



**EMOTION RECOGNITION AND SENTIMENT ANALYSIS FOR
RELATIONSHIP IMPROVEMENT.**

TMP-2023-24-133

Status Document - 2

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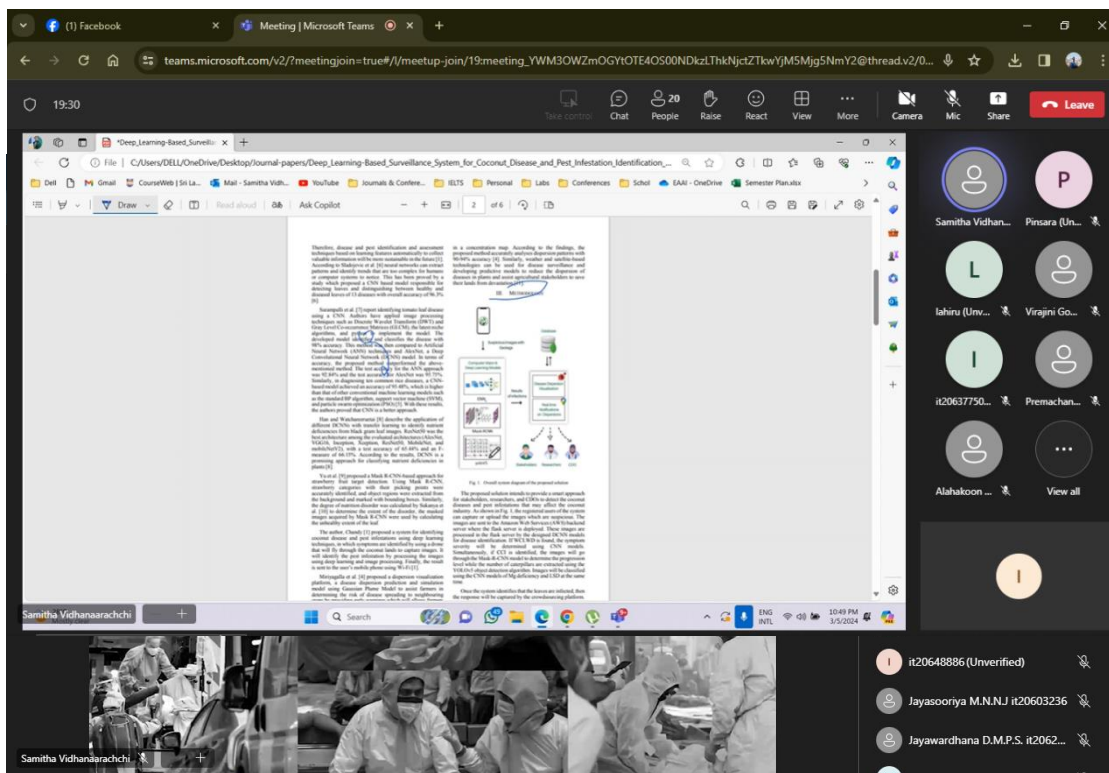
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Sri Lanka Institute of Information Technology Sri Lanka

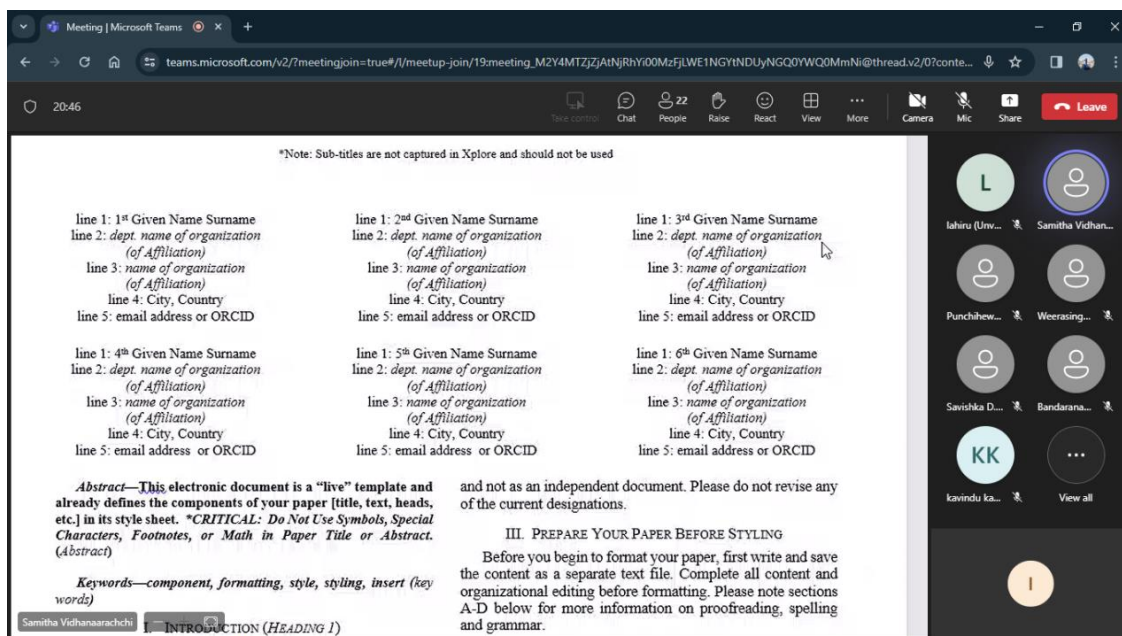
Table of Contents

01. Screenshots of the chats and calls in MS Teams	2
02. Work breakdown structure & allocates resources for each area.	5
03. Updated Gantt chart of finalize Design & implementation phases	9
04. Teams Planner Charts.	10
05. Test Results.	12

01.Screenshots of the chats and calls in MS Teams



The screenshot shows a Microsoft Teams meeting interface. The main window displays a presentation slide titled "Deep Learning-Based Surveillance System for Coconut Disease and Pest Infestation Identification...". The slide contains text about disease identification and a diagram of a deep learning architecture. The right sidebar shows a list of participants, including Samitha Vidhanaarachchi, Pansara (Unv...), Iahuru (Unv...), Virajini Go..., i20637750..., Premachan..., Alahakoon..., and View all. At the bottom, there is a video feed showing several people in white protective suits, likely in a laboratory or clinical setting.



The screenshot shows a Microsoft Teams meeting interface. The main window displays a presentation slide with a form for capturing metadata. The form includes fields for line 1: 1st Given Name Surname, line 2: dept. name of organization (of Affiliation), line 3: name of organization (of Affiliation), line 4: City, Country, and line 5: email address or ORCID. Below the form, there is an abstract and a section titled "III. PREPARE YOUR PAPER BEFORE STYLING". The right sidebar shows a list of participants, including Iahuru (Unv...), Samitha Vidhanaarachchi, Punchihew..., Weerasing..., Savithka D..., Bandarana..., KK, kavindu ka..., and View all. At the bottom, there is a video feed showing several people in white protective suits, likely in a laboratory or clinical setting.

Figure 1.1: Meeting with Co – Supervisor.

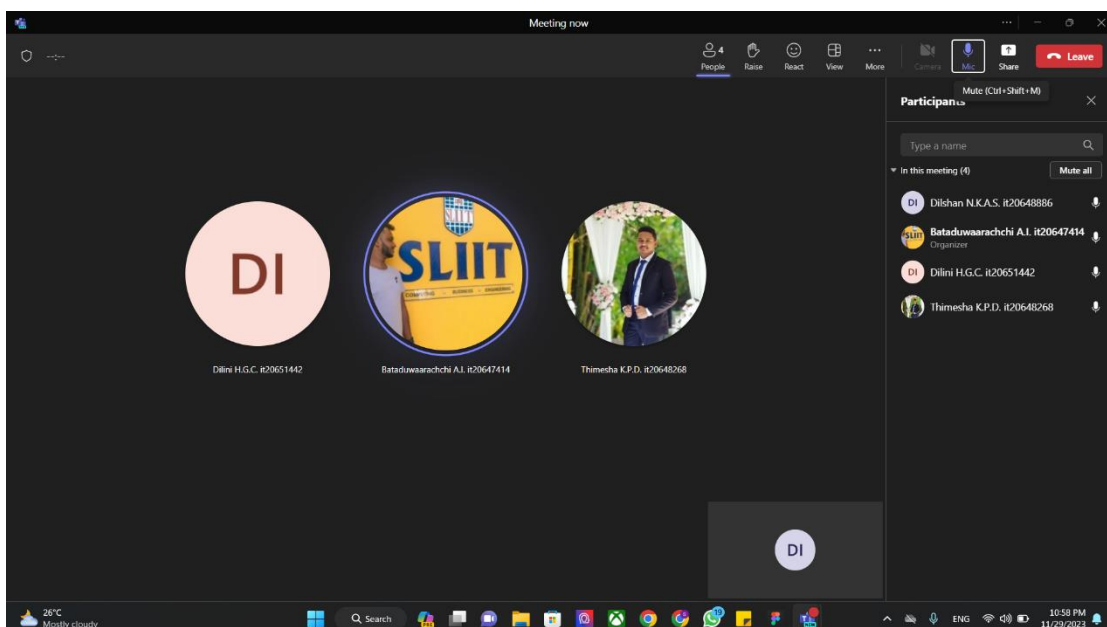
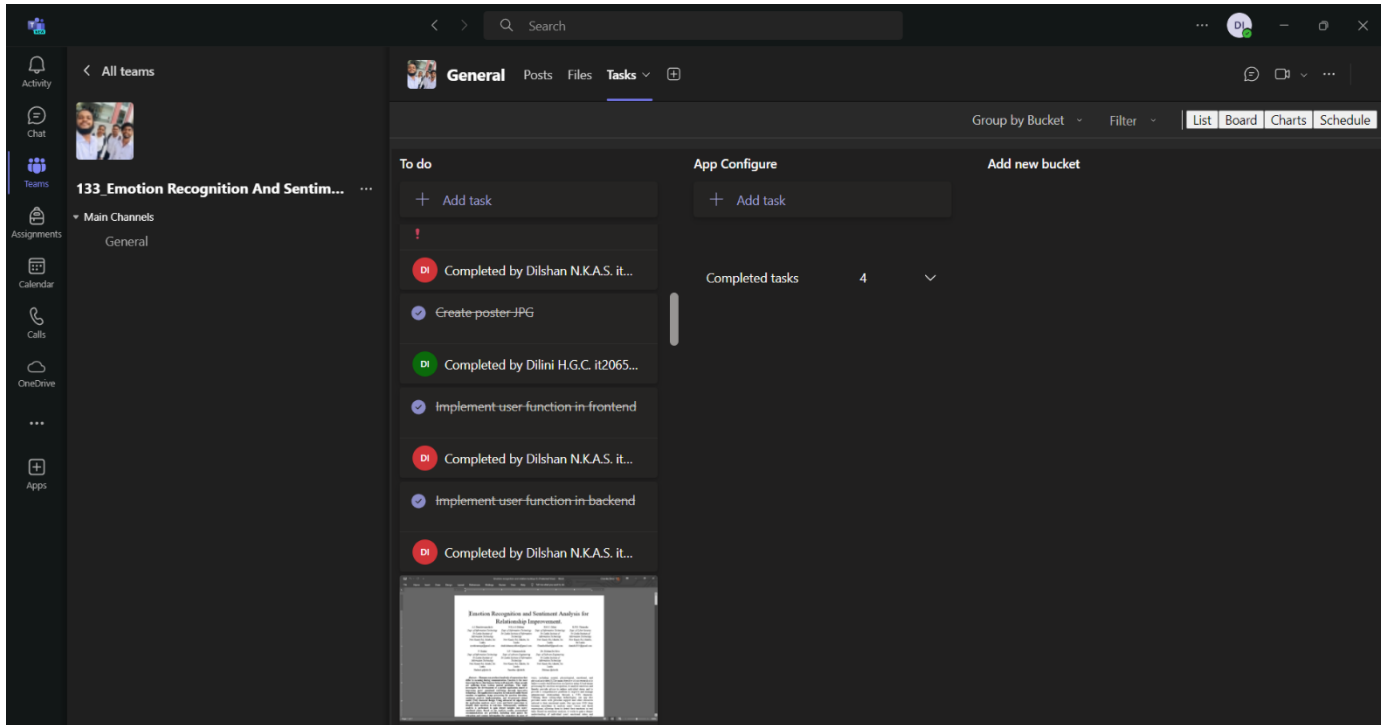


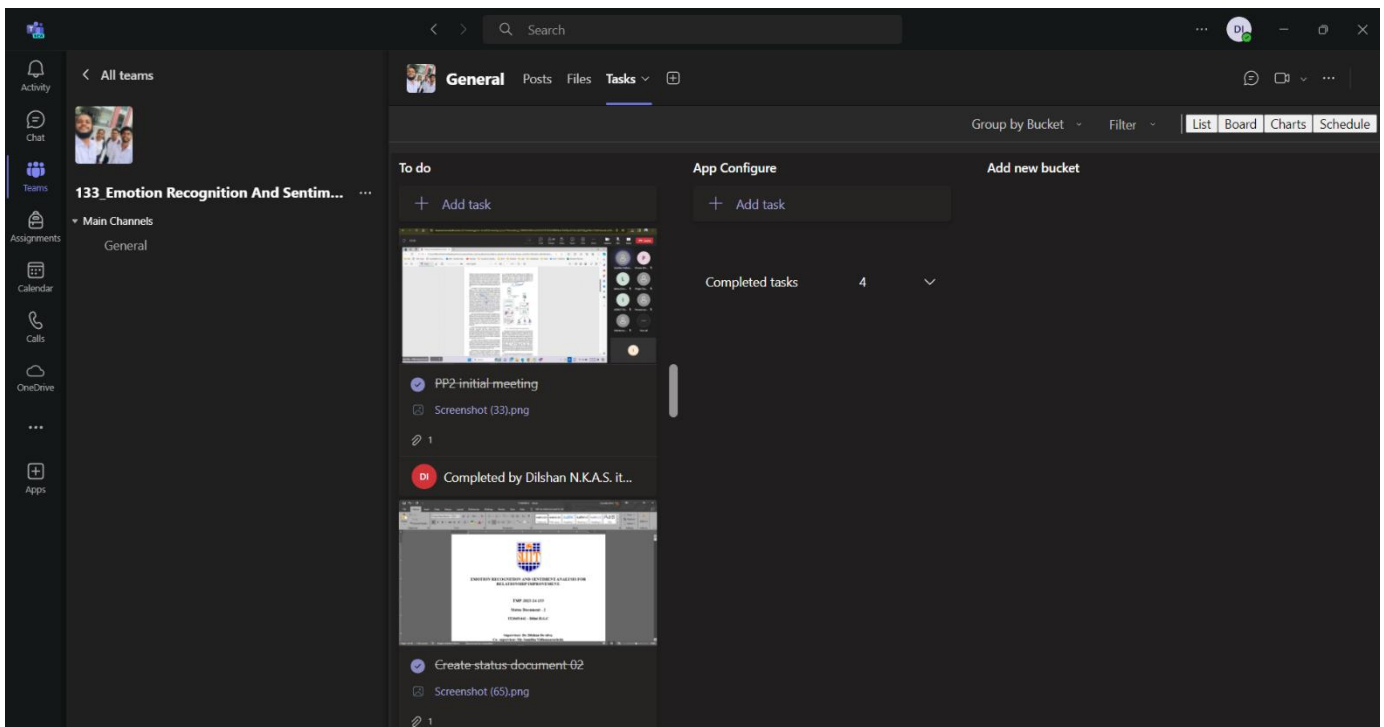
Figure 1.2: Meeting with group members.

02. Work breakdown structure & allocates resources for each area.



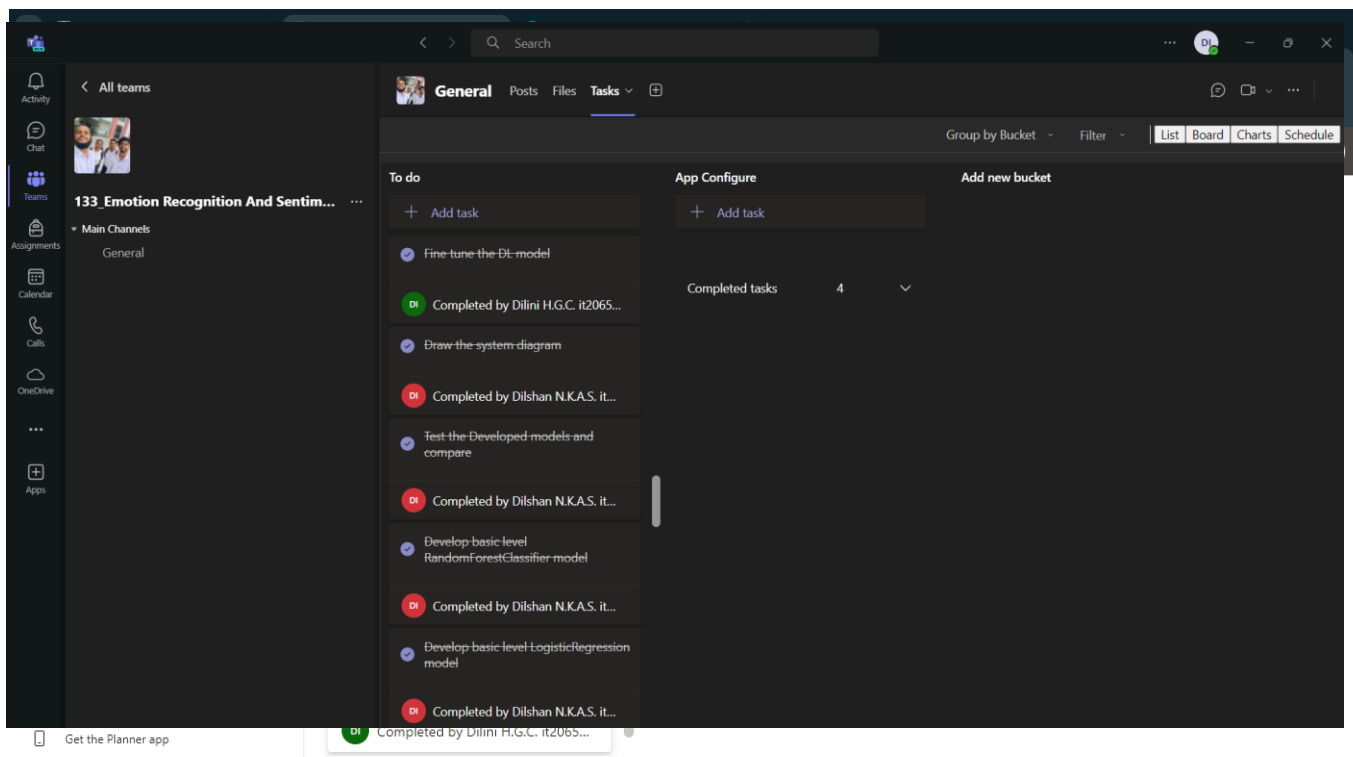
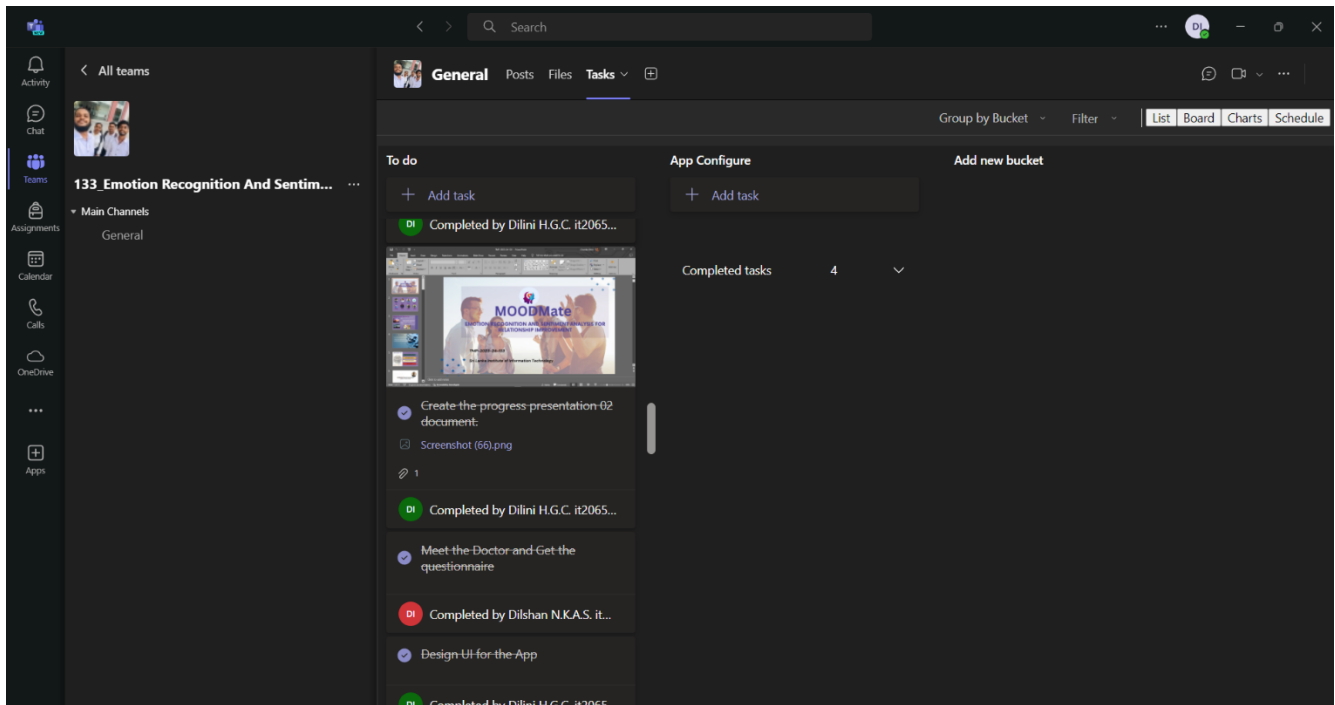
The screenshot shows the Microsoft Teams interface for a team named '133_Emotion Recognition And Sentim...'. The 'General' channel is selected, and the 'Tasks' tab is active. The task list is as follows:

Task Name	Status	Assignee
Completed by Dilshan N.K.A.S. it...	Completed	Dilshan N.K.A.S.
Create-poster.JPG	In Progress	Dilini H.G.C.
Implement-user-function-in-frontend	In Progress	Dilshan N.K.A.S.
Implement-user-function-in-backend	In Progress	Dilshan N.K.A.S.
Completed by Dilshan N.K.A.S. it...	Completed	Dilshan N.K.A.S.



The screenshot shows the Microsoft Teams interface for the same team and channel. The task list is updated with the following items:

Task Name	Status	Assignee
PP2-initial-meeting	In Progress	Dilshan N.K.A.S.
Screenshot (33).png	In Progress	Dilshan N.K.A.S.
Create status document 02	In Progress	Dilshan N.K.A.S.



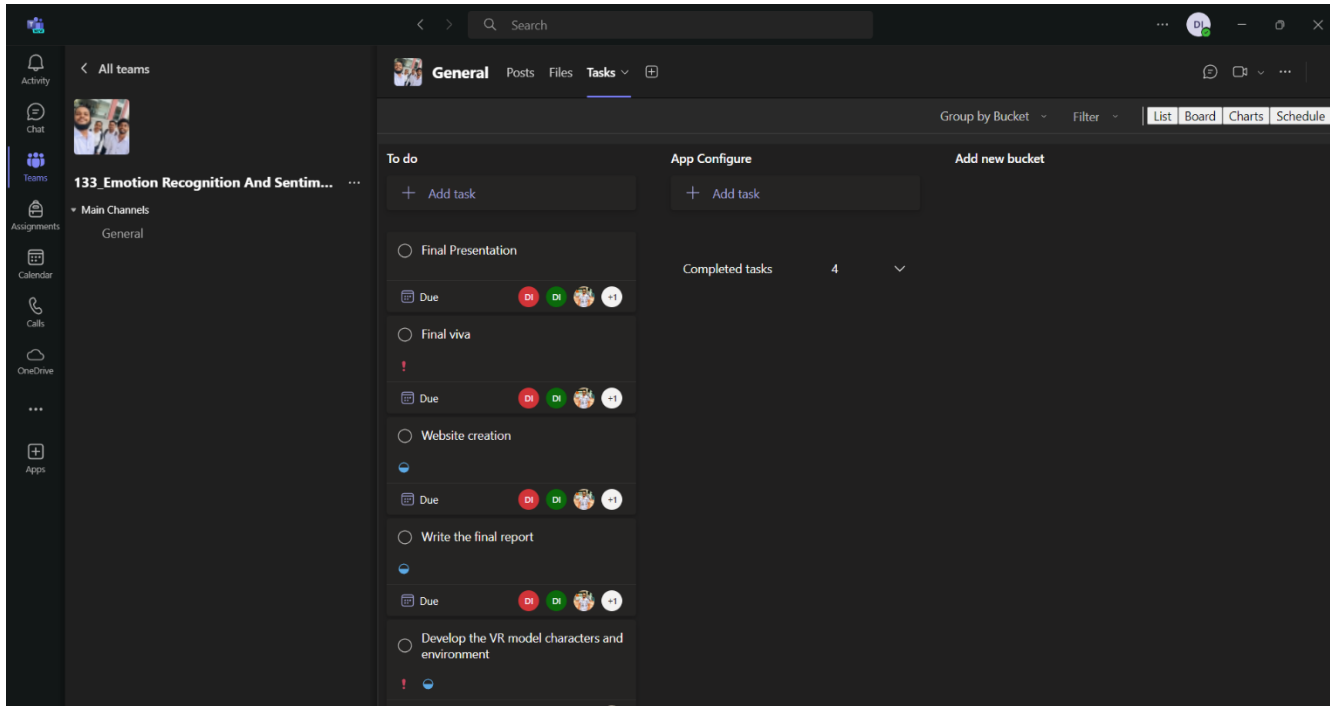


Figure 2.1: Allocated research task and completion

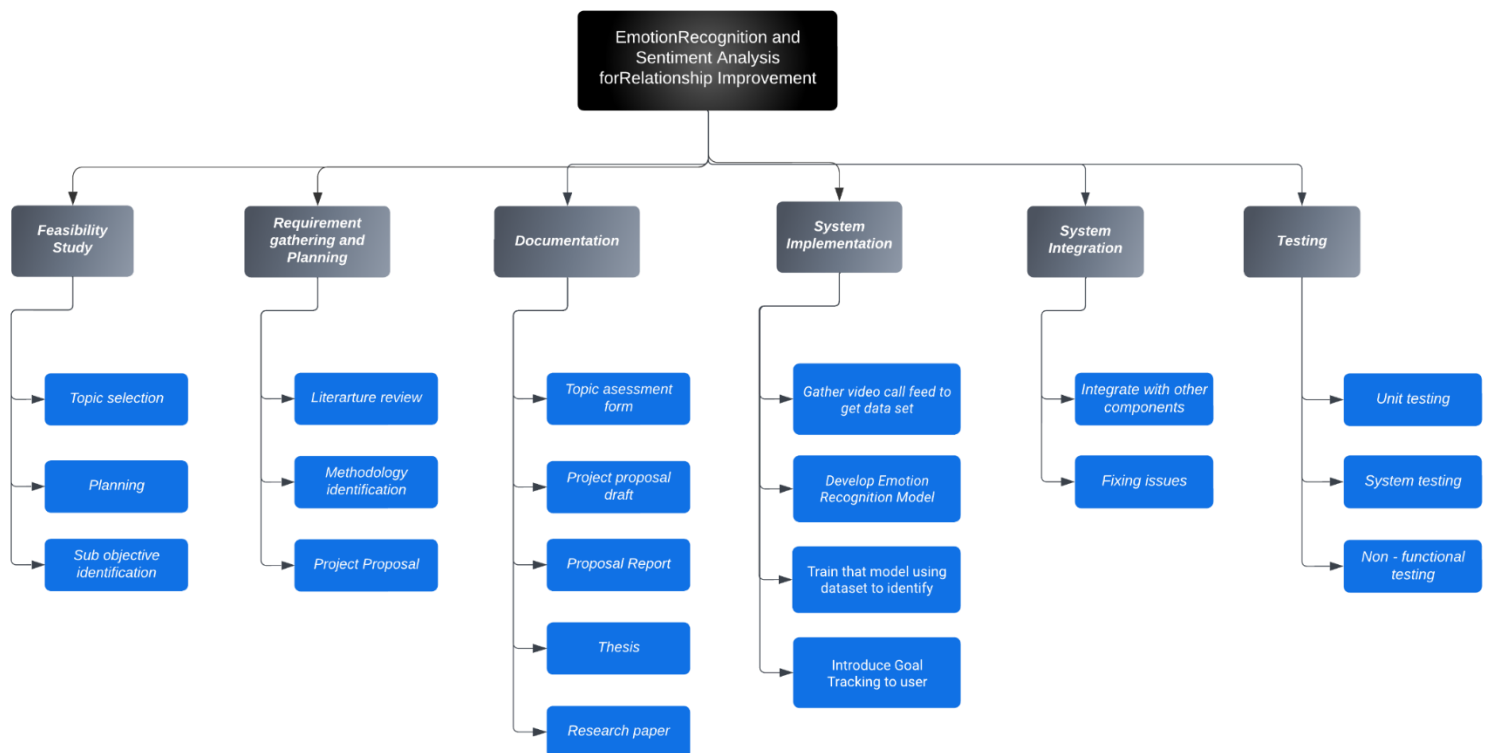


Figure 2.2: WBS and Completion – IT20648886

03. Updated Gantt chart of finalize Design & implementation phases

WBS Num	Task Title	%	June	July	August	September	October	November	December	January	February	March	April	May
1. Planning Phase														
1.1	Research Identification	100%												
1.2	Propose Research & Select Supervisor	100%												
1.3	Research Background Study	100%												
2. Environment Setup														
2.1	Background Gathering	100%												
2.2	Literature Review	100%												
2.3	Requirement Analysis	100%												
3. Proposal														
3.1	Project Proposal Document	100%												
3.2	Project Proposal Presentation	100%												
4. Software Requirements Specification														
4.1	Identification of the function	100%												
4.2	Final SRS Document	100%												
5. Design														
5.1	Sketch	100%												
5.2	UI Design	100%												
6. Software Design														
6.1	System Implementation	100%												
6.2	Progress Presentation 1	100%												
6.3	Project status Doc	100%												
7. Implementation														
7.1	Data Collection	100%												
7.2	Frontend Development	100%												
7.3	Backend development	100%												
7.4	Integration	100%												
8. Testing														
8.1	Unit Testing	100%												
8.2	Integration Testing	90%												
9. Project Finalization														
9.1	Evaluate all the requirements are met	95%												
9.2	Identify & fix shortcomings	99%												
10. Final Doc & Viva														
10.1	Final document	60%												
10.2	Final Presentation & viva	40%												

Figure 3.1: Planner Gantt Chart

04. Teams Planner Charts.

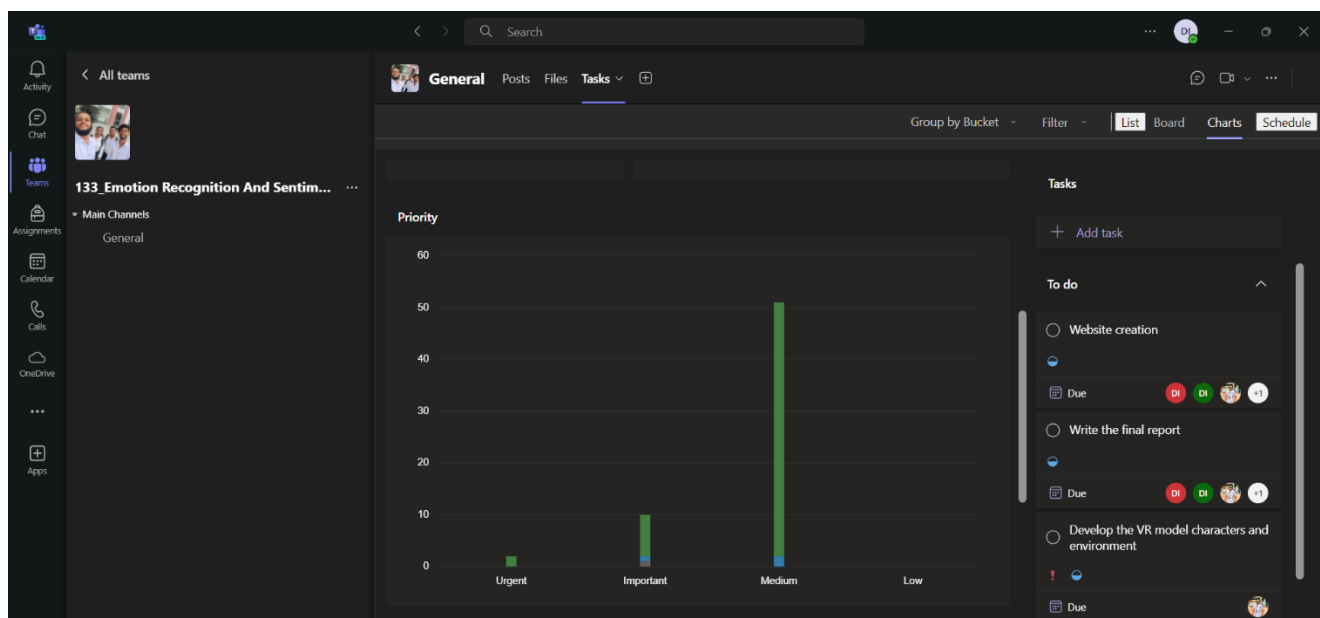
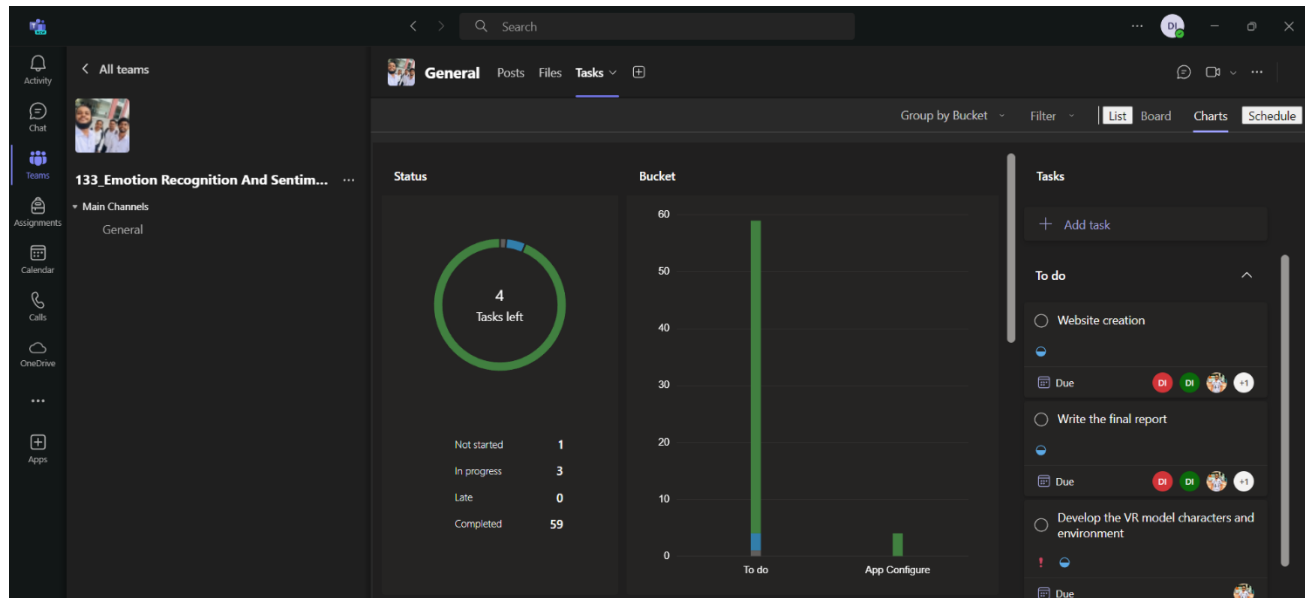
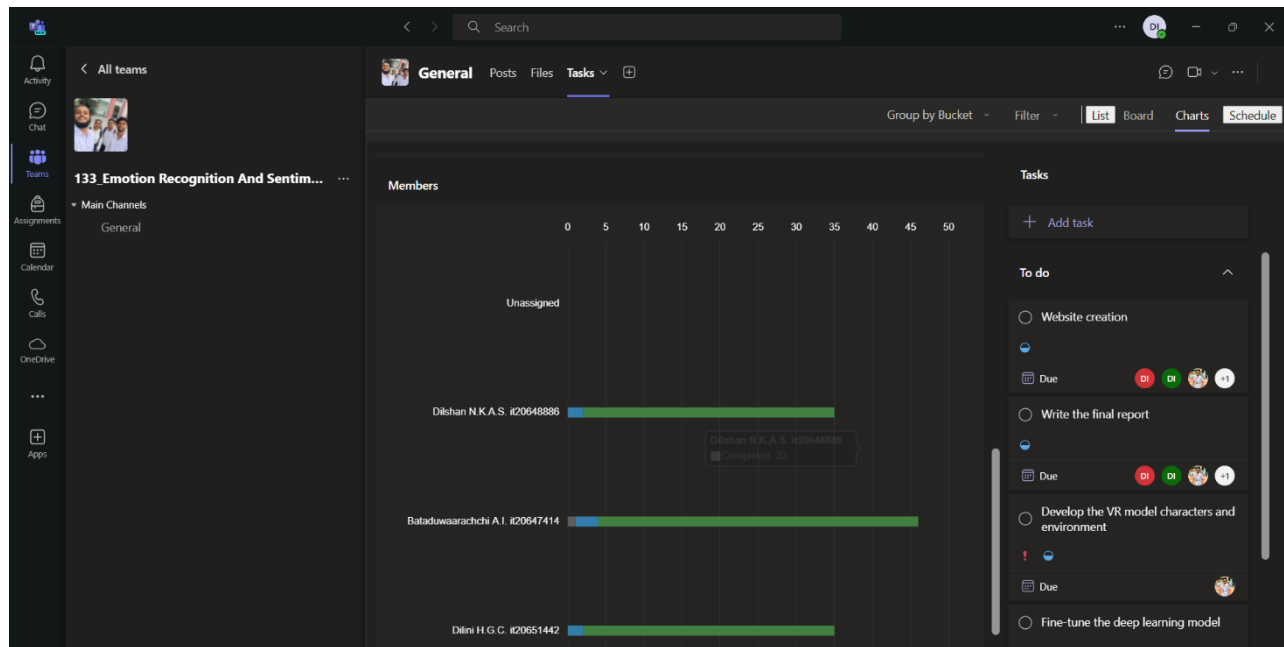
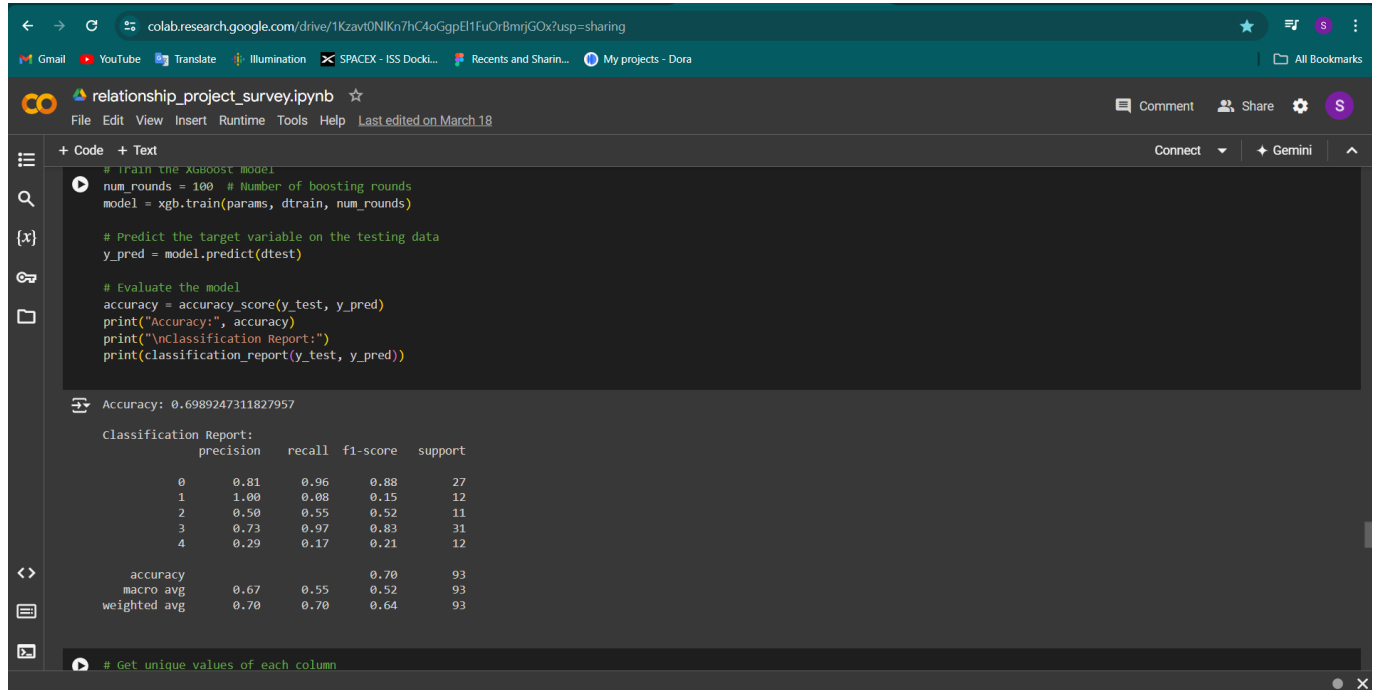


Figure 4.1: Planner chart – IT20648886



05. Test Results.



Colab notebook interface showing the execution of a Python script for training and evaluating an XGBoost model. The script includes training parameters, prediction on test data, and evaluation using accuracy and classification report.

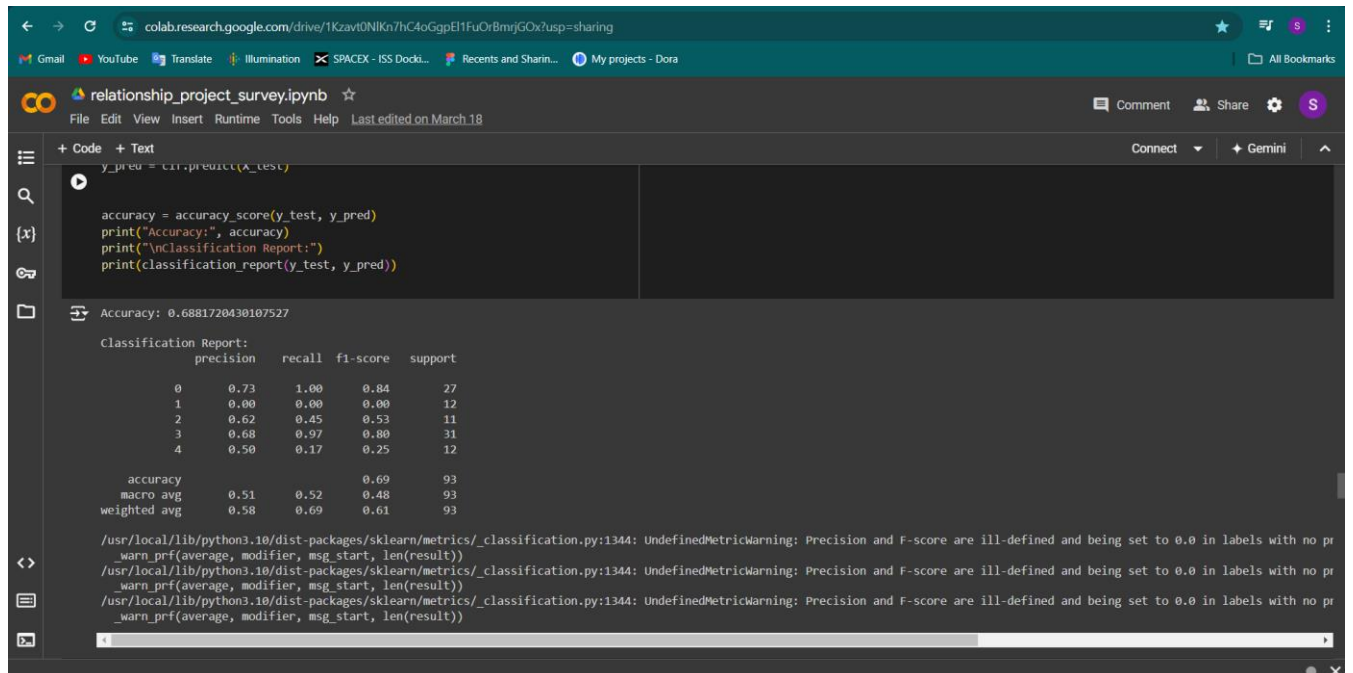
```
# Train the XGBoost model
num_rounds = 100 # Number of boosting rounds
model = xgb.train(params, dtrain, num_rounds)

# Predict the target variable on the testing data
y_pred = model.predict(dtest)

# Evaluate the model
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
print("\nClassification Report:")
print(classification_report(y_test, y_pred))
```

Accuracy: 0.6989247311827957

Classification Report:					
	precision	recall	f1-score	support	
0	0.81	0.96	0.88	27	
1	1.00	0.08	0.15	12	
2	0.50	0.55	0.52	11	
3	0.73	0.97	0.83	31	
4	0.29	0.17	0.21	12	
accuracy			0.70	93	
macro avg	0.67	0.55	0.52	93	
weighted avg	0.70	0.70	0.64	93	



Colab notebook interface showing the execution of a Python script for training and evaluating a Logistic Regression model. The script includes prediction on test data, evaluation using accuracy and classification report, and a warning about undefined metrics.

```
y_pred = clf.predict(x_test)

accuracy = accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
print("\nClassification Report:")
print(classification_report(y_test, y_pred))
```

Accuracy: 0.6881720430107527

Classification Report:					
	precision	recall	f1-score	support	
0	0.73	1.00	0.84	27	
1	0.00	0.00	0.00	12	
2	0.62	0.45	0.52	11	
3	0.68	0.97	0.80	31	
4	0.50	0.17	0.25	12	
accuracy			0.69	93	
macro avg	0.51	0.52	0.48	93	
weighted avg	0.58	0.69	0.61	93	

/usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classification.py:1344: UndefinedMetricWarning: Precision and F-score are ill-defined and being set to 0.0 in labels with no pr
 _warn_prf(average, modifier, msg_start, len(result))
 /usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classification.py:1344: UndefinedMetricWarning: Precision and F-score are ill-defined and being set to 0.0 in labels with no pr
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 _warn_prf(average, modifier, msg_start, len(result))

Figure 6. 1: Text classifier models accuracy.

