Summarised Planned State of Project:

Design Solution/Application:

1. Designing wearables that can be integrated with emotion classification and heart disease prediction models. (Optional)

Development of AI Model:

- 1. Setting up an environment to deploy a heart disease detection and prediction model.
- 2. Coding program to develop emotion recognition model.
- 3. Coding program to develop heart disease prediction model.
- 4. Coding program to connect sensor with AI model.

Deployment of Model and Sensor into Edge and Cloud Computer:

1. Deploying emotion recognition model developed onto edge computer.

Actual Progress Since Last Review

Design Solution/Application:

1. The wearables design was done according to plan.

Development of AI Model:

- 1. Environment and libraries for edge computer and AI model have been set up.
- 2. The dataset was downloaded, and a customized dataset was created.
- 3. TensorFlow model was trained.
- 4. TensorFlow Lite model was created and uploaded onto STM32Cube IDE.
- 5. Debug and solve flash memory insufficient issues.
- 6. A program that connects sensors with an AI model has been created.
- 7. The task was performed according to plan.

Deployment of Model and Sensor into Edge and Cloud Computer:

- 1. Debugging deployment of AI models and sensor code.
- 2. The task is still ongoing.

Next Steps

- 1. Start writing the thesis draft.
- 2. Complete the first cycle of obtaining real-time inference using values from sensors.
- 3. Debugging firmware deployment on STM32CubeIDE.

Supervisor Feedback

The supervisor recommended commencing the drafting of the thesis and focusing on completing the initial phase of acquiring real-time emotion classification inference utilizing sensor data.