**Objectives:**

1. Review and refine the literature review.
2. Update the project schedule/timeline as needed.
3. Finalize the project proposal and submit it to your supervisor and faculty.

**Summary of weekly activities**

* Complete the topic proposal
* Make some modifications on topic proposal based on the feedback from supervisor
* Finalize topic as Development of Trash Detection and Monitoring Dashboard for Environment Stewardship
* Find three research papers related to the topic and highlight the techniques, advantages and disadvantages from the research papers

| **Proposed Topic** | Development of Trash Detection and Monitoring Dashboard for Environmental Stewardship |
| --- | --- |
| **Goal** | To develop an AI-based trash detection and monitoring dashboard that capable to distinguish metal, plastic, and glass type of waste |
| **Objectives** | Data Collection   * Utilize an open-source dataset to train the initial model for trash detection and classification * Prepare and collect a custom dataset to further enhance model accuracy   Model Development   * Train the model using the initial dataset, followed by fine-tuning with custom dataset to improve the performance * Validate the model’s performance using another collected custom dataset   Deployment   * Develop a webpage to show the result including the number of detected trash items per category |
| **Scope** | * Customize the trash classification to three categories which are metal, plastic and glass * Selection and customization of YOLO for object detection and trash classification * Prepare a custom collected dataset, followed by annotating for further training * Design and build a webpage to display the |

**Summary of weekly activities**