CPT6314 Final Year Project (FYP) 1 Meeting Log
Trimester OCT / NOV 2024 (Trimester ID:2430)

Meeting Date: 13.12.2024	Meeting No.: 3
Meeting Mode: Face-to-Face	
Project ID: FYP01-DS-T2430-0144	**Project Type:** Research-based
Project Title : Plant Disease Detection using Deep Learning	
Student ID : 1211104786	**Student Name:** Nicholas Tan Zhi Xuan
Student Programme and Specialisation: Computer Science with Specialization in Data Science	
Supervisor Name: Dr. Pee Chih Yang	**Co-Supervisor Name: (if applicable)** Dr. Wong Lai Kuan
Collaborating Company: (if applicable)	**Company Supervisor Name: (if applicable)**

1. WORK DONE
[Please write the details of the work done, after the last meeting]

Tasks:
Learning and Based Research /
~~Problem Formulation and Project Planning /~~
~~Background Study or Literature Review /~~
~~Requirement Analysis or Theoretical Framework /~~
~~Design or Research Methodology /~~
~~Prototype Development or Proof of Concept /~~
~~Draft Report Completion~~

(Please strike out the tasks, which are not applicable)

Details (in point form):

1. Explored YOLO v8 object detection model using 7.5k images of dataset
   - Taking the 21k dataset each disease 1.5k images to create a 7.5k images of dataset for Roboflow
   - Used Roblow to create annotated cassava leaf images and data-preprocessing for YOLO detection model training and validation

2. Project timeline planning

2. WORK TO BE DONE
[Please write the details of the work to be done, before the next meeting]

Tasks:
Learning and Based Research /
~~Problem Formulation and Project Planning /~~
~~Background Study or Literature Review /~~
~~Requirement Analysis or Theoretical Framework /~~
~~Design or Research Methodology /~~
~~Prototype Development or Proof of Concept/ Draft Report Completion~~

(Please strike out the tasks, which are not applicable)

Details (in point form):

- Try exploring U-Net for image segmentations
- Try exploring EfficientNet for disease classifications

3. PROBLEMS ENCOUNTERED AND SOLUTIONS

[Please write the details of the problems encountered, after the last meeting and provide the solutions / plan for the solutions]

Problem:

- The precision result of the object detection seems accurate but still needs improvement

Solution:

- Try not to use Roboflow's annotated images to train the model
- Find another ways to get the attention of detection model and classification model for analyzing the images.

4. COMMENTS (Supervisor / Co-Supervisor / Company Supervisor)

OK

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…………………………… ……………………………...
Supervisor's Signature Student's Signature

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Co-Supervisor's Signature Company Supervisor's Signature
(if applicable) **(if applicable)**

IMPORTANT NOTES TO STUDENTS:

1. Items 1 – 3 are to be completed by the students prior to the meeting. Item 4 is to be completed by the supervisor / co-supervisor / company supervisor.

2. Student has to upload the soft copies of the meeting logs in eBwise and also attach them along with interim (FYP1) report.
   Minimum requirement is SIX Meeting Logs (Period: Week 3 to Week 12). Students can have fortnightly meetings with the supervisor.

3. Log sheets provide the basis for evaluating the General Effort (Project Management, Attitude, and Technical Competency) of the student, by the supervisor and also for checking the attendance requirement of the student, by the FYP Committee.

   This also provide the student with feedback from the supervisor / co-supervisor / company supervisor on the tasks done and provide the plan for the upcoming tasks. This can provide the motivation for the student to give consistent and efficient effort throughout the period of FYP.

4. Student who fails to meet the minimum requirement (six nos.) of log sheets will not be allowed to submit FYP report.