COMP 3004 HRV Team Project

Video Demo: https://youtu.be/FG6kd_iKN0Y

Team # 6

Team Members:
Alex de Carle
Kenji Isak Laguan
Mujtaba Mujtaba
Nirmith Victor D'Almeida

Organization of submission

- Before reading/ accessing this project here are some tips to have a better reading experience
- Structure of the project
  a. HRV
    I. images folder which contains all folders which include button/ icon/.overlay
    II. followed by all the code files
  b. Documentation
    I . Use Cases
    II . Textual explanation
    III. UML
    IV. Traceability Matrix
    V . Sequence Diagram
- Thanks for reading the tips

Each Member Contribution:

Alex

- Help Design base UI template (with approval and suggestions from other team members)
- Modified the battery code from the denas prototype to fit in our project.
- Added QTCustomPlot to the project add created the base structure for our implemented graph
- Added the first version of gathering heart rate data, storing heart rate data, and plotting heart rate data in our graph
- Added the functionality for storing, showing, and clearing the session data

Kenji

- Help Design base UI template (with approval and suggestions from other team members)
- Help team members set up git locally on the VM and also on QT to get latest with ease and much convenience
- Added Menu UI using code from denas and modified to fit our requirements.
- Added the functionality of changing the challenge levels and breath interval settings with corresponding UI updates.
- Added the breath pacer animation using a Progress Bar based on the breath interval.
- Added score generation and updates for UI elements(length, coherence score, and achievement score) during a session and LED updates based on coherence score.
- Fixed random bugs found while testing for other components.

Mujtaba

- Help Design base UI template (with approval and suggestions from other team members)
- Helped with Design Decisions and implementations on UI
- Worked on Documentation
    - UML
    - Traceability
    - Sequence Diagram
    - Use Cases

Nirmith

- Create/ Design base UI template (with approval and suggestions from other team members)
- Added and fixed image display on local UI template
- Create and design session view
- Reworked UI session to accommodate graph data
- Modified and reworked graph to simulate incoherent and coherent data
- added attach to skin and interrupt session functionality
- Fixed delays in heart sensor for session data