



IT4010 – Research Project Year 4

Status Document 1

Submitted to

Sri Lanka Institute of Information Technology

Enhancing Personalized E-Learning: A Novel Approach to Adaptive Learning Pathways for Individualized Knowledge Acquisition

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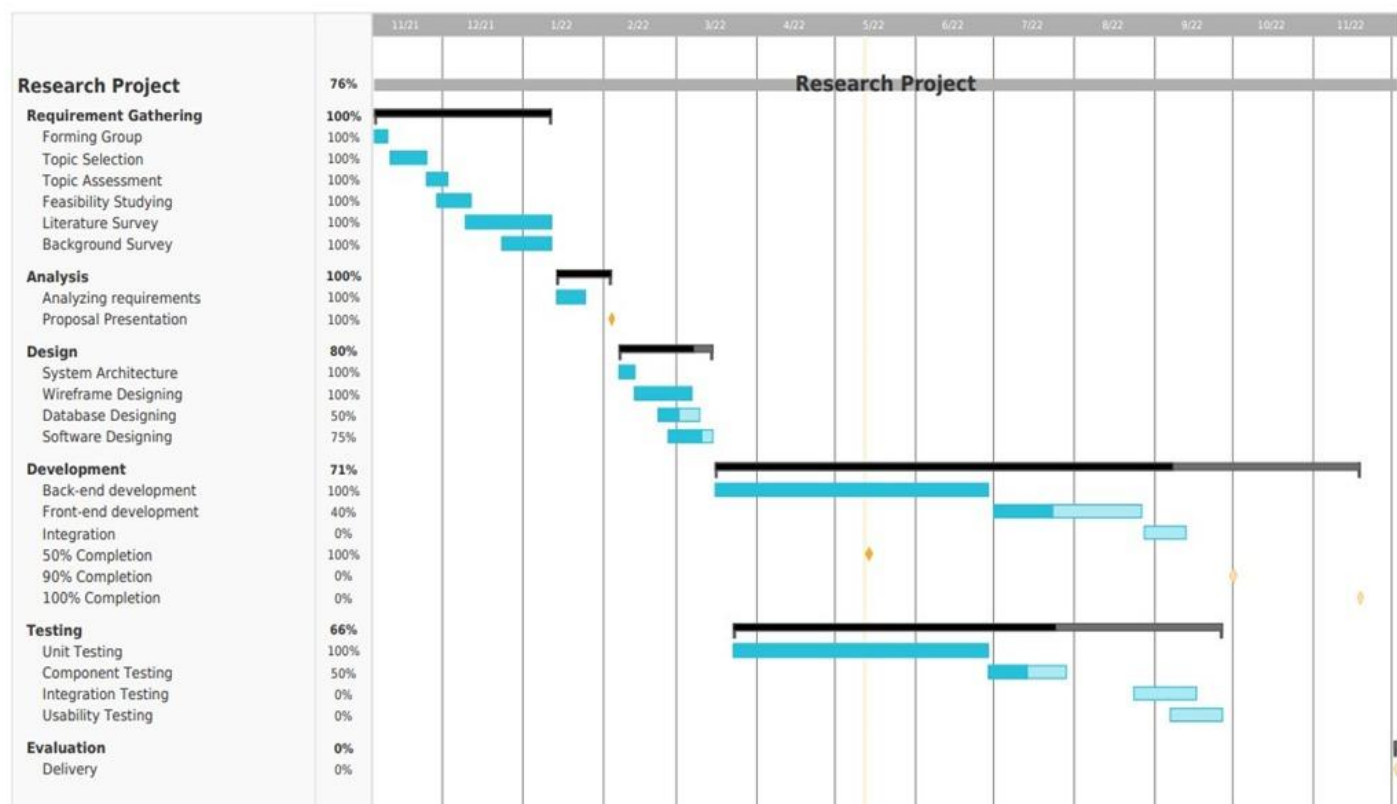
In partial fulfilment of the requirements for the
Bachelor of Science Special Honors Degree in Information Technology

Date: May 05th, 2024

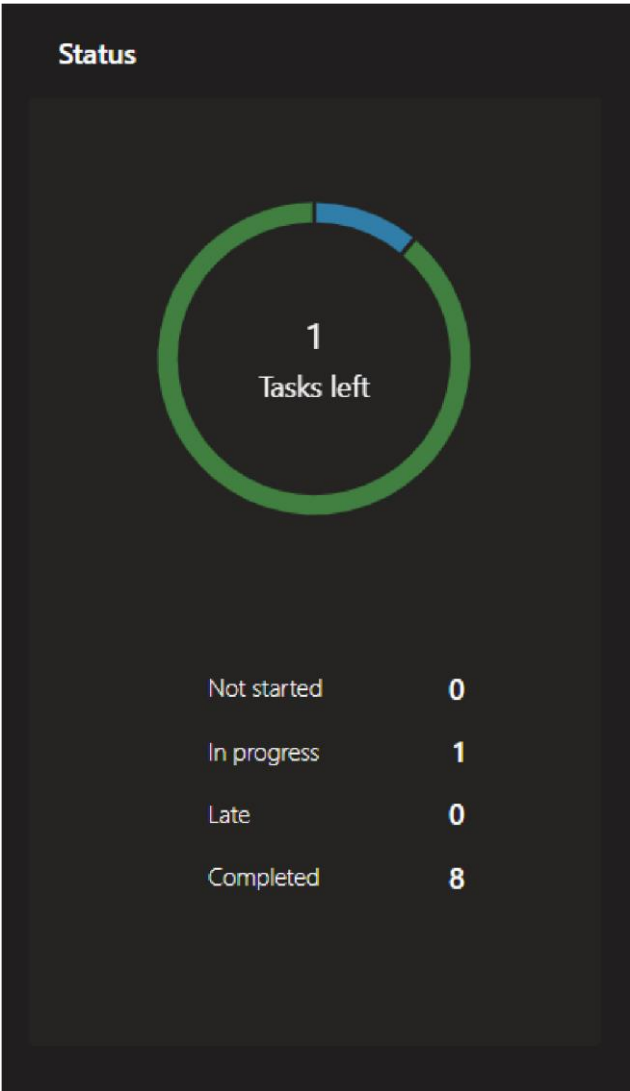
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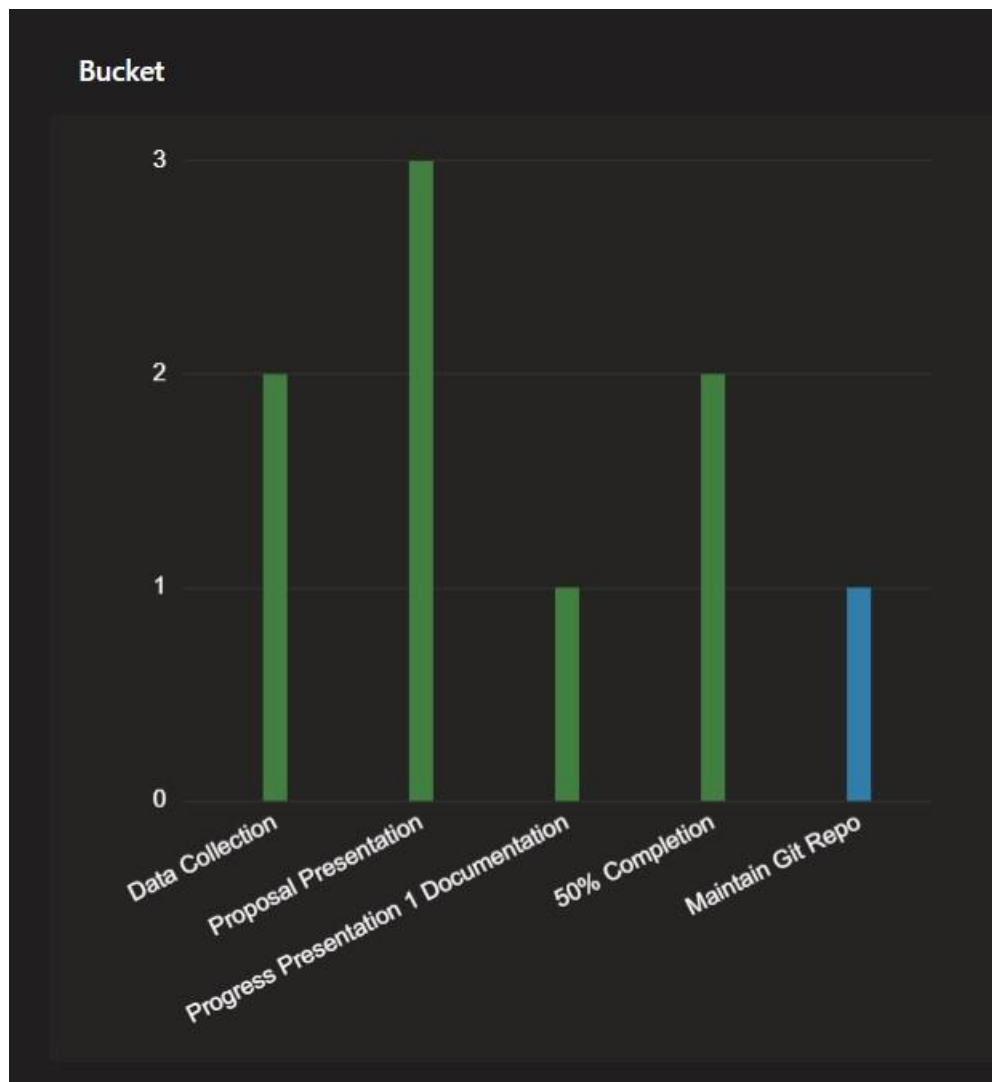
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Gantt Chart

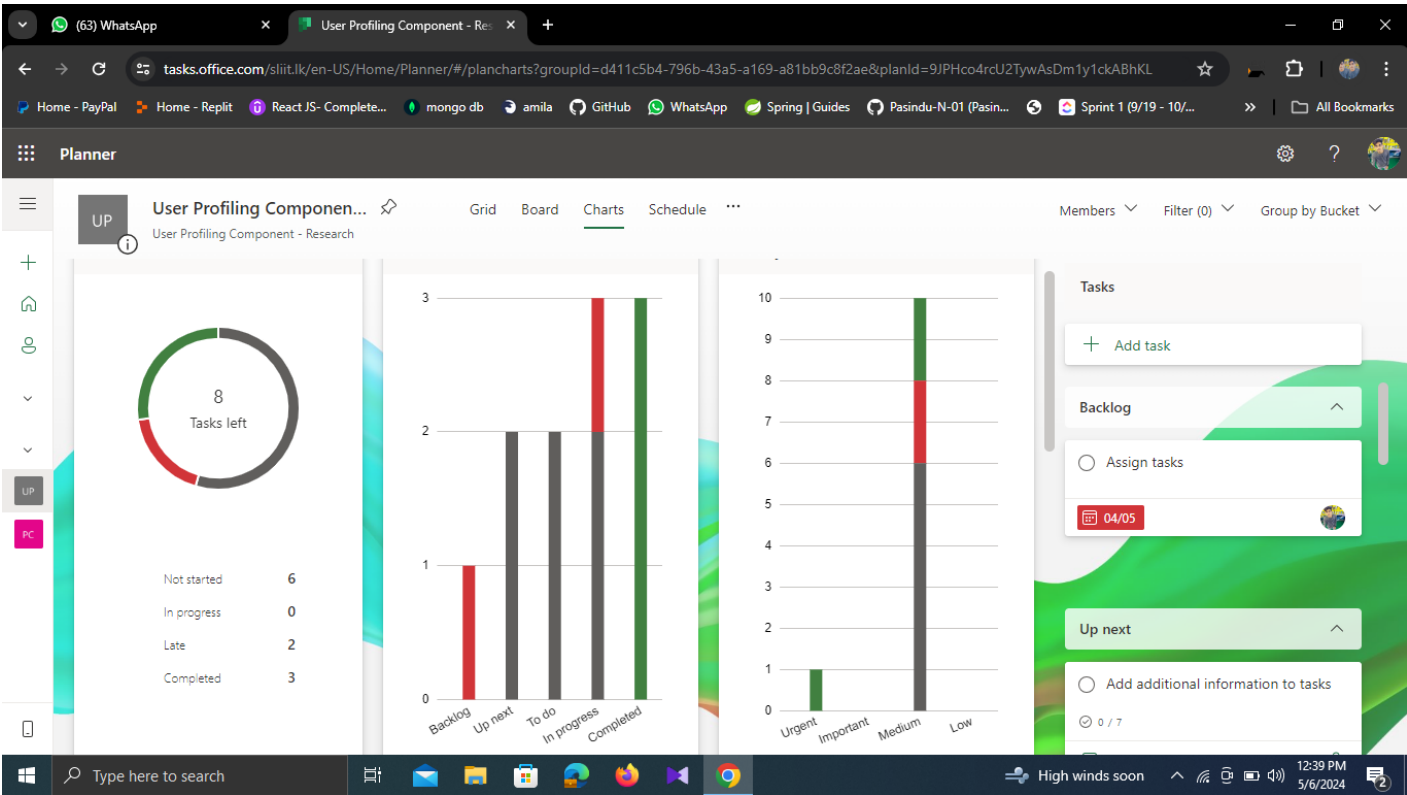


Project View of MS Planner

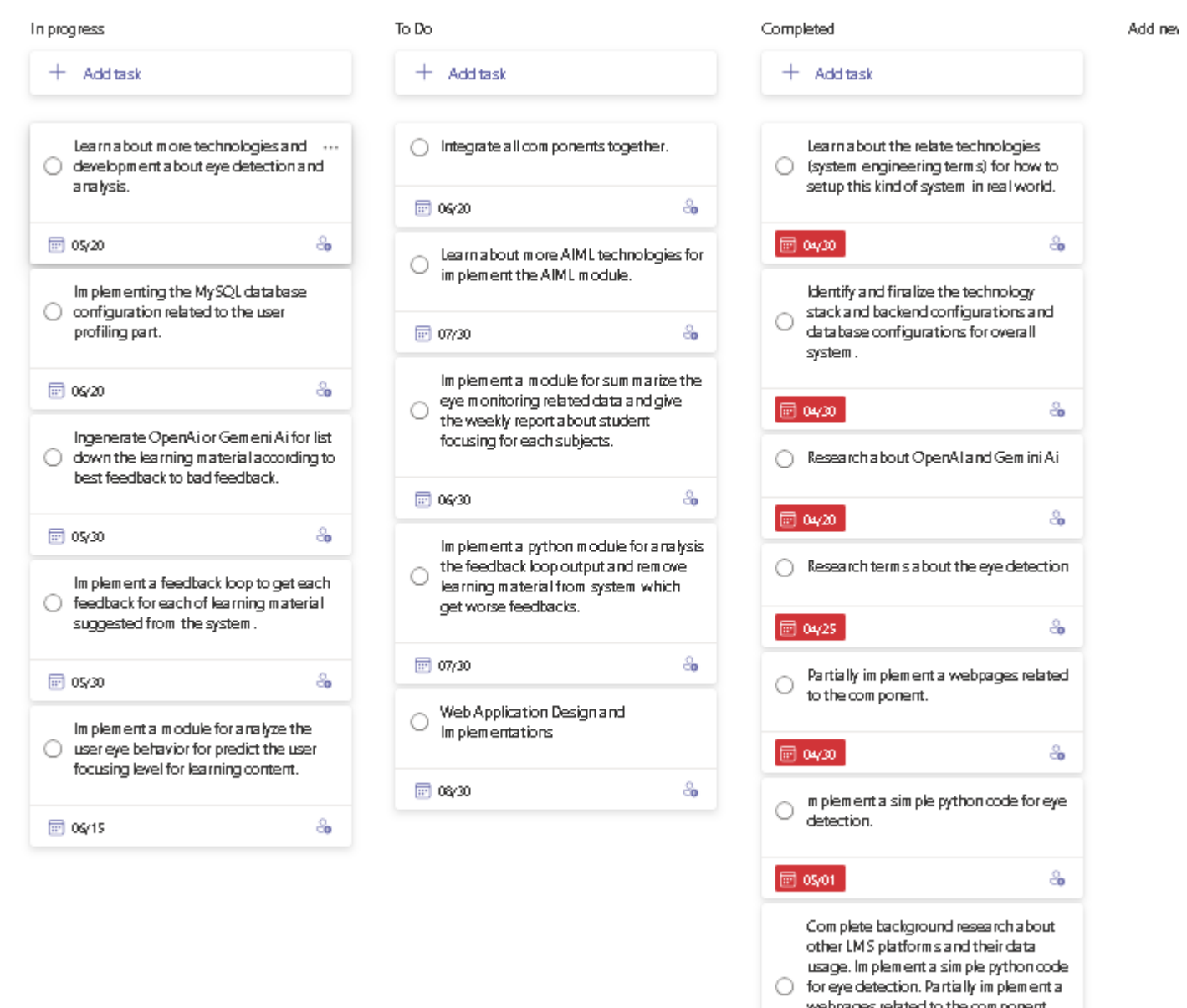




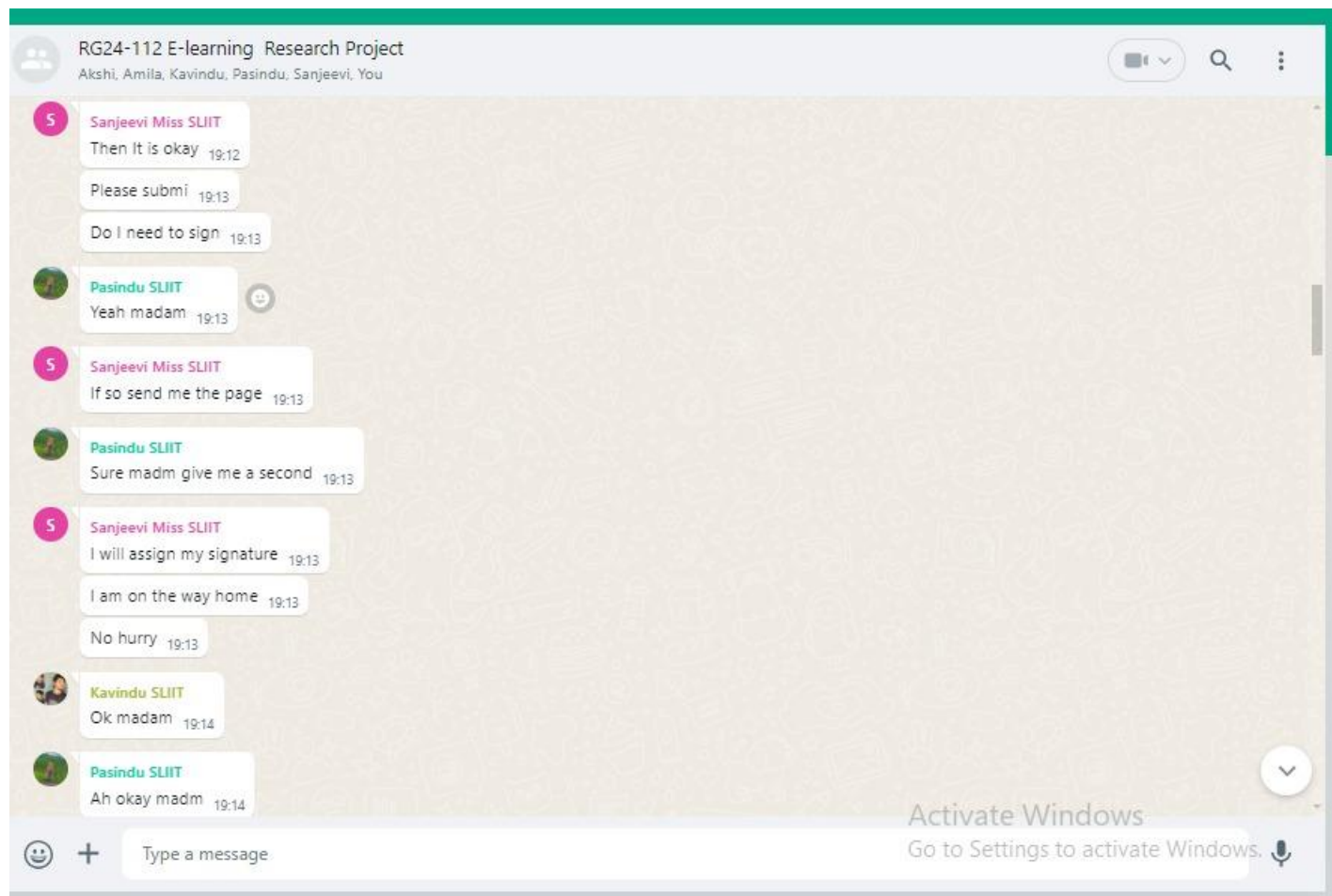
Task View Of the MS Planner

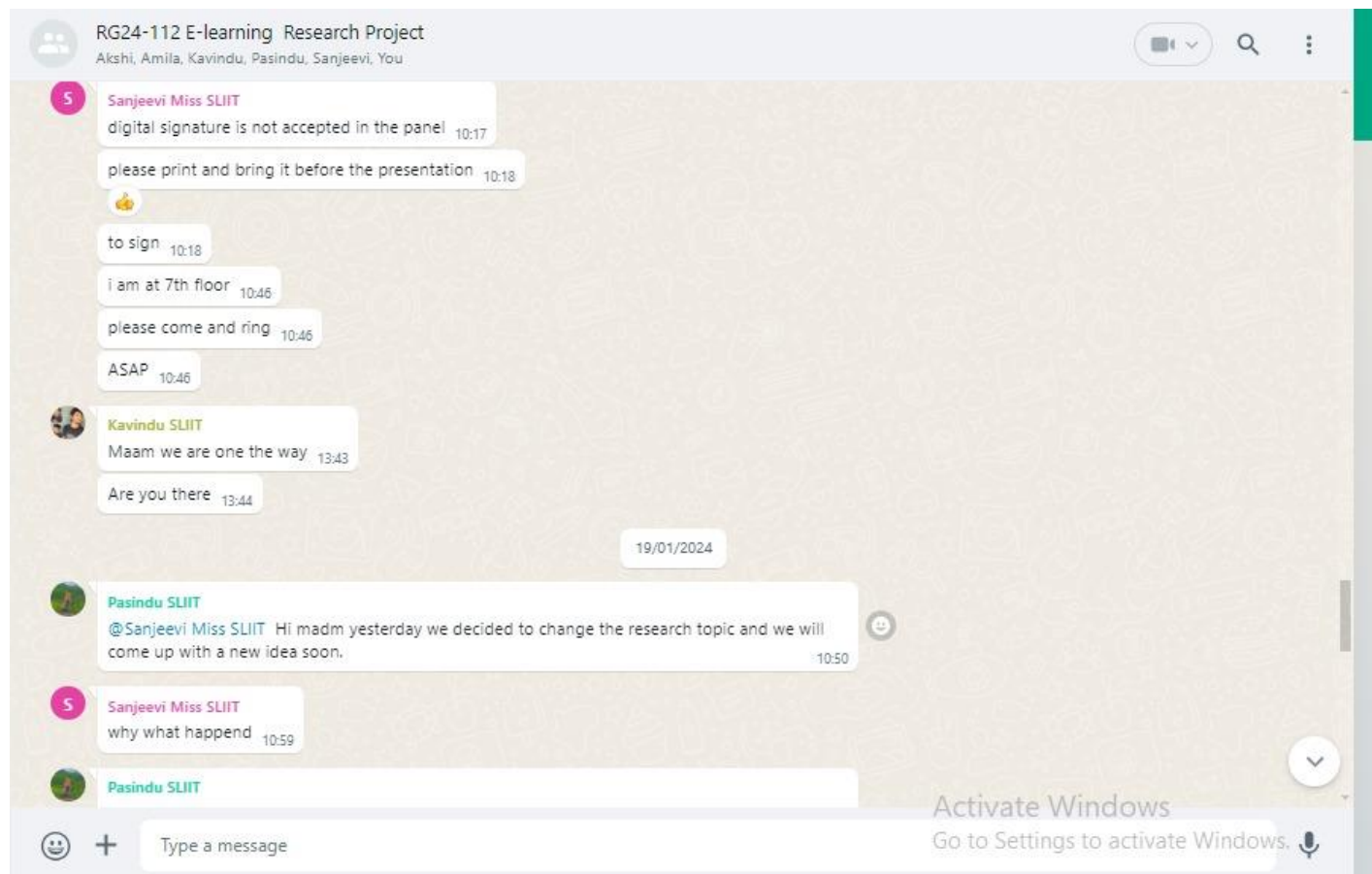


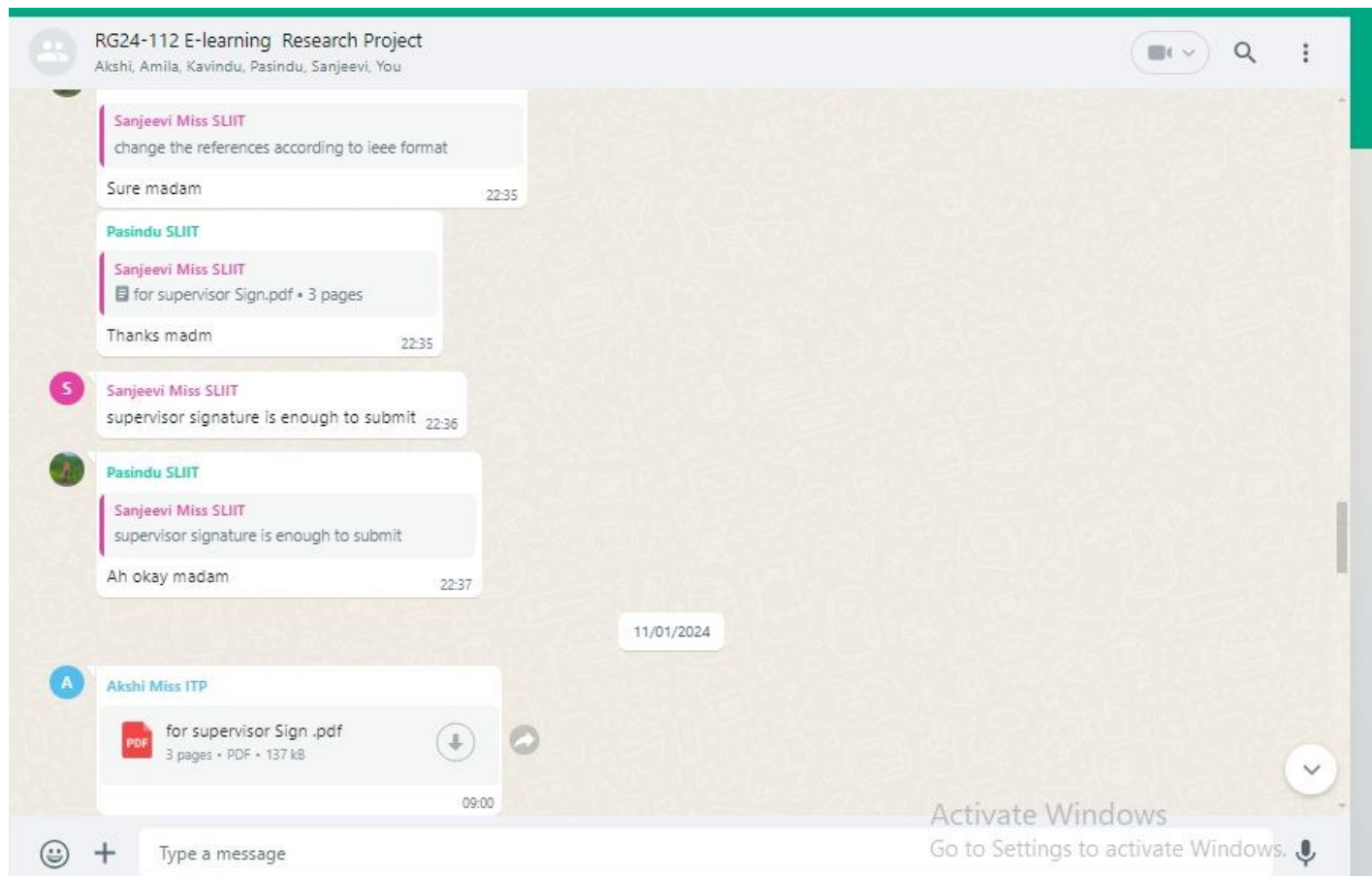
Work Breakdown Structure of MS Planner



Proof of Virtual and Physical Meetings







RG24-112 E-learning Research Project
Akshi, Amila, Kavindu, Pasindu, Sanjeevi, You

TAF Document RG24-112.pdf • 15 pages

This is our TAF document PDF 19:31

Sanjeevi Miss SLIIT
When is the deadline 22:16

Midnight, 22:16

Pasindu SLIIT
Before 11th January 22:18

Deadline should be tomorrow midnight 22:18

Pasindu SLIIT
Pasindu SLIIT
Madam there is a CW notice that saying today is the last day. We shoul submit the document before 11th January..
This notice said like that. But not clearly mentioned. 22:19

Sanjeevi Miss SLIIT
change the references according to ieee format 22:35

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for supervisor Sign.pdf
3 pages • PDF • 150 kB 22:35

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Research Meeting

01:00:28

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Nishshanka N. ...

Jayasinghe K.A. ...

Nishshanka N. ...

Sanji Chan...

Participants

Type a name

In this meeting (5)

Mute all

Abeykoon R.M.S.P it21021602

Jayasinghe K.A.K.N it21032806

Organizer

Nishshanka N. A. G. A. A it21032...

Nishshanka N. A. P. K. R. it21033...

Sanji Chandrasiri (Guest)

Meeting guest

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OVERALL RESEARCH PROBLEM

- **Lack of Personalization:** E-learning platforms struggle to tailor personalized learning experiences to individual preferences and learning styles.
- **Generic Approaches:** Current systems use content delivery methods that don't maximize user engagement or knowledge retention.
- **Limited Adaptability:** Most platforms can't dynamically adjust to diverse learner needs, creating difficulties in accessing relevant materials.
- **Gap in Literature:** There's a lack of research on developing adaptive machine learning models for customizing learning pathways in online education.

Nishshanka N. A. P. K. R. it21033032

08:45

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PowerPoint Slide Show - [unichiru PP1 (1)] - PowerPoint

OVERALL SYSTEM DIAGRAM

The diagram illustrates the system architecture. On the left, **Students** and **IT Management Users** interact with the **Frontend Web App**. The frontend includes icons for code editors, a database, and PHP, and is styled with **Tailwind CSS**. The frontend connects via an **API** to the **AWS Cloud Hosted Backend**. The backend consists of **Python Flask**, **python scripts**, and **AI/ML** components. These components are connected to a central server icon, which in turn connects to two databases: **Main System DB** and **Learning Resources DB**.

Nishshanka N. A. P. K. R. it2...

Jayasinghe K.A.K.N it21032...

Nishshanka N. A. G. A. A it2...

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