

**2023-2024**

**Student Name(s) : Koay Xian Cong**

**Project Title : AI in Healthcare**

**Supervisor(s) : Dr Hermawan Nugroho**

**Date of meeting : 11 Oct 2023 Length of meeting : 45 minutes**

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| **Progress made since the last meeting** |
| 1. **The HIRARC form submitted is being approved and reviewed.** 2. **Researched on how to connect the STM32MP156F. Installation of VirtualBox and Ubuntu 22.04.3 LTS on Windows PC since the documentation available from STM is in Ubuntu OS.** 3. **Read papers provided by Dr Hermawan and journals from various publishers online to think about a suitable application for edge computing that I am interested in.**  * **One of the journal papers that sparked my curiosity was utilizing electrocardiogram (ECG) to perform emotion recognition.** * **Focusing readings and findings towards emotion recognition.** * **My idea was to create a wearable that can collect real time data using ECG and perform real time emotion recognition on the edge while collecting the ECG data and sending them to the cloud to perform heart disease analysis/prediction.** * **Target user could be anyone with stroke, high blood pressure, heart disease, anxiety, depression, etc.** * **By combining both emotion recognition and heart disease classification, it can be useful to develop a solution that could monitor physical and mental health, which is beneficial to the healthcare industry.**  1. **Researched on models and dataset available for idea proposed.** 2. **Started drafting project outline and planning report.** 3. **Created a Gantt Chart with markings of important datelines and milestones.** |

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| **Items discussed /planned for the week** |
| **Item Discussed:**   1. **Proposed findings to Dr Hermawan about emotion recognition and heart disease classification on the edge.** 2. **Discussed forms and bookings regarding the project (i.e. lab space booking, ethical approval, etc.)**   **Plan for the week:**   1. **Literature review of recent years journals and research papers from healthcare industry, focus on publisher from IEEE Transaction, Elsevier, IOP.** 2. **Finalize Gantt Chart.** 3. **Continue working on project outline and planning report.** 4. **Try booting STM32MP156F.** 5. **Think of an idea to create a simple demo to present during meeting with moderator.** 6. **Set up meeting with moderator.** |

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| **Remarks (if any)** |
| **Please find other publications /papers from other good journals (I.e, IEEE Transaction, Elsevier or IOP) which discuss emotion detection via ECG signal (not EEG).** |

**Student’s signature:**



**Supervisor’s signature(s):**  **Dr Hermawan** **Date: 13 Oct 2023**