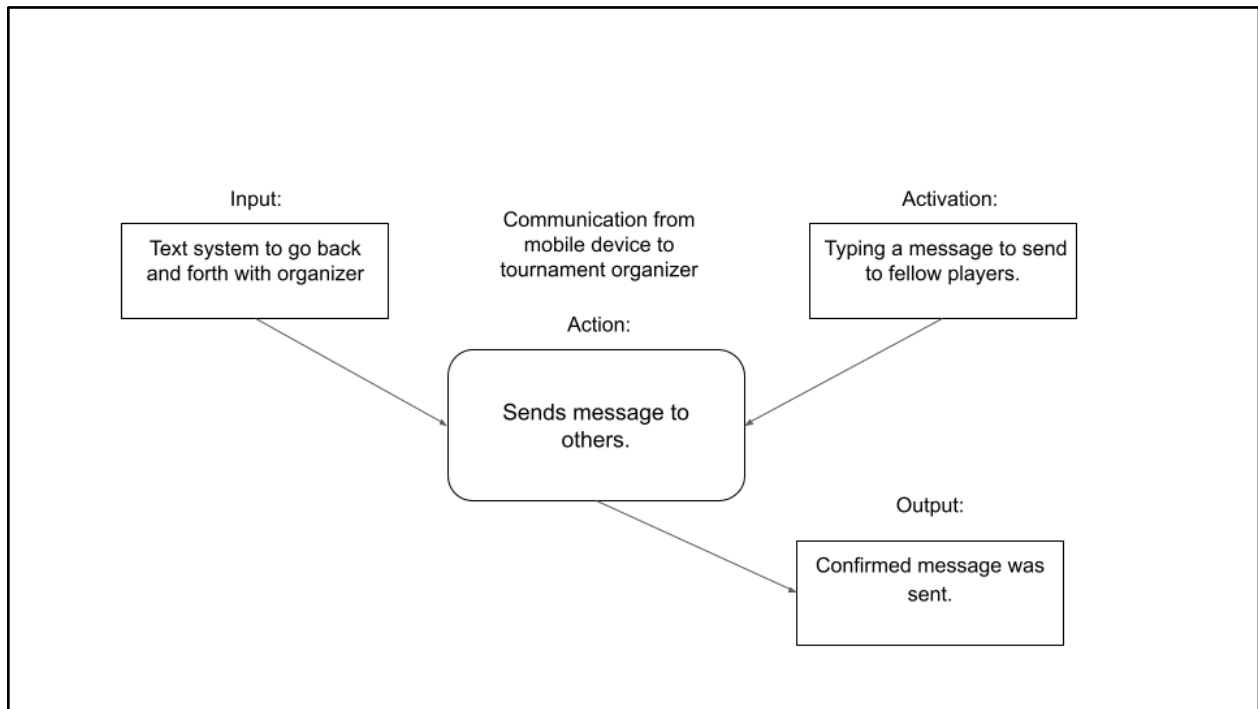
2.) Stage Records



3.) Match Records, Score

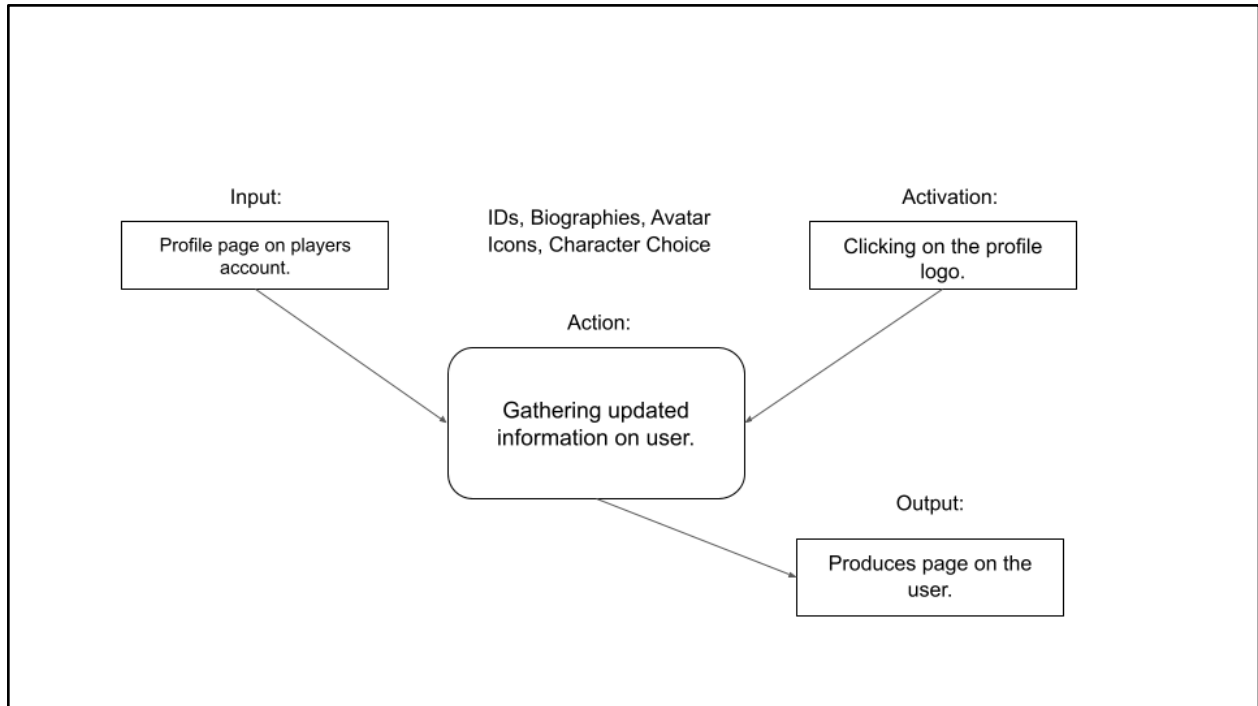


4.) Communication from mobile device to tournament organizer

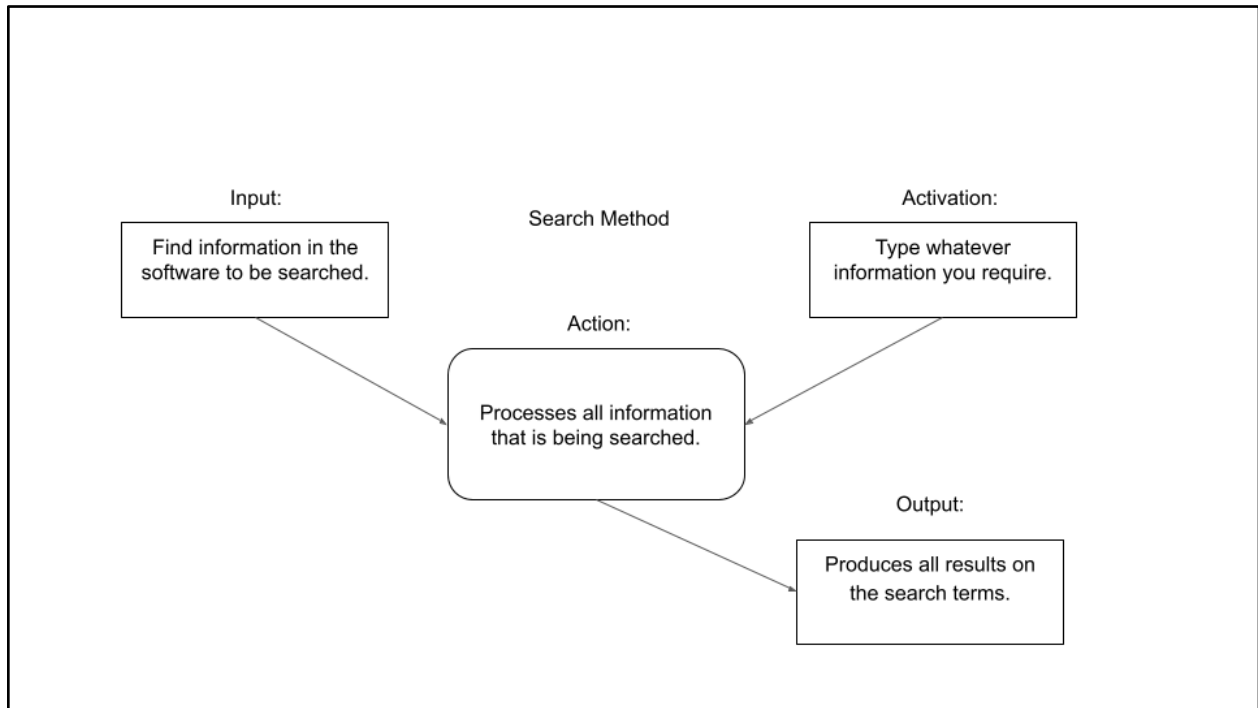


B.) User Accounts

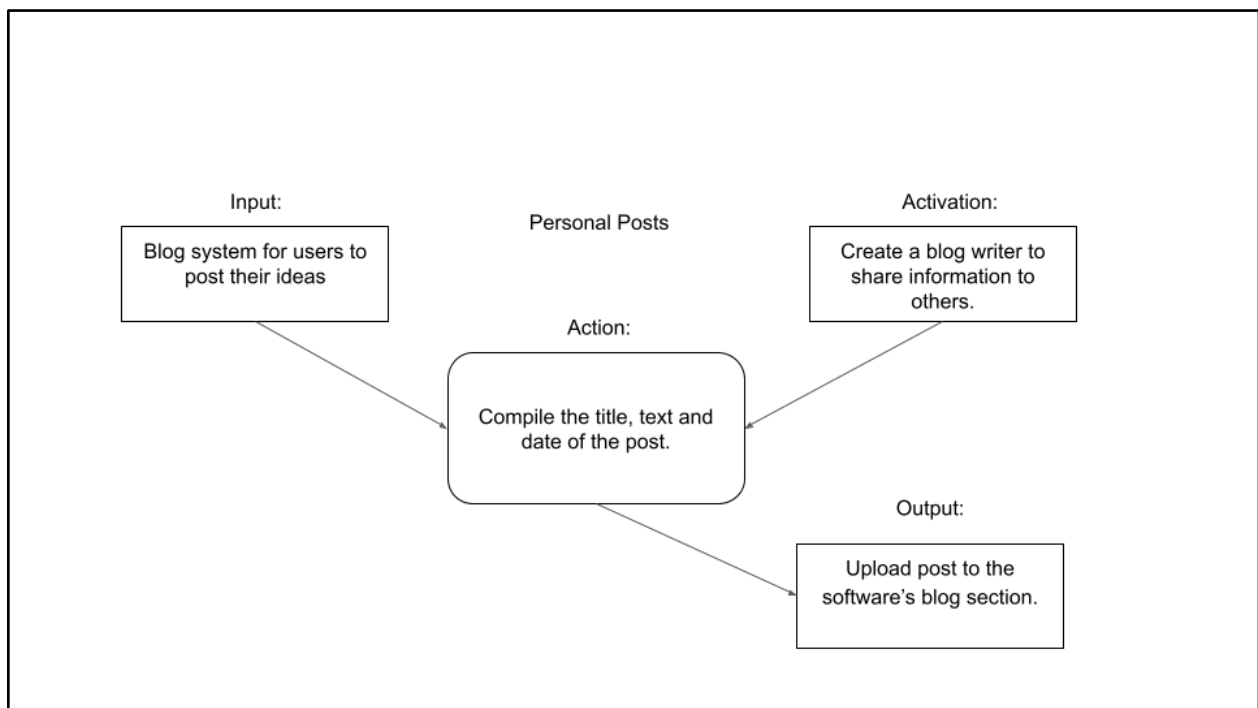
5.) IDs, Biographies, Avatar Icons, Character Choice



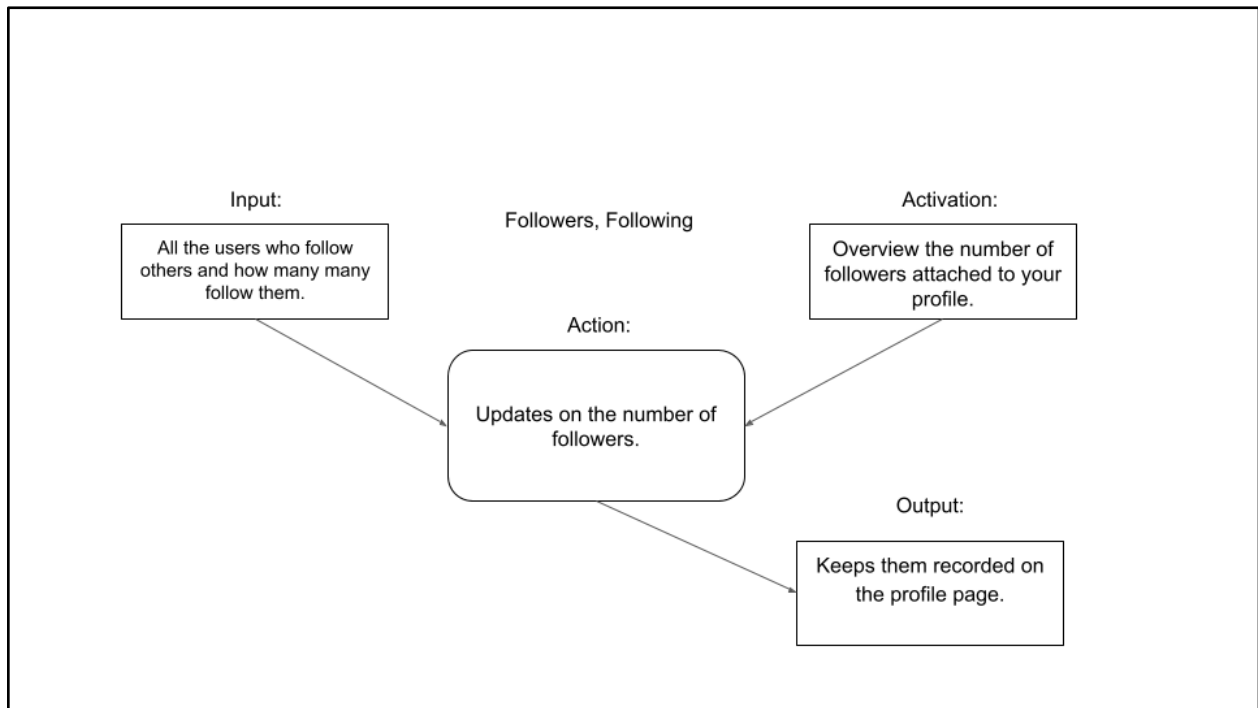
6.) Search Method



7.) Personal Posts

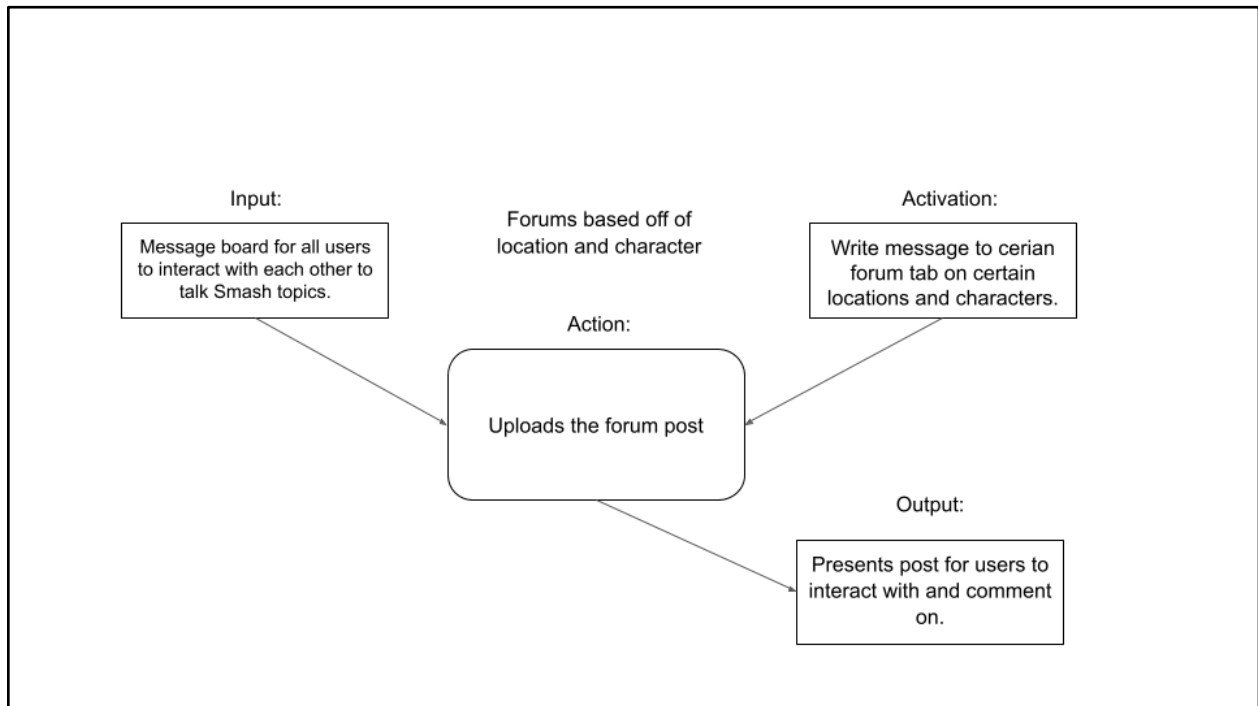


8.) Followers, Following

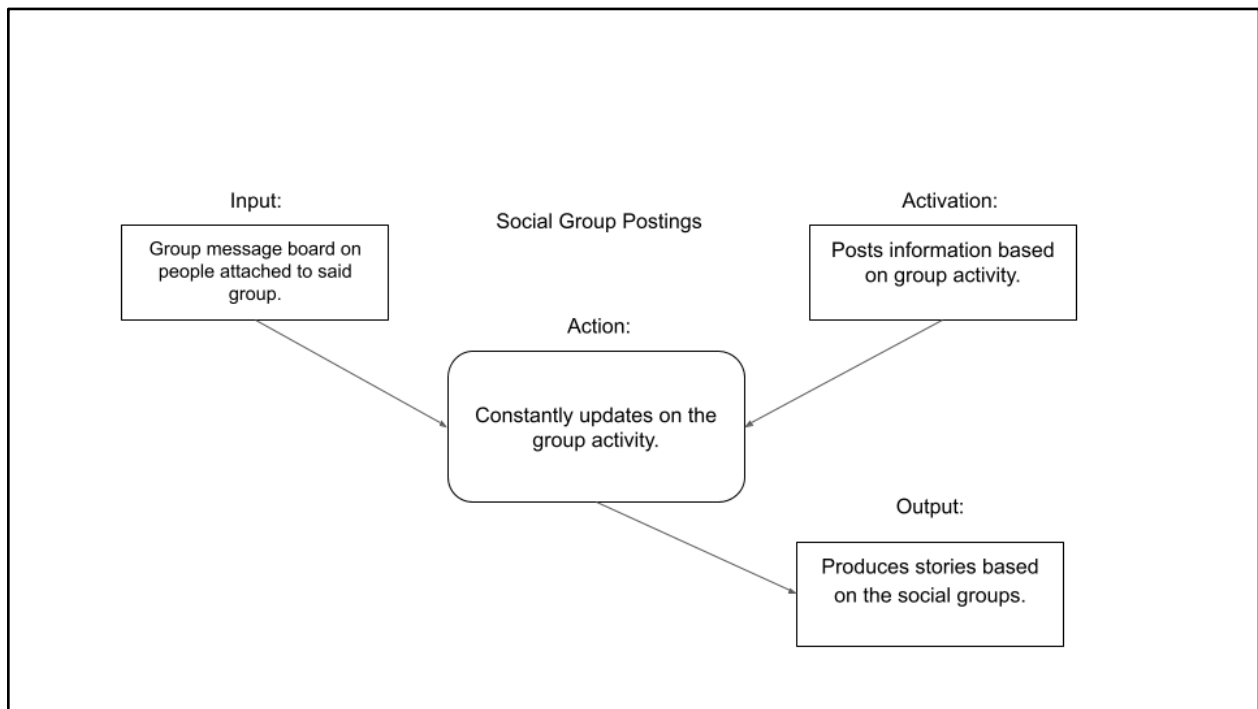


C.) User-Group Forums

9.) Forums based off of location and character

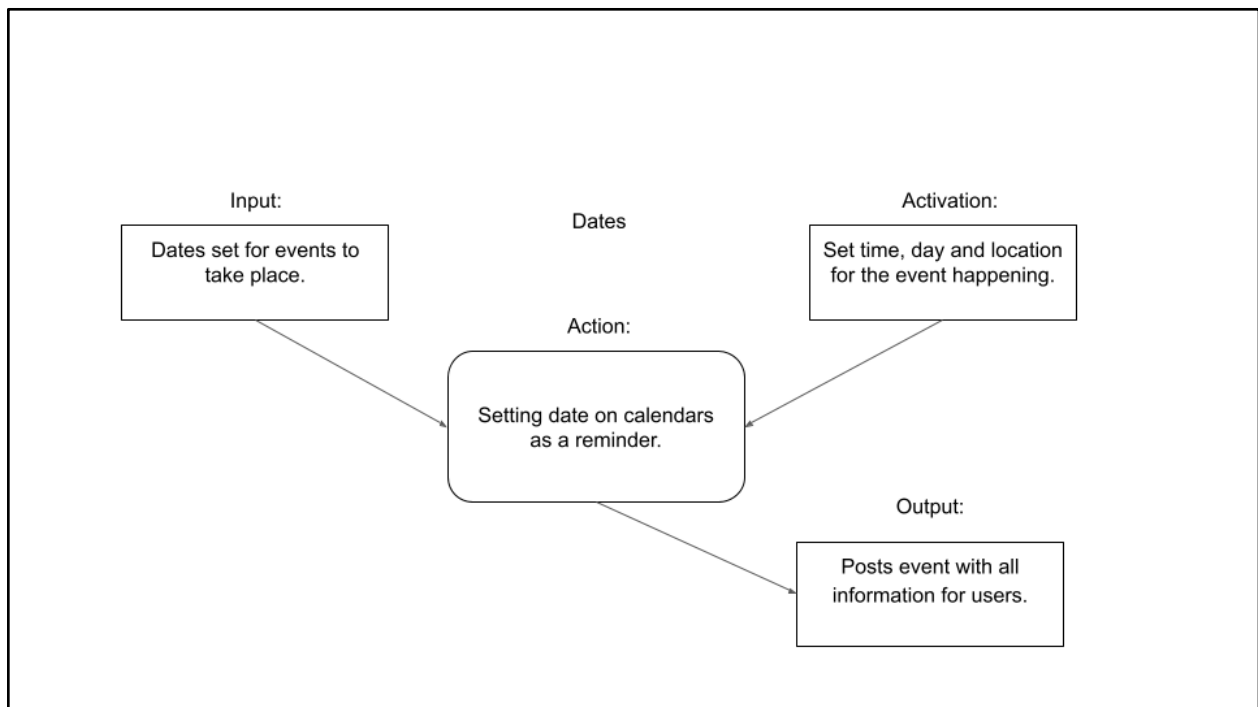


10.) Social Group Postings

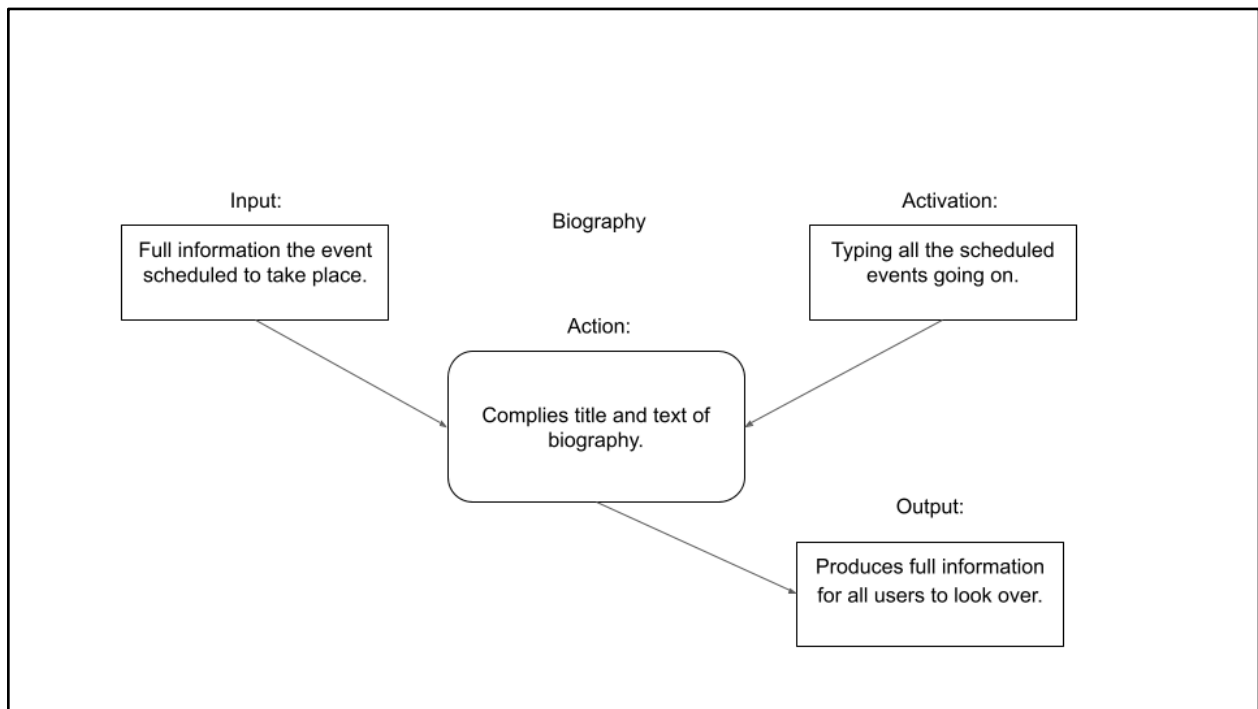


D.) Event Pages

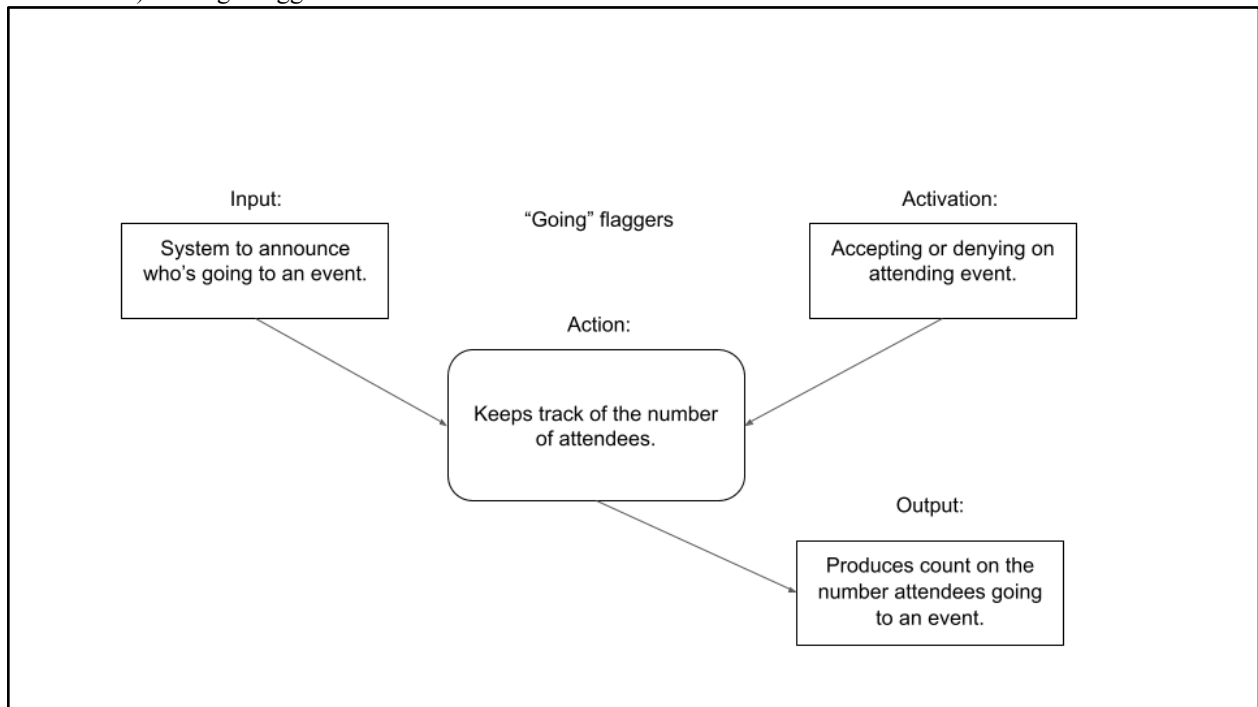
11.) Dates



12.) Biography



13.) "Going" flaggers



A. Personas

Sam is a 17-year-old freshman going into college. In High School, he played Smash with his friends from the soccer team maybe once a month. They never took it too seriously, but Sam always won, so he always perks up when it is mentioned in conversation. Now that Sam is in college without his old friend group, he's been very anxious to approach new people. He's planning to major in History for a degree in law, so something lively and exciting like Smash feels like just what he needs to connect to other people. Sam has watched a couple of high-level tournaments, and follows a few top level players, but hasn't attended anything other than a Freshman orientation Smash meetup, but he's beginning to think it might be a good way to meet new people on a college campus.

Mitch, age 26, works at the Ford plant in Louisville, Kentucky. Born and raised on the south end of Louisville with his 4 younger siblings, he played Super Smash Brothers with his siblings beating them to a pulp. He has a degree from Louisville in Physics, and he's confident in his ability to analyze data, so he's excited to take advantage of the possible improvements a strict record keeping software could give him. He attends a tournament on a weekly basis, sometimes doubling up, his friend group is some people from work and school, but his main conduit for social life is through Smash Brothers with the guys down at the bar.

Andrew is 30 years old and he's a veteran Smash player. He's been obsessed with Smash and fighting games since he could walk. First, he went to tournaments for Super Smash Brothers Melee, then he hosted them for Super Smash Brothers Brawl at local game shops, now he's been hosting Smash tournaments for more than a decade. He runs tournaments out of a Cincinnati Arcade bar, and advertises to the 21+ crowd for their events. He's also helped run national level events as well as regional tournaments—he knows what he's doing and he's been doing it for a long time. He works his job as a remote Software Engineer, and he's willing to pump time and even money into trying new things to liven up the scene. He's been through a lot of tournament organizing software before, ones that hosted locally, ones that had some data collection, and ones that functioned as advertising platforms themselves, but he's never seen an app that can do it all. He's cautious about switching from his old software, but he's swapped before, and it worked out for the better.

B. Scenarios

Meeting New People—Sam

Sam arrives at college to a completely new world to explore. Orientation groups just don't do it when it comes to meeting new friends, so he begins to search online for stuff to do. He sees that there's an active smash community on his new campus, University of Cincinnati. Once going to a tourney, he sees that people are using this app to get their matches and record data. His first round is against a veteran player who uses the app, and they use the application to decide on what stage they'll play on. Sam and his opponent finish their match and notices his opponent didn't report his match to the tournament organizer. Sam walks over and reports his score, but the tournament organizer tells him thanks, but they already got it. Sam is surprised, and the tournament organizer lets him know that the app they used automatically sends the data and records their matches.

Connecting Online—Sam

After going to his first tournament on campus, Sam downloads **SmashApp** for the next time, but he gets a notification saying, "Watch Fatality flawless his opponent in under a minute!" Sam clicks on the notification and watches a clip of the local player, "Fatality," beating up the veteran opponent who beat him at the last event. He sees a graphic of who placed in the top 8 of last tournament, he sees clips of more cool combos, the last moment of grand finals, and that there's going to be a larger event next week. Sam decides he's going to go to the larger event after seeing how active and lively the community is. Without seeing all of these ways to communicate with others in his local community, Sam wouldn't have seen the advertising for the larger event and might not have gone.

Creating and Communicating—Sam

Sam goes to a larger event and meets the people he's seen post online this week. He plays some games and makes some friends. After the event, everyone goes out to eat together, and while there, Sam is invited to join a group-chat on **SmashApp**. Throughout the week, people chat and meetup to play smash at each other's dorms. By the end of the week, Sam feels like he's really found his friend group, and he's excited to go to even more tournaments—even if he isn't winning too much. Sam continues to use the SmashApp, now he's involved in the local community page, his personal friend's pages, and follows a bunch of top players in the scene.

Analyzing the Usual—Mitch

Mitch has been going to tourneys for years now and achieved a lot of success. As a Samus main, in just a few years, he's now known as one of the best in the country. He's put in a lot of work analyzing his own videos, thinking about how to curve the strengths of his usual combatants, and it's been a fruitful process, but he still can't beat one person who travels sporadically in the community. Mitch has been losing to this guy for a while now, and everyone talks about their rivalry, but Mitch doesn't feel it's much of a rivalry since he loses so much. So after a couple weeks of using the data analysis of **SmashApp**, Mitch notices a trend. He seems to always lose to him on the 4th game of their best of five sets, when Mitch has already gone up 2 to 1 in the set. He notices that they always play on the same stage too, so next set Mitch chooses to go to a different stage. And it works! This time, Mitch closes out the set in game 4, winning 3-1, and without **SmashApp**, Mitch doesn't know if he could have done it.

After the Tourney—Mitch

Mitch has been to a lot of high level events. He's been to California, he's been to Atlanta, Chicago, Detroit, but all of the times before this major tournament, **SmashApp** hadn't been so popular in the Midwest. Now after playing some games with a stranger at a tournament, the two can link up and follow one another to see how they do in their local scenes. Even when the tournament is over, and everyone is back at home, Mitch now has an easy connection to the cool people he met over the weekend, and can share all of his combos, thoughts, and opinions about the game to them. Without **SmashApp**, this type of communication would be harder to navigate, asking for someone's facebook, twitter, or Instagram might have more personal information than a stranger might be willing to share, but because of **SmashApp's** niche atmosphere, people can feel more comfortable sharing just their usernames to one another.

A New Opponent—Mitch

Mitch has never fought a Kirby like this before. There's no Kirby's in his home state, so when he's projected to fight the best Kirby in the world, KirbyStar64, he's a little anxious. So Mitch looks up KirbyStar64's profile on **SmashApp**. He sees that in KirbyStar64's region, there's another Samus player like him, and KirbyStar64 keeps losing to him. Mitch looks up a video between the two and notices how KirbyStar64 plays. After all of this review, Mitch feels a lot better about their upcoming match.

Starting a New Series—Andrew

It's been a while since Andrew has been able to host a tourney because of covid, but now, after a long hiatus, he's ready to start again. Next week will launch the first tournament of his new weekly series, and he's going to post everywhere about it—but first, Andrew is going to post it on **SmashApp**. This is because Andrew knows that **SmashApp** is going to have the most responsive audience. There's going to be pre-registrations, excitement, and a lot of energy for the page—which building the atmosphere of a lively event is essential to posting and advertising to new people. So first, before he tries to outreach on larger platforms like Facebook, Twitter, and Discord, Andrew is going to post on **SmashApp** first to get the attention of the ones he knows will be coming.

The Grand Ball—Andrew

Andrew is finally doing something he always wanted to—to run a national level tournament. He's calling it, "The Grand Ball," because this will be the first tournament of this size, and for him and his community. So communicating to local communities near and far is going to be essential. Thanks to **SmashApp**, Andrew can easily

get ahold of a state's notable figures hundreds or even thousands of miles away. It can allow him to get in touch with larger e-sport organization's to fly out the best players in the world, he can contact star regional players to offer their carpools discounts on hotels, gas money. Running a tournament of this size is going to take a massive advertising and communication reach, and without **SmashApp**, Andrew's ability to find all of the right people would be near impossible.

Keeping the Community Safe—Andrew

After last week's event, Andrew received a notice that one of his attendees went to the event unaware of their covid-19 status. As a result, Andrew cancels next week's tournament. To let all of his attendees, know, he can not only instantly make a post to the forum's public group, but send a broadcast to local group chats, a notification that the event page has been cancelled, and know that he's directly contacting everyone who might have attended last week so they know to get tested, and anyone planning on attending the next one in the series.

C. User Stories

Sam—As a new hobbyist I want to easily be able to find tournaments and events in my location.

Sam—As a new player, I want an easy way to connect with the already established scene and work myself in as a regular.

Sam—As a beginning in competition, I want a way to notice where I'm messing up routinely.

Mitch—As an experienced player, I need a way to catalogue my history of matches so I can prepare for each opponent to the best of my ability,

Mitch—As a regular in the scene, I want a way to communicate with my friends without hearing about my relatives or politics.

Mitch—As a dedicated Smash fan, I want to be able to watch content about Smash because it's my favorite thing in the world.

Andrew—As a tournament organizer, I want a way to consistently and reliably let my community know about upcoming events.

Andrew—As a tournament organizer, I want a way for my attendees to communicate their match scores to me without shuffling through a crowd or inaccuracies.

Andrew—As a tournament organizer, I want a way to advertise to other communities easily by posting in their groups and having easy access to established players.

D. Feature List

Bold = Minimum Viable Product

A.) In-Tournament Data Recording:

1.) Character Records

2.) Stage Records

3.) Match Records, score

4.) Communication from mobile device to tournament organizer

B.) User Accounts

5.) IDs, Biographies, Avatar Icons, Character Choice

6.) Search Method

7.) Personal Posts

8.) Followers, Following

C.) User-Group Forums

7.) Forums based off of location and character

8.) Social Group Postings

D.) Event Pages

9.) Dates

10.) Biography

11.) “Going” flaggers