# Sri Lanka Institute of Information Technology



Research Project
IT4010

B.Sc. (Hons) in Information
Technology

Status Document

Group ID: 2023-24-074

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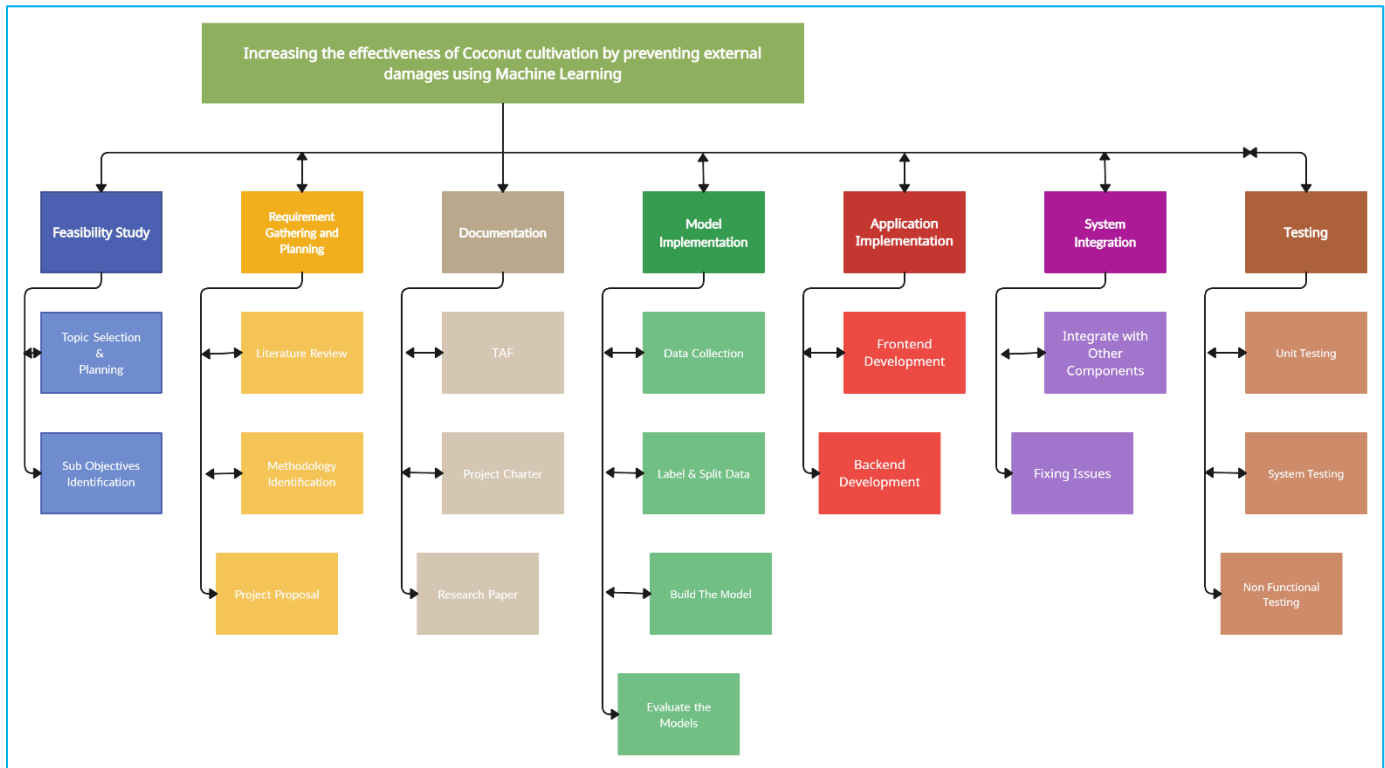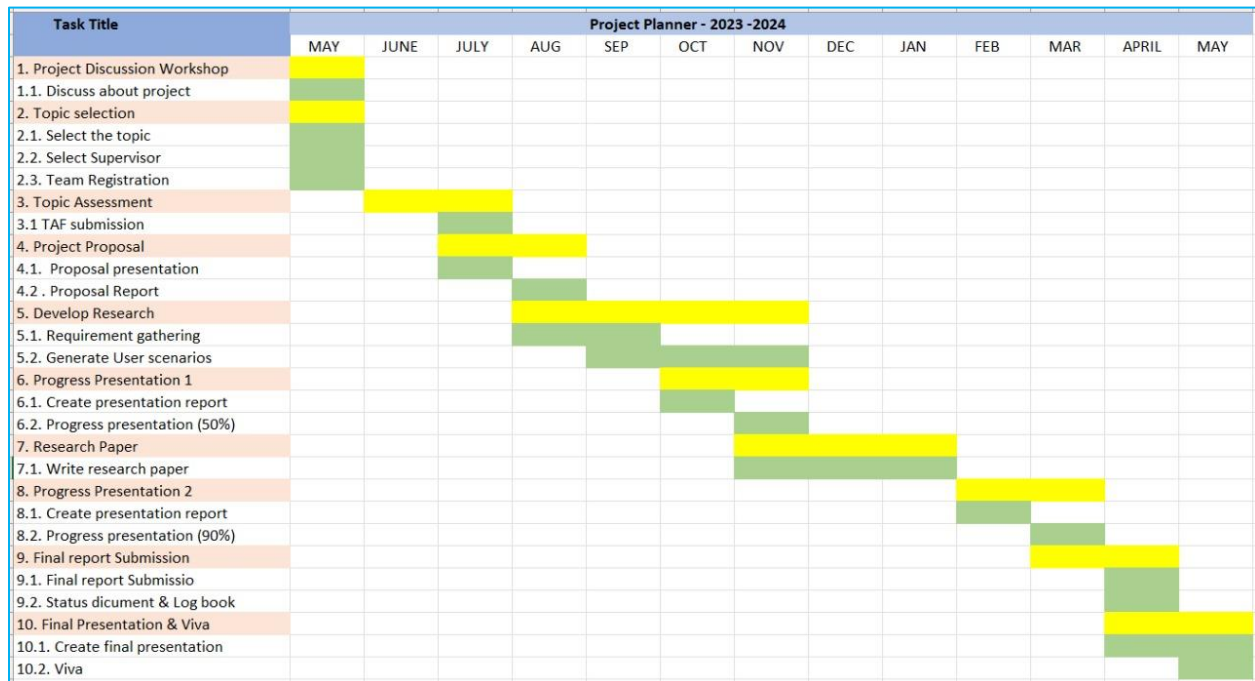Specialization: Data Science

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# 1. 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.

## 2. 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.

| Task Title | Project Planner - 2023 -2024 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAY | JUNE | JULY | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APRIL | MAY |
| 1. Project Discussion Workshop | ▓ | | | | | | | | | | | | |
| 1.1. Discuss about project | ▒ | | | | | | | | | | | | |
| 2. Topic selection | ▓ | | | | | | | | | | | | |
| 2.1. Select the topic | ▒ | | | | | | | | | | | | |
| 2.2. Select Supervisor | ▒ | | | | | | | | | | | | |
| 2.3. Team Registration | ▒ | | | | | | | | | | | | |
| 3. Topic Assessment | | ▓ | ▓ | | | | | | | | | | |
| 3.1 TAF submission | | | ▒ | | | | | | | | | | |
| 4. Project Proposal | | | ▓ | ▓ | | | | | | | | | |
| 4.1.  Proposal presentation | | | ▒ | | | | | | | | | | |
| 4.2 . Proposal Report | | | | ▒ | | | | | | | | | |
| 5. Develop Research | | | | ▓ | ▓ | ▓ | ▓ | | | | | | |
| 5.1. Requirement gathering | | | | ▒ | ▒ | | | | | | | | |
| 5.2. Generate User scenarios | | | | | ▒ | ▒ | ▒ | | | | | | |
| 6. Progress Presentation 1 | | | | | | ▓ | ▓ | | | | | | |
| 6.1. Create presentation report | | | | | | ▒ | | | | | | | |
| 6.2. Progress presentation (50%) | | | | | | | | | | | | | |
| 7. Research Paper | | | | | | | ▓ | ▓ | ▓ | ▓ | | | |
| 7.1. Write research paper | | | | | | | ▒ | ▒ | | | | | |
| 8. Progress Presentation 2 | | | | | | | | | | ▓ | ▓ | | |
| 8.1. Create presentation report | | | | | | | | | | | ▒ | | |
| 8.2. Progress presentation (90%) | | | | | | | | | | | | | |
| 9. Final report Submission | | | | | | | | | | | ▓ | ▓ | |
| 9.1. Final report Submissio | | | | | | | | | | | | ▒ | |
| 9.2. Status dicument & Log book | | | | | | | | | | | | | |
| 10. Final Presentation & Viva | | | | | | | | | | | | ▓ | ▓ |
| 10.1. Create final presentation | | | | | | | | | | | | ▒ | |
| 10.2. Viva | | | | | | | | | | | | | |

# 3. PROGRESS AND PLANNER

## Tracking the Completed Tasks

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

### Research Tracker

| Main tasks | Sub tasks | Status | Completed date |
|---|---|---|---|
| Data Collection & Summarizing | Merge all the collected data by other two components | ☑ Complete | |
| | Filtering all the triggered data identified as a monkey. | ☑ Complete | 31/08/2023 |
| | Allocate the data according to mic locations | ☑ Complete | |
| Prediction Model Implementation | Preprocess the data | ☑ Complete | |
| | Figure out features related to prediction | ✕ On hold | |
| | Implement the CNN model | ☑ Complete | 16/10/2023 |
| | Test and evaluate the model | ☑ Complete | |
| | Find the way to enhance the model accuracy | ✕ On hold | |
| Mobile Application Design | UI design | ☑ Complete | |
| | Logo design | ☑ Complete | 8/11/2023 |
| Mobile Application Development | Develop the frontend | ☑ Complete | |
| | Develop the backend | ✕ On hold | |
| | Connect the database | ⚠ Not started | |
| | Connect frontend and backend | ✕ On hold | |
| | Combine each component | ⚠ Not started | |
| Monkey's Visitation Patterns Visualization | Point out the identified mics locations | ☑ Complete | |
| | Find the accurated mic range | ☑ Complete | |
| | Visualize all the triggering data related to the mic locations | ☑ Complete | |
| | Visualize data regarding farmer's opinion | ☑ Complete | |
| Identified Monkey's Behavir Patterns | Summarize the visualized data | ✕ On hold | |
| | Find the patterns according to their visitations | ⚠ Not started | |

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

# 4. MEETINGS

## MEETINGS WITH THE SUPERVISOR (MR. Vishan Jayasinghearachchi)

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 |

*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 |