### Brianna Garbo – Assignment 2

Cognitive Teardown: Pokemon GO

- Conrad: Why are video games addictive?
  - o No pre-defined end, even after "catching them all" there is no game over
  - Social connections: group hubs as "gyms" or "pokestops" encourage players to meet.
  - Leveling system with steady progress almost every action contributes to level
  - Collaboration: gyms can be accomplished with a team, and raids must involve cooperation with other players
  - In-game currency
  - Game evolves when player is offline pokemon and raid opportunities continue to change regardless of player involvement

# Mauro: Candy Crush

- Teach, don't show: easy to pick up the game and discover "WHAT" and "WHY" the structure of the game is – how to move, catch a pokemon, etc. however, the game also rewards higher levels of interaction by discovering more complex gameplay.
- Selling expertise vs experience: in-game currency can be purchased for real money or earned through fairly low-level game play (albeit slow), which can then in turn purchase items for cosmetic changes and skill-related boosts. Items purchased rarely feel as though they do not lead to in-game success (save for cosmetic items), and purchased items are also earnable in-game.

#### Mauro: Flappy Bird

- Simplicity/complexity: very simple concept that is addictive and rewarding at a base level, but additional rewards players who discover, research, or learn about additional levels of complexity, offering greater rewards for those who do
- Positive reinforcement/reward system: low-stakes risk with easy, but variable-timed rewards create an addictive environment
- Transfer: may not be familiar with swiping up to throw a ball, but certainly familiar with swiping up, and with the physics of ball throwing, so this behavior comes fairly quickly
- Error correction: easy to replicate previous ball throws and make adjustments to angle

#### Mauro: Angry Birds

- Familiarity: the Pokemon franchise is nearly ubiquitous; many generations can understand the concept innately, but this is especially true of younger generations more likely to be interacting with an exergame app.
- How things look: clean design, minimal wasted resources, easy to navigate
- Storyline: not much of one, but there is some ongoing background information added in over time that is roughly the same sort of mystery or story as AB.
- o "Win" screens easy to read, gamified in terms of number/score display

Proposed App: dogGo! [insert Catchy Mobile App Name Here]

An exergame app designed to improve both human and companion dog health. Using the phone's GPS to track location and distance, and in-game rewards to motivate the player for longer walks and walks to new locations, this app will encourage dog owners to get outside with their best friend. The in-game interface is similar to to any GPS screen, with the player (and their dog) depicted as a customizable avatar at the center of the screen. The dog avatar is, most importantly, also customizable.

### Avatar notes:

- Initial nonbinary gender. Players may select from a variety of masculine to feminine faces, body types, clothing, and accessory options, and select their display gender (male, female, or nonbinary – research alternate options for comfort) at the end of character customization. This is changeable at any time. Additional accessory and clothing options may be purchased, but basic body choices such as hair styles are not limited. Users should feel comfortable and accomodated.
- Highly customizable dog avatar. As this is an app designed for people with pets, it is extremely likely a player will want an accurate depiction of their best friend!
  Limited accessory choices available, additional options may be purchased.
- Customizable profiles [filtered for language] for both player and pet. Don't forget "report" feature for inappropriate content. :)

Gameplay involves walking your dog. While the game is playable without a dog – you may create your personal and pet avatars either way – certain aspects of the game will be limited to those with a dog, detailed later on. Simply walking will earn biscuits to feed to your in-game pet for a cute interaction animation, or saved to turn into an in-game currency.

Additional gameplay involves taking in-app photos of your dog, or dogs you meet, along your walks, and sharing player tags for additional rewards.

Walking to dedicated meet-up locations allows the user to access the social aspect of the game. Players may submit photos of their pet taken at that location to be viewed by, and voted on, by other players also frequenting that location. A player's pet profile may be viewed. Players may earn in-game currency based on the amount of positive votes their photo received. The amount of photo submissions per location is limited, encouraging players to travel to new hubs. Players are limited to 20 in-game photo slots per day unless stocking up on temporary additional photo slots at hubs, or purchasing a permanent expanded inventory.

Players may also submit collections of dogs they have "spotted" on their travels. Submitting this collection removes the photos from your "inventory" (they are still saved) and allows them to be voted on like the player dog photos. Photos submitted with a player tag (for meeting other players "in the wild") will receive an additional bonus. Collect all the dogs!

### Exergame apps

- 1. Virtual "graffiti tagging" game for kids to get out and walk to new locations but also submit their own artwork and designs. Upload art from an outside source or draw your own graffiti-style "tag" in the app's paint interface. Travel to new hub locations best done by walking, which earns you additional inventory space for multiple tags, as well as prompts you to find other tags in the wild to stock up on spraypaint and browse user-submitted artwork, acting as a social space for feedback, interaction, and commentary. Leave your own tags behind in locations for other players to find and tag over, encouraging users to go back out and reclaim their territory. Tags must be a certain distance apart from each other (and possibly fulfil some other criteria) to count to a user's total amount of "territory," and the more territory a user has claimed, the quicker they accumulate in-game currency but also the more notorious they become on in-game leaderboards, inspiring other players to take them down a peg, possibly through the use of a "bounty" system. Bounties give you bigger rewards for tagging over territories claimed by high-ranking players!
- 2. ZOMBIES! Sync your phones for the amount of people playing. Like tag, there is one randomly generated "zombie" to start. As the players run, the phone tracks activity, giving you higher chances of fighting off the zombie or surviving a zombie bite or a higher chance of successfully biting the human players. Gameplay should be more like Manhunt than Tag at night, or in a large space, encouraging hiding and finding each other and "stealth" gameplay and the game can track if any player has ranged too far from the rest and single them out to turn into a zombie, or drop them from the game. If tagged by the zombie, you are "out" for 30 seconds. The game will then calculate if you have enough health, stamina, etc to first fight the zombie off, fight off being turned into a zombie if bitten, or turn into a zombie. If not turned, the zombie player must "bite" someone else before returning to the safe player, who can run again after the 30 seconds are up. If turned into a zombie, they are now compelled to join the zombie team and "bite" the humans.
- 3. User-curated mapping, hiking, and walking "explore your town" app for parents and kids, meant to be educational. Routes are tracked via phone GPS, and photos are submitted of good stopping locations, that a parent may browse prior to selecting a route, including local history or scientific information. The GPS keeps the user on course without getting lost and leads them to the view "vantage points" or other stops put in by the creator. Routes can be voted on via a five-star system by anyone who has been verified via GPS to have attempted the route, and reviews will be viewable by other users, who will see how much of the route the reviewer completed. Parents can earn points and ranking on the site based on contribution, distance walked, and upvotes to lend additional weight to their reviews or their maps.

## **Commercial Exercise Apps**

- 1. A simple time-tracking app with a few suggested cardio exercises jumping jacks, running in place, etc. Hit the Start button when commercials begin, then the End button when commercials end. Input the exercise performed for that length of time, and the app will show you the estimated calories burned. The app tracks how many days in a row you've participated, presenting the results in a graphical "don't break the chain" style chart, to encourage daily participation, and each day and amount of calories burned goes into "energy" for an egg, which will eventually hatch into a beautiful (buff?) chicken. Then hatch more eggs! Show them off! Collect them all!
- 2. A more complex app with suggested body-weight workout exercises. The user can select from some basic options like difficulty, or areas of the body they would like to improve, and approve/reject offered exercises prior to starting the workout, or simply allow the app to randomize the exercises given. Exercises can be reviewed in cards from the main menu. The Start button is hit when the commercials begin, and the app walks you through healthy exercise options until the End button is hit at the end of commercials, and then the calorie burn is displayed. Also has a "couch to fitness" track which is a more automated program designed to walk a beginner user through an array of exercises to work one section of the body at a time, and increase in difficulty periodically, for the amount of days recommended or the user has set. Exercises completed unlock "stars" on that exercise to help track progress; a certain amount of stars equals "mastery," which then unlocks a higher difficulty exercise, and earns a medal. Users can browse their mastered exercises and medals and share them on social media, and link their app up with their social media accounts to show rankings of how many masteries or medals they have in a certain area whenever a commercial break is completed.
- 3. A song-based commercial exercise app. When commercials start, it randomizes to a song from your music library, or syncs to Spotify or some other music app. The user may select a custom playlist. The user has to move the phone in time with the music or for a certain distance in order for the song to keep playing at its usual pace and volume it will slow down and reduce in volume if not. Additional time played can unlock additional song slots or less random functionality for song selection.

# Sleep Quality Apps

- 1. An app that customizes what you listen to and when while you sleep based on user feedback. First using a basic program based on sleep patterns, it plays music or sounds designed to offer the most relaxing sleep based on the length of time the user has selected to sleep for. The user may then edit this information by interacting with the app if woken up during the night, or by inputting when they were woken or by what noise the next day. The app will then make changes based on feedback to try and help the user sleep through those problem times. It can also be customized to increase white noise or the user's preferred background sounds at times the user knows they wake up, or if they know there is a noise disturbance at certain times of night.
- 2. An app that helps track white noise leaks in your sleeping area and disturbances during the night. It offers input as to ways to make your sleep environment most relaxing, and you can do a walking tour of the room to have the phone's mic track noisy areas, which it can use to suggest where to place fans or white noise devices most usefully. During the night, it will track what noises occur and record them for later playback, so the user can determine what they are and if they can be avoided. Users can rate their sleep each night and see if changes help improve their sleep ratings over time.
- 3. Encourage good sleeping habits by working with an app that begins reminding you at set intervals before a designated "bedtime" that it is "phone off" time and time to get ready for bed. It will start a tracker when the phone is not in use prior to the user's designated "bedtime." The next day, it will display if the phone was not in use for 30 minutes prior to "bedtime," and ask the user to rate their sleep. It tracks sleep ratings as compared to downtime before bed, and allows the user to see how their downtime and off-the-phone time before their bedtime can help improve their sleep.