Minutes, Company 1 **Date: 2022-07-06**

In-person attendees – Craig Scratchley, Mohammad Soltanshah, Anika Sheikh, Adham Sorour, Ramanpreet Kau, Riku Makita, Guest 1, Guest 2

Remote attendees - Dylan Rowsell, Harley McLachlan

Absent: None

Location: Lab 1, 8888 University Drive, SFU

Regret: None

Purpose: Second Progress Review

Minutes:

Meeting started at 3:53PM by Dylan

A. PowerPoint Presentation on Progress of the Project

- Dylan and Harley went over the feedback receive from the first progress meeting
    - Bluetooth chips suggestion made by craig was further researched and was found to be a non-optimal approach for the scope of the project
    - Face ID Recognition was removed from the project requirements as suggested by Craig
        - The product will assume one item is with the user and use that item to distinguish between different users
        - If user does not have any item with them they will not be detected
- Riku goes over the purpose and the target market of the product, E-minder
    - Purpose: Detect and remind users to carry user specified items when exiting their home
    - Target Market: Elder, People with ADHD, and Children/Parents
- Harley shares the progress made by Hardware team
    - Many Hardware components ordered and received
    - Components modelled in 3D
    - Initial item detection tests started with RFID tags
- Raman goes over the challenges faced by the hardware team
    - Problem: The range for RFID tags were not as advertised
        - Resolution: looking to enhance antenna on RFID reader, Battery assisted Passive RFID tags
- Raman shares the next steps for the hardware team regarding RFID tags, product enclosure, and touch application
- The hardware team shares the demonstration video regarding tests done on RFID tags range detection
- Adham goes over the progress made by software team
    - Ordered and Received Raspberry Pi
    - Flutter and Figma tools selected for software development
    - Successfully installed flutter-pi embedder on the raspberry pi

- Anika goes over details on what Figma, and Figma-to-Flutter applications are
- Dylan shares challenges faced by the software team
    - Problem setting up flutter-pi program on Raspberry Pi 3B
        - Resolution: Contacted the maker of the module on Discord and Created an issue on GitHub
- Anika goes over next steps for the software team regarding UI Prototype, and testing of Figma-to-Flutter
- Adham shares next steps for the software team regarding Communication between Raspberry Pi and external devices
- The software team shares the demonstration video regarding the successful installation of flutter0pi embedder on raspberry pi

B. Craig's Question and Concerns

- Craig asked to clarify what the product is for the two guest attendees
    - Adham explains the functionalities of E-minder
- Craig mentions it is important to fix the RFID issue
- Clothes also use RFID Tags, but they are not distinguishable between different clothes. They just detect if the clothes are inside or outside the stores
- Walmart wanted their suppliers to put RFID tags on all their products to distinguish between each
    - Suggests we look into this
- What will the product look like for ENSC440?
    - Installation will be one enclosure
        - Raspberry pi, speaker etc.
    - Potentially we can design a circuit product that will be much smaller
- How much will the product cost at the end of ENSC440?
    - Should be under $200 but we want it under $100
- Suggests we probably don't need HDMI for product in ENSC440
- Do you have to have a screen?
    - This might be a secondary function
- He mentions screen might push up the price
- He mentions we don't need to 3D print an enclosure for the proof of concept

C. Mohammad's Questions and Concerns

- He mentions things need to be more classified
- Priorities need to be taken into account
    - Hardware is significant issue
- Out requirement documentation did not distinguish between alpha and beta phase of the product

D. Guests' Questions and Concerns

- Guest 1 mentions to make sure software and hardware are able to integrate
- Guest 1 suggests narrowing down the scope as to what we want to have finished by the end of ENSC405W

E. Things to do before next meeting in week of August 8th, 2022

- Hardware team: Research more on RFID tags solutions

- Riku, Adham (CCO): Ensure Hardware team's changes are compatible with the chosen software
- Dylan (CEO): Ensure correct priorities are being focused on when developing the proof-of-concept

F. Next Meeting

- Week of August 8Th, 2022; Lab 1, 8888 University Drive, SFU

Meeting is adjourned at 4:33PM by Dylan