

Sri Lanka Institute of Information Technology



Research Project IT4010

**B.Sc. (Hons) in Information
Technology**

Status Document 2

Group ID: 2023-24-074

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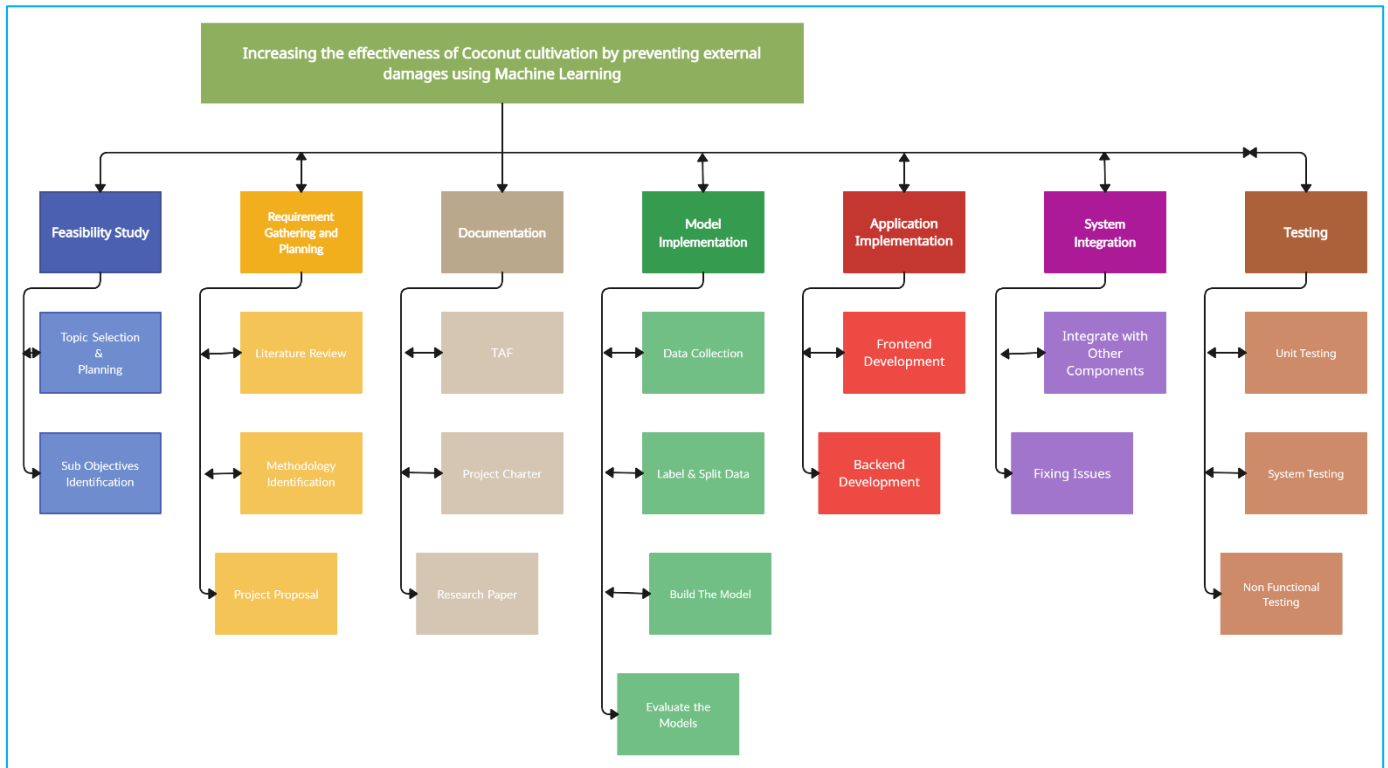
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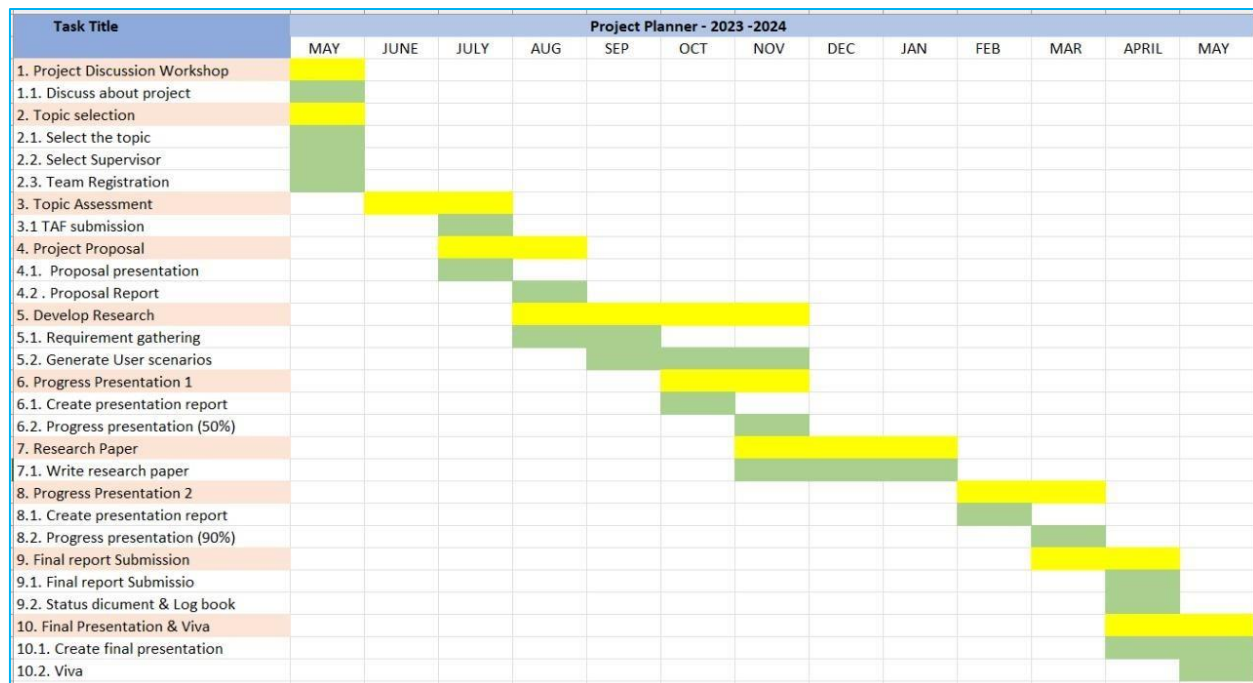
WORK BREAKDOWN STRUCTURE

The work breakdown structure entails breaking down a project or task into smaller, more manageable parts in a hierarchical manner. The work breakdown structure plan for the research project's timeline is presented below.



GANTT CHART

A Gantt chart is a popular project management tool used to visualize the schedule and progress of tasks or activities over time. The Gantt chart which we designed to plan our progress is as shown in the following diagram.



PROGRESS AND PLANNER

Tracking the Completed Tasks

Task tracking is an efficient way to manage a project. For tracking purposes each component maintains a personal task tracking excel sheet.

Reseach Tracker			
Main tasks	Sub Tasks	STATUS	Completed DATE
Data Collection	Find a source to Collect the data	☑ Complete	
	Collect the Coconut caterpillar images	☑ Complete	
	Collect the Whitefly images	☑ Complete	
	Devide and Prepare the dataset	☑ Complete	
	Upload the dataset in to cloud	☑ Complete	8/31/2023
Model Implementation	Preprocess the data	☑ Complete	
	Find the way to balance the imbalance dataset	☑ Complete	
	Create the CNN model	☑ Complete	
	Test and Evaluate the Model	☑ Complete	15/10/23
Mobile Application FrontEnd Development			
	UI Design	☑ Complete	
	Logo Design	☑ Complete	
	FrontEnd development through AS	☑ Complete	
Mobile Application BackEnd Development			
	Connect with firebase	☑ Complete	
	Develop Backend	☑ Complete	
	Connect with frontend	⚠ Not started	
CNN Pretrained Models Comparison	Combine Each Component	⚠ Not started	
	ResNet50, VGG16	☑ Complete	
	MobileNet, InceptionV3	☑ Complete	
	Densenet	☑ Complete	
	Evaluation	☑ Complete	
Research On Latest Pest solutions	Comparison	☑ Complete	
	Find Latest Products for Caterpillar infections	☑ Complete	
	Find Latest Products for Whitefly infections	☑ Complete	
	Fine people related to them	☑ Complete	

*Status – Completed/ In Progress / On Hold/ Not Started

MEETINGS

MEETINGS WITH THE SUPERVISOR (MR. Vishan Jayasinghaarachchi)

As a team, it is necessary to obtain proper guidance from the supervisor to complete the project successfully. Supervisor guidance is crucial for a research project as it provides valuable expertise, support, and mentorship throughout the research process. The following are the details of the meetings that were conducted with the supervisor.

Date	Reason	Mode
11/07/2023	Discuss about the topic selection	Physical
19/07/2023	Finalize the topic	Physical
22/07/2023	Discuss about Proposal presentation	Teams
11/08/2023	Discuss about proposal issues	Hybrid
18/08/2023	Finalize the Components	Hybrid
25/08/2023	Discuss about TAF	Hybrid
01/09/2023	Initial awareness for progress presentation 1	Teams
06/10/2023	Prep for Progress Presentation	Physical
31/10/2023	Final Prep for Progress Presentation	Physical
10/11/2023	Discuss about the PP1 Comments	Hybrid
01/12/2023	Discuss component progress & related issues	Hybrid
15/12/2023	Initial awareness for research paper publication	Hybrid
22/12/2023	Discuss progress of the research paper & components	Hybrid
19/01/2024	Discuss progress of the research paper & components	Teams
26/01/2024	Discuss progress of the research paper & components	Teams
16/02/2024	Discuss progress of the research paper & components	Teams
16/03/2024	Final Prep for Progress Presentation 2	Physical

*HYBRID – Some members physically & others online

MEETINGS WITH THE CO-SUPERVISOR (MR. Samadhi Rathnayake)

Date	Reason	Mode
11/07/2023	Discuss about the topic selection	Physical
19/07/2023	Finalize the topic	Physical
06/10/2023	Discuss component progress & related issues	Teams
27/10/2023	Discuss about Progress presentation	Teams

Challenger & Solutions

Challenge	Solution
Imbalanced Datasets	Focal loss
Imbalanced Datasets	Manual balancing (adding another class)
Overfitting	Change the optimizer (SGD)

Version Control

- GitHub

it20600334

Pest-Classification

Public

Pin

Unwatch 1

Fork 0

Star 0

main 1 Branch 0 Tags

Go to file

Add file

Code

About

it20600334 c5 c0d4e90 · 2 days ago 8 Commits

.vscode	c 2	last week
static	c3	last week
templates	c3	last week
MobileNetV2OP.h5	c 2	last week
README.md	Initial commit	last week
app.py	c5	2 days ago
requirements.txt	r	2 days ago

README

Pest-Classification

No description, website, or topics provided.

Readme

Activity

0 stars

1 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Languages

HTML 51.0%

Python 28.5%

CSS 20.5%

it20600334 / Pest-Classification

Search

Code Issues Pull requests Actions Projects Security Insights Settings

Pulse

Contributors

Community

Community Standards

Traffic

Commits

Code frequency

Dependency graph


Network

Forks

Mar 10, 2024 – Mar 18, 2024

Contributions: Commits

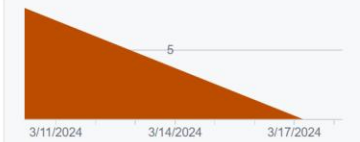
Contributions to main, excluding merge commits



it20600334

8 commits 429 ++ 156 --

#1



<https://github.com/it20600334/Pest-Classification/commits>