Electrocardiogram Tasks and Planning document

Version 1.1

# Document Revision History

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| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Change summary** | **Reviewed By** |
| 1.0 | 11/12/2019 | Jamie Bateman | Merge of all personal task lists | Andrew Belcher |
| 1.1 | 11/12/2019 | Andrew  Belcher | Added estimated task completion dates based on everyone’s timescale suggestions. |  |

# Summary

This document denotes the tasks and expected deadlines for the ECG and companion app development. Each task has a dedicated ID, an expected amount of time taken to complete, and an expected date on which the task shall be complete. This document has been used to generate a Microsoft Project Manager project. Each task will have a dedicated member of the team assigned to it as the project progresses. Pre-requisites are also taken note of to get a better understanding of which tasks can be performed in parallel.

# Tasks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Task id** | **Task module** | **Task description** | **Prerequisites** | **Task completion date** | **Days** |
| ECG Onboard Application | | | | | |
| SCN-1 | SCREEN | Text module- create code for writing text to the display | EVQ-1 | 29/1/20 | 1 |
| SCN-2 | SCREEN | Graph module – create code for drawing a graph from a wave buffer to display | SCN-2 | 13/2/20 | 3 |
| SCN-3 | SCREEN | Boot logo – write code to display a boot animation or logo on POST | POST-1 | 14/2/20 | 1 |
| FR-1 | FRAM | FRAM handler – write code to read and write to FRAM | EVQ-1 | 19/2/20 | 1 |
| SRL-1 | SERIAL | Serial connection handler – write code to initialize connection or handshake with pc app. | APP-SERIAL-1 | 5/2/20 | 2 |
| SRL-2 | SERIAL | Serial command handler – write code to send/receive command frames and process them. | SRL-01 | 7/2/20 | 2 |
| SRL-3 | SERIAL | Serial data handler – write code to send/receive data packets | SRL-02 | 13/2/20 | 2 |
| BTN-1 | BUTTON | Button hander | EVQ-1 | 30/1/20 | 2 |
| EVQ-1 | EVENT QUEUE | Event handler |  | 24/1/20 | 2 |
| SLD-1 | SLIDERS | Slider handler | EVQ-1 | 30/1/20 | 2 |
| PRB-1 | PROBES | Connection handler | EVQ-1 | 30/1/20 | 2 |
| PRB-2 | PROBES | ADC handler | PRB-1 | 7/2/20 | 1 |
| HR-1 | HEART RATE | Heart pulse detection | PRB-2 | 7/2/20 | 1 |
| HR-2 | HEART RATE | Heart rate calculation | PRB-2 | 7/2/20 | 1 |
| LED-1 | LED | Led handler | EVQ-1 | 14/2/20 | 1 |
| LED-2 | LED | Error state handler | EVQ-1 | 14/2/20 | 2 |
| LED-3 | LED | Recording state handler | EVQ-1 | 14/2/20 | 2 |
| POST-1 | Post(init) | Hardware check handler | EVQ-1 | 14/2/20 | 1 |
| Desktop Companion Application | | | | | |
| APP-DB-1 | App-DB | Create definition for user data structure |  | 27/2/20 | 1 |
| APP-DB-2 | App-DB | User create and edit helper functions | APP-DB-1 | 28/2/20 | 1 |
| APP-DB-3 | App-DB | Load existing user data into class-based format at startup | APP-DB-2 | 5/3/20 | 2 |
| APP-UI-1 | App-UI | Implement form to create new patient | APP-DB-2 | 4/3/20 | 1 |
| APP-UI-2 | App-UI | Implement form to edit/view existing patient | APP-DB-2 | 4/3/20 | 1 |
| APP-UI-3 | App-UI | Implement full patient view page | APP-DB-3 | 11/3/20 | 2 |
| APP-UI-4 | App-UI | Implement ECG recording form configuration |  | 4/3/20 | 1 |
| APP-UI-5 | App-UI | Implement serial class with ECG recording form button press | APP-UI-4, APP-SERIAL-3 | 25/3/20 | 2 |
| APP-UI-6 | App-UI | Live update graph on recording form as data is received from serial class | APP-UI-5 | 2/4/20 | 4 |
| APP-UI-7 | App-UI | Trigger report save on “save” button press after recording | APP-REPORT-3, APP-REPORT-4 | 28/2/20 | 1 |
| APP-UI-8 | App-UI | Trigger analysis report generation when “generate report” pressed whilst viewing user profile | APP-REPORT-7, APP-UI-2 | 5/4/20 | 1 |
| APP-REPORT-1 | App-REPORT | Define format for individual ECG report |  | 28/2/20 | 2 |
| APP-REPORT-2 | App-REPORT | Pool ECG recording data with database user data into class format | APP-REPORT-1, APP-DB-1 | 5/3/20 | 2 |
| APP-REPORT-3 | App-REPORT | Generate PDF from ecg-recording class | APP-REPORT-2 | 20/3/20 | 4 |
| APP-REPORT-4 | App-REPORT | Generate json format file for individual ECG recording with all datapoints |  | 28/2/20 | 2 |
| APP-REPORT-5 | App-REPORT | Load all ECG JSON recordings for a given user | APP-REPORT-4 | 5/3/20 | 2 |
| APP-REPORT-6 | App-REPORT | Parse ECG JSON to create summary class of graph data for ECG data trend | APP-REPORT-5 | 13/3/20 | 4 |
| APP-REPORT-7 | App-REPORT | Generate PDF format report from ECG trend analysis | APP-REPORT-6 | 25/3/20 | 4 |
| APP-SERIAL-1 | App-SERIAL | Complete handshake with ECG device |  | 18/3/20 | 2 |
| APP-SERIAL-2 | App-SERIAL | Generate and send commands for ECG defined in design document |  | 26/3/20 | 2 |
| APP-SERIAL-3 | App-SERIAL | Receive and store ECG recording data into vector |  | 4/3/20 | 4 |