Makerere Passionfruit Disease Classification and Detection using Deep Learning based Generative Adversarial Networks (GANs)

EGH400-1 Assessment 1
Project Proposal: Scope of Work

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Version	Date	Author	Changes/Comments
1.0	March 13, 2025	Oliver Strong	

Contents

1   General Objective

[One paragraph describing the overall project objective and research questions].

This project seeks to create a state-of-the-art model for the detection, classification, and segmentation of disease on Makerere Passionfruit.

2   Key Finding from the Literature

[Here you should succinctly state a key takeaway / most relevant learning from your review of literature (which will be included as an appendix)].

3   Stakeholders & Resources

[Describe the end users, team members or other people who must be consulted or informed about project progress or outcomes. Identify resources that will be used to complete the project]

4   Project Methodology

[Describe what methodology and methods you will use to conduct your capstone research project. When considering your approach to project methodology, you may wish to revisit your learning from EGH404 Research in Engineering Practice. Consider what data, information, or measurements you may collect and how you will analyse and synthesise that into a final outcome.]

5   Deliverables

[Identify what will be produced by the end of your project which may include constructed systems, reports, drawings, designs, reviews, reports, presentations etc. Note that you should include interim deliverables including status reports to your supervisor, clients, industry partners or stakeholders as required]

6   Risks, Requirements & Constraints

[Identify any existing systems that must be interfaced with. Are there any regulatory constraints? What safety and ethical concerns will have to be considered? Are there limits to the scope of your project because of dependencies?] [Identify any risks including the likelihood and consequence and specify how you will mitigate or monitor that risk]

7   Quality & Sustainability

[How will you measure the quality of your outcome or deliverables? How will you test the validity of your solution? What is the scope of sustainability that you will consider, i.e. are you only interested in the short term impact or will you have to consider life cycle analysis?]

8   Timeline & Deliverables

[Outline the broad phases of your project (milestones) and the deliverables that will be achieved at each stage (This plan should extend across both EGH400-1 and EGH400-2)]. Include designs, reports, physical systems, etc. The following table contains some examples of what might appear in this table.

9   Management of Project Changes

[Outline how you will manage any stakeholder, partner, or supervisor requests for change. Note if there are changes as the project progresses, then you should update this scope and update the version outlining the nature of the change]