

Advanced Web Studio Notes

1) I'm working with people who bet on sports.

2) Group 1: My friend Scott who uses FanDuel

FanDuel is a site where users pick a group of players over a given time period and compete against other players to see who put together the best collection of players.

There are constraints which limit which players you can choose, and there are traditional sports betting actions as well, but Scott just uses FanDuel for football.

a) Actions

- i) Texting: Coordinating with friends outside of the app to see who wants to play fanduel that week.
- ii) Googling: Researches which players he wants to use that week
- iii) Using FanDuel: Selecting the players on the website to pick his lineup
- iv) Moving Money: Money needs to move from his bank account into the app in order for him to actually play and get paid
- v) Risk Management: He maintains a different spreadsheet of all his action for the week so he can manage his risk across multiple apps

b) Environments

- i) Home desk: When doing research and more serious bet placing Scott uses his desk at home to make sure everything is as he needs
- ii) Chair at work: Scott says he tinkers with his weekly lineups while he's at work using his phone
- iii) Bathroom: Scott does a lot of tinkering in the bathroom...no need to elaborate.
- iv) The car: Scott says he calls his friends while he's driving to see what they think about the games for the upcoming weekend
- v) The bed: Scott says he lays in bed and tinkers with his lineup

c) Interactions

- i) Scott watches the games that he's playing on TV
- ii) Scott uses his computer to research games and constantly searches for news and updates
- iii) Scott taps on his phone to update his lineup to his preferences
- iv) Scott calls FanDuel on the phone when there's an issue
- v) Scott drives his car while he talks to friends about the upcoming games

d) Objects

- i) Scott uses the remote to change the TV channel
- ii) Scott uses his phone/tablet to place wagers on the go
- iii) Scott uses a computer to do research and do analysis
- iv) Scott uses his phone to call friends
- v) Scott Uses his credit card to put money on the sites

e) People

- i) So I only observed Scott, but he's in a league with 11 other guys who all play each other each week in FanDuel.
- ii) Didn't see them but the admins that monitor the site
- iii) Didn't see them but someone has to make the odds etc.
- iv) Didn't see them but someone has to aid the fund transfers
- v) Didn't see them but someone has to manage the advertisements on the site.

3) Group 2: Observing my friend Mike place bets on his brother's totally legal gambling website

a) Actions

- i) Mike needs to convert his money to bitcoin to put his money on the site
- ii) Mike googles to do research on the games of the day
- iii) Mike logs into the site to view available bets
- iv) Mike talks to his brother about what odds might be changing in the future
- v) Mike checks the app periodically to find out when his winnings are available

b) Environments

- i) Mike mostly does things from his home computer
- ii) Mike also checks the site on the go when he's at work. On site at a construction project in Rhode Island
- iii) if Mike is watching a game at a bar he will check the site for available odds
- iv) Mike will occasionally check things in his car if he's waiting for someone or something
- v) Mike usually checks odds and ponders wagers when he's on line waiting for lunch.

c) Interactions

- i) Mike watches the games he's playing on his TV
- ii) Mike searches for information on his computer
- iii) Mike checks his phone for score updates, and cashflow updates
- iv) Mike uses his credit card to convert money to bitcoin
- v) Mike calls his brother on the phone about site maintenance

d) Objects

- i) Mike uses the remote to watch TV
- ii) Mike uses his computer to do research and place wagers
- iii) Mike uses his phone to place wagers
- iv) Mike uses a credit card to put money on the site
- v) Mike uses a phone to call his brother

e) Users

- i) Someone has to move the money from bitcoin to cash on both sides of the transaction
- ii) Mike uses the site to place wagers. As do others

- iii) Mike's brother doesn't own the site but he works on commission based on how many clients he has using the site
- iv) Someone has to manage the site.
- v) Someone has to set the odds

4) Critical Incidents and Attempts at a solution

a) Actions

- i) Critical Incident: Converting money to bitcoin is a pain. Especially with rates fluctuating severely pre and post conversion. Even if you win so much in bitcoin by the time you convert it may be less. A workflow solution that held \$\$ in it until bitcoin fell or rose to a specific price before conversion would be helpful.
- ii) When Scott sets his lineup FanDuel doesn't have notifications about who is playing and who is not. It's easy to make a mistake and use a player that's not playing. One database solution might hold the current injury status of all players that are playing or not playing.

b) Environments

- i) Mike likes to watch games at bars, but for football and fighting sometimes bars aren't showing the games/matches that he wants to watch. A database solution would contain all the information of where and when different events are playing.
- ii) FanDuel takes a 10% cut of all winnings. So he and his friend play for free on the site and take care of the money management themselves. A communication intermediary that tracked wins and losses over the course of the season, and allowed for money transfer with less of a fee would handle the money management for them at a cheaper price.

c) Interactions

- i) Mike can't always find the game he wants to watch on TV and sometimes has to check his computer to find a stream of the game. A database solution would have a list of all available streams of the event he wants to watch
- ii) Scott uses his computer for research but sometimes misses information that he should see especially with events that occur close to game time. A messaging intermediary would push news events to him that are relevant for the players he's dealing with.

d) Objects

- i) Scott doesn't get news alerts on his phone about players that are starting or not starting. A messaging service would push notifications to his phone as players got hurt
- ii) Mike doesn't know when money is available for conversion from bitcoin on his site. A messaging service would let him know when it was ready

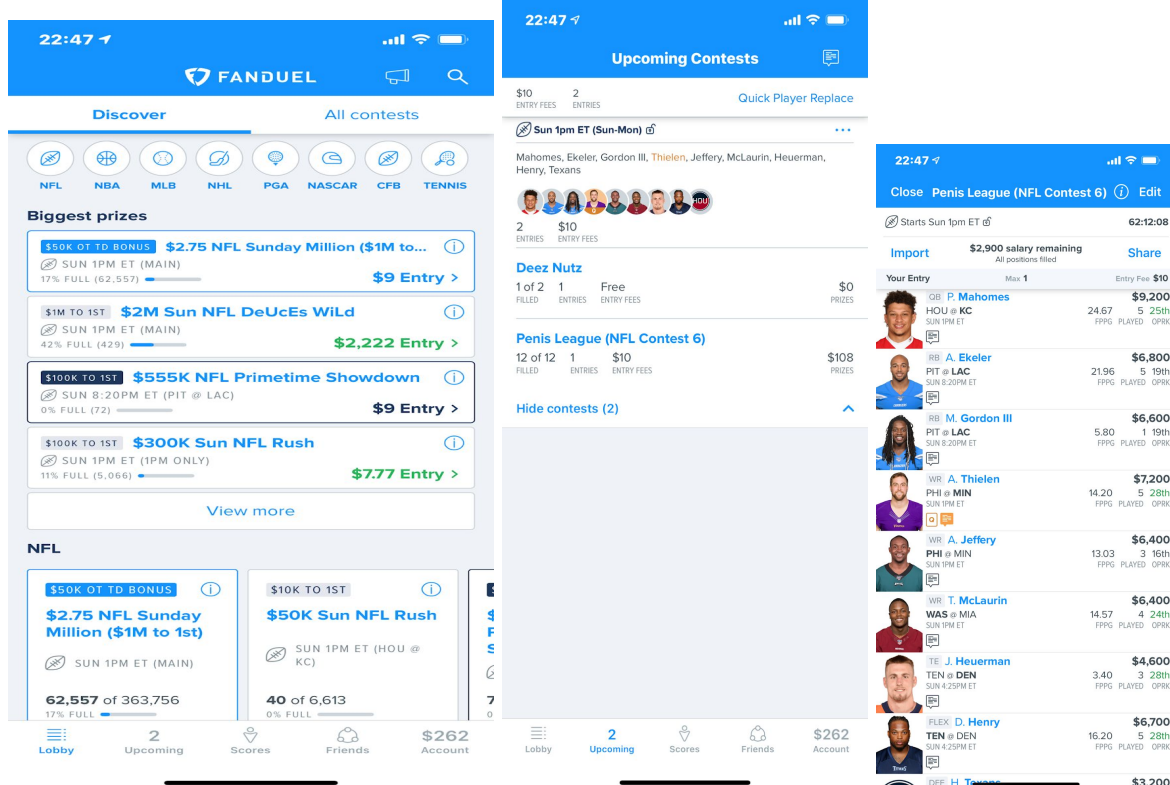
e) Users

- i) Sometimes it's hard to find a league or tournament to join on FanDuel since the crowd is so diluted. Using a messaging service Scott could find

new people to play with other than his personal friends that are on the same skill level and same risk profile.

- ii) It's hard for Mike's brother to set people up on the site since the site doesn't have a dedicated IT department and adding new users is non trivial. A workflow service that automates some of the hoops that new users need to jump through to join would be helpful.

5) Pictures



Pictures 2:



Michaela's Group of people: She's working with musicians here at Columbia that want to play gigs and just don't have a place to play. Who actually listens to acapella anyway?

Session 1 (watching a member of the acapella group Notes and Keys and his friend (Juilliard/Columbia) perform at a SoFar Sounds concert in Chelsea and speaking with them afterwards):

a. Actions:

- i. Sing and play the saxophone during rehearsal and performances (involves microphone and speakers, sometimes he performs with a band and sometimes individually).
- ii. Texts fans to stay in touch and texts other musicians to collaborate.
- iii. Manages social media posts and marketing.
- iv. Records performances on videos and posts them.
- v. Coordinate with SoFar sounds about a performance spot.

b. Environments:

- i. Songwriting in his dorm
- ii. Performed in Nielson Cafe
- iii. Columbia lounges to collaborate with other musicians
- iv. Group rehearsal in Columbia dorms and common spaces
- v. Spaces in Lerner to practice and perform

c. Interactions:

- i. Songwriting with paper pen and computer
- ii. He uses a microphone and speakers when performing.
- iii. He uses his phone to text and coordinate practice times.
- iv. He uses his computer to email the SoFar Sounds coordinators.

- v. He uses a computer to look at sheet music to write lyrics

d. Objects:

- i. Headphones
- ii. Saxophone
- iii. Piano (electric and traditional)
- iv. Microphone
- v. Computer
- vi. Video Recorder

e. Users:

- i. The fans
- ii. The pianist
- iii. Member from acapella group recording the performance
- iv. Friends/members from acapella group who sing with Nathan
- v. The MC

Session 2: Performers in the on campus acapella group

a. Actions

- Practice singing songs together/rehearsing.
- Performance feedback and advice.
- Live performance
- Record music
- Post music to website and to spotify

b. Environments

- Practice in the bedroom /suite
- Rehearsing in Lerner
- Performing in Lerner
- Auditioning in Hamilton hall
- Performing in John Jay

c. Interactions

- Microphone and recording set to record music (upload to Spotify)
- Computer for getting the right note before going into singing/practicing a song.
- Computer to update their information on their website (album release, members, auditions, contact, etc.
- Post on Facebook to notify about auditions and concerts

d. Objects

- Microphone to sing into during concerts
- Computer to get the right note/pitch before singing a song or segment
- Video recorder + iPhone video of performances
- Piano (real and computer)
- Phone as "microphone" in rehearsal of performance
- Paper (musical sheets)

e. Users

- beatboxer

- Music director -- ring leader of the musical part of the group (mainly gave feedback and direction with how to sing each song)
- President -- gives some heads up about concert coming up and logistical things + feedback on performance as well
- Singers
- Lead singer

2. Critical Issues and possible solutions

Actions

- Practicing and determining times to coordinate can be difficult when there's lots of people involved. A scheduling app could help fix this problem.
- Reaching out to fans is important since doing so on social media seems impersonal especially with smaller followings. A more personal messaging app in which the fans and the musicians can interact would be helpful, especially if musicians can notify fans in a non obtrusive way

Environments

- It's difficult to find rehearsal time in common space. A scheduling app would help mitigate this issue.
- Getting students aware of performances is difficult. A non obtrusive messaging app would help make people aware.

Interactions

- A computer can be annoying to take places especially when performing and trying to find the right note. Making a mobile app would be helpful
- A program that lets him write sheet music as well as the accompanying lyrics would help him compose songs in a more unified way

Objects

- When singing you don't know if you're hitting the right note or not. An app that let you know if you're singing the right note would make sure you sound right.
- When performing it's hard to keep everything together between music and performance notes. Having an app on a computer/tablet with all the sheet music in order with accompanying notes would provide more context.

Pictures:

