

Summarised Planned State of Project: Literature Review: <ol style="list-style-type: none">1. Research covers emotion recognition and heart disease prediction with ECG.2. Research covers software tools, models, and architecture for edge computing. Setting up Yocto OS and loading the starter pack: <ol style="list-style-type: none">1. Research and learning function of STM32MP157F DK2 libraries and software.2. Installing the starter pack and testing the capability of the edge computer. Setting up and coding ECG sensor: <ol style="list-style-type: none">1. Connecting ECG sensor on edge computer.2. Coding software to send serial data onto the serial plotter.	Actual Progress Since Last Review Literature Review: <ol style="list-style-type: none">1. Research was done according to plan. Specific literature reviews were carried out on review papers on AI models. Setting up Yocto OS and loading the starter pack: <ol style="list-style-type: none">1. Basic features of edge computer are tested and demoed to supervisor and moderator.2. The task was performed according to plan. Setting up and coding ECG sensor: <ol style="list-style-type: none">1. The task was performed according to plan and is up to schedule.2. UART, GPIOs, and 16-bit ADC are configured, and engineering mode is booted.3. Data of ECG can be plotted on a serial monitor with a 115200 baud rate.
Next Steps <ol style="list-style-type: none">1. Based on my Gantt chart planning, I am slightly ahead of my schedule. Hence, an optional task can be performed which is stated in the Gantt Chart – designing wearables for the solution.2. Focusing on STM32 model zoo and journals to develop a TensorFlow Lite model for emotion classification prediction.3. Develop a script to display output. Supervisor Feedback <p>The supervisor advised simplifying the project's overall complexity by converting several tasks into optional "stretch" goals. Emphasis was suggested to be placed on developing the emotion classification model. Furthermore, attention was directed towards exploring the STM32 model zoo and constructing a model based on literature from reputable journals. This feedback prioritises the development of a robust emotion classification model and leveraging existing resources for model creation.</p>	