Purpose: Requirements and Design Documents

Date: 01 October 2019

Time: 10:30 AM

Place: Sunny Room (ASB)

Attendees: Rachel, TK, Evan, Negar, Kai, Armaan

Absentee(s): n/a

1. Non-functional Requirements

Functional regs — build off of feature list

- i. Security
 - 1. Privacy standards
 - a. Private info
 - b. Permission/Consent
 - 2. Terms and conditions
 - 3. No unique identifiers
- ii. Refer to "brain age" games for radial chart
- iii. Program must be written in swift
- iv. Database needs to handle X amount of users firebase (proof of concept) (gets messy with many users)
 - 1. Firebase Google cloud platform
 - 2. Reliability of firebase
 - 3. Sync to their reliability standards
- v. Games need to be linked to an existing parkinson's symptom
- vi. Methods in place to allow easy usability and correct posture and exercises
- vii. User interaction with interface
 - Buttons have a hitbox big enough for parkinsons (or make big buttons)
- viii. Execution speed
 - 1. Game loading times < 5s (100% of the time)
 - 2. Upper limit → some timeout error message
- ix. Games stored natively
 - 1. Collection of games
- x. Must successfully use camera and touchscreen
- xi. Network connection
 - 1. Database
- xii. Space the app would take up
- xiii. Games must have rewards/achievements
 - 1. Because of low levels of dopamine
- xiv. Identification
 - 1. Random number generator
 - 2. No personal data will be stored
 - 3. Serial number/mac number
 - 4. Future login system
- xv. iOS version
- xvi. Applications must be usable without holding the tablet
- xvii. Camera

- 1. Low light?
 - a. 1500 2500 lumens
 - i. How to measure (DO NOT MENTION)

xviii. DDR

- 1. Camera mid to chest level
- 2. About 1.5 to 2.5 meters away

2. Feature Priority

- a. Version 1
 - i. Minimal UI
 - ii. Finger Twister
 - iii. Profile at least showing radial chart
- b. Version 2
 - i. Semi-working AR game
 - ii. Refine stuff from version 1
 - iii. Semi-working adventure story
 - 1. For now, just speech
 - 2. Couple of scenes
 - 3. ~2 different kinds of minigames
- c. Version 3
 - i. Everything completed

3. Ideas

- a. Adventure game as daily play?
- b. Minigames?
- c. Demoed as separate game

4. TO DO

- a. Engine
- b. Thursday meeting online