



# **AI-Powered Solutions for Breakdown Challenges with Electric Vehicles**

## **EV SPARE PARTS SHOP FINDING SERVICE**

Project Id: 2023-24-117

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Status Document II

BSc (Hons) in Information Technology Specializing in Information  
Technology

Department of Information Technology

Sri Lanka Institute of Information Technology Sri Lanka

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# 1. Group Gatherings

## 1.1 Meetings with Supervisor

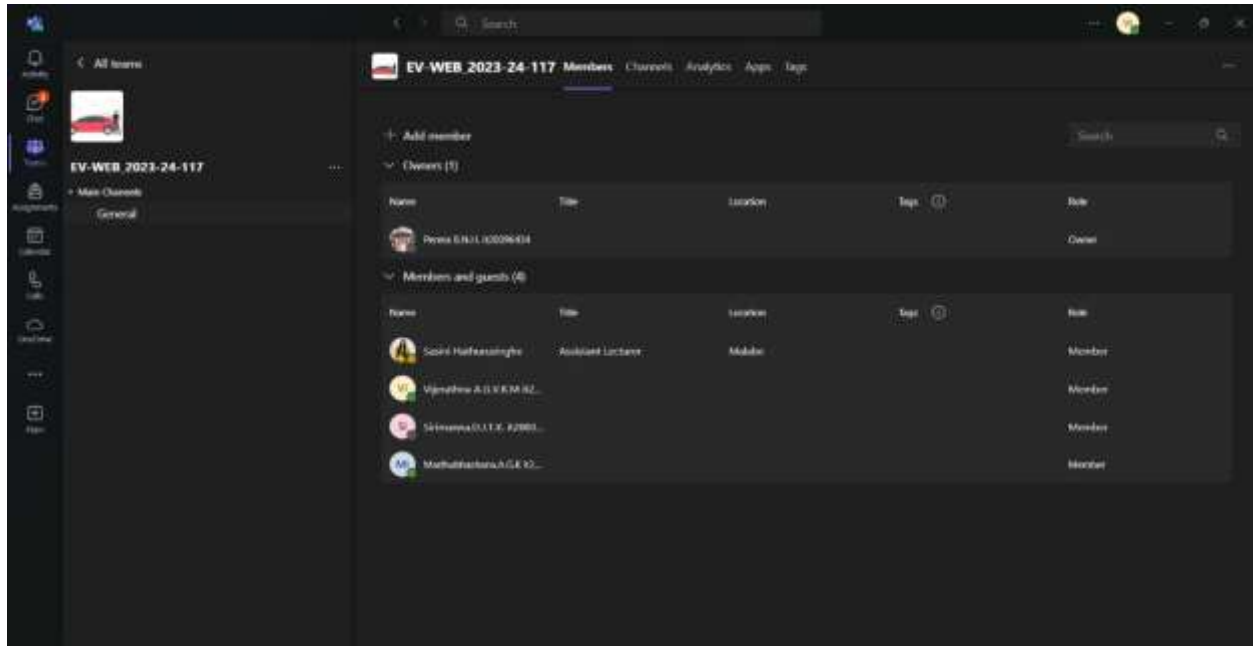


## 1.2 Group Members

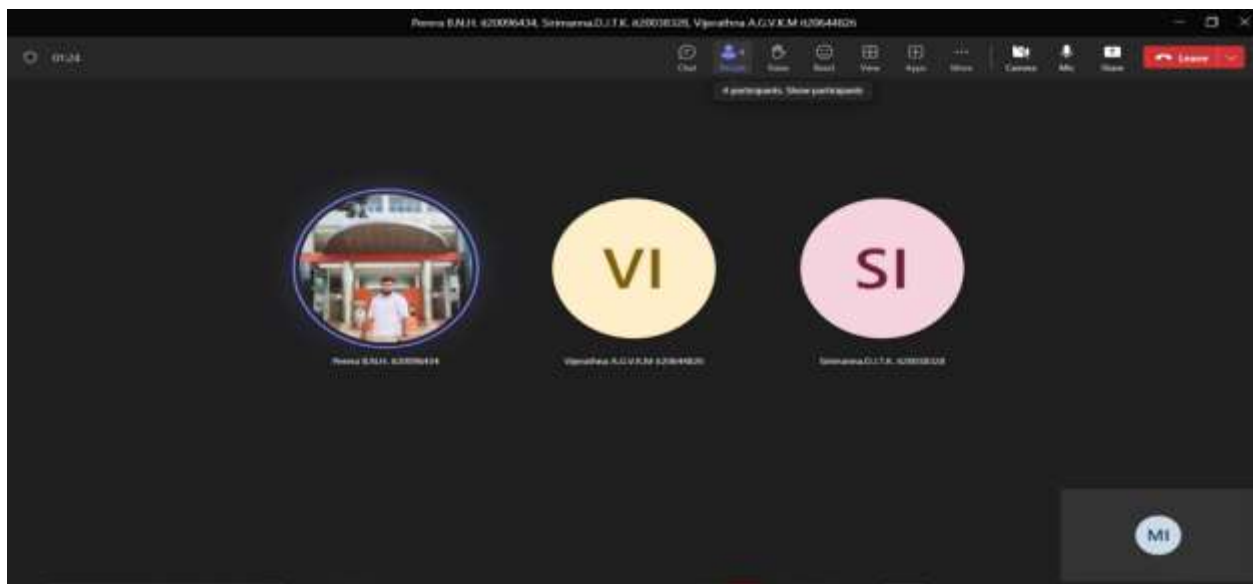


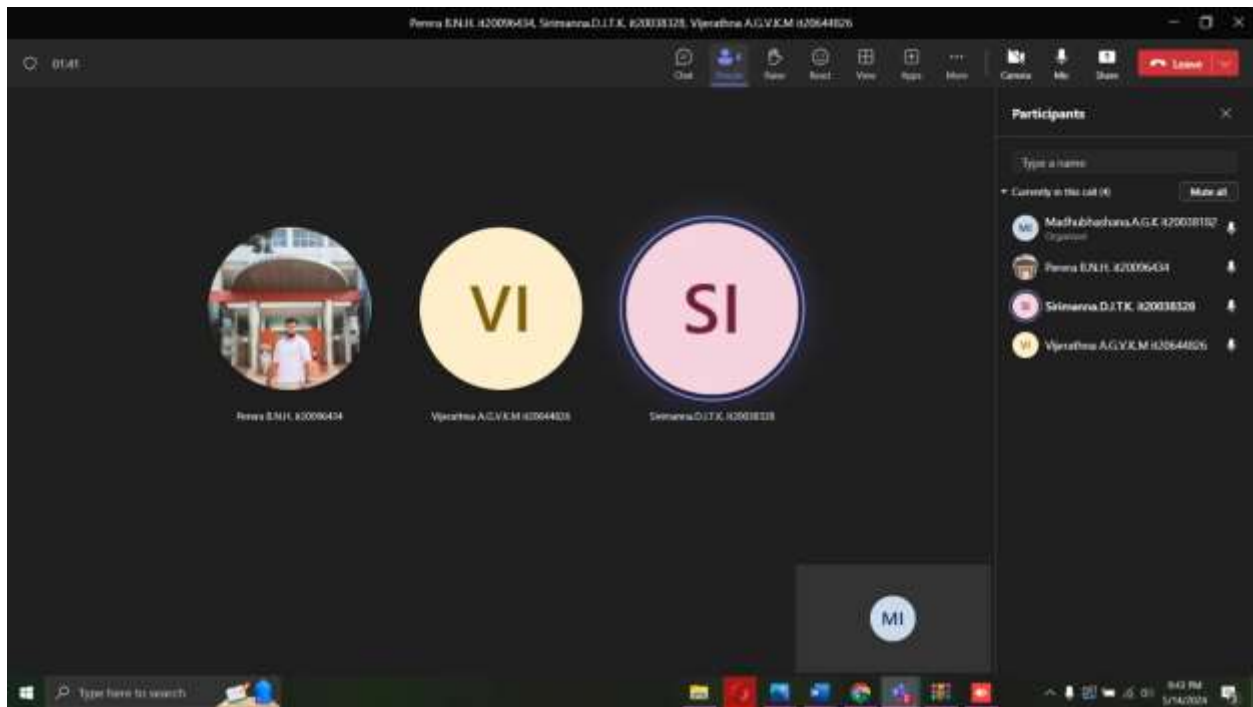
## 2. MS Teams Details

### 2.1 Team and Team Members

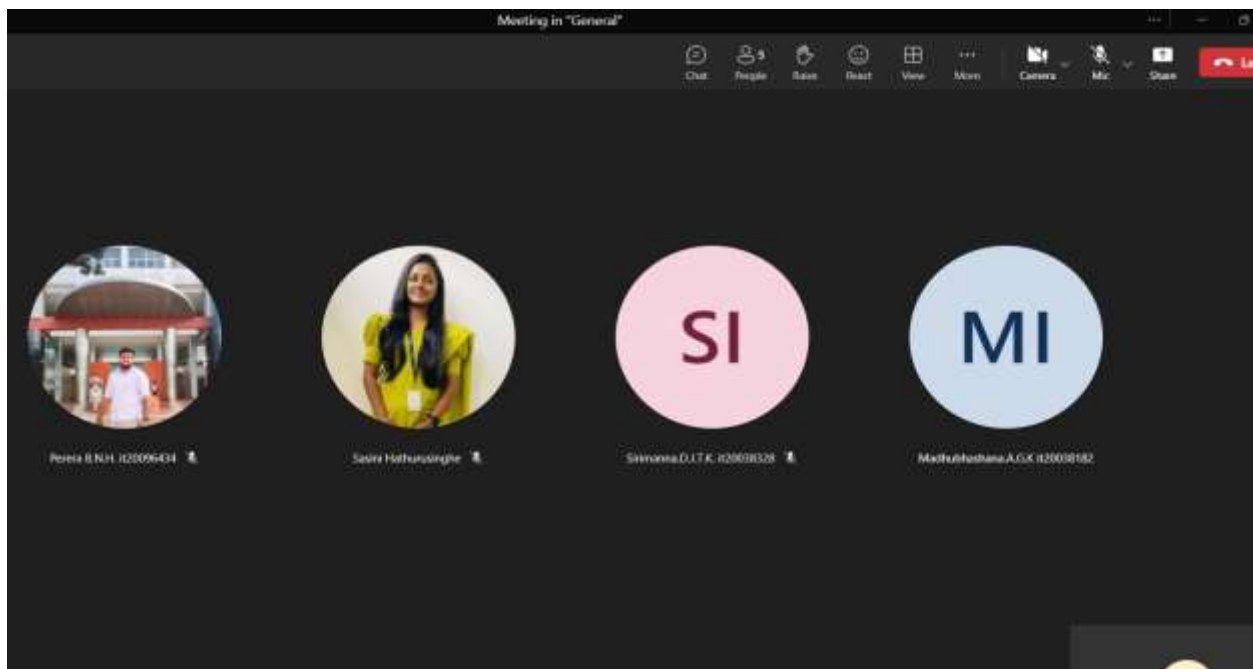


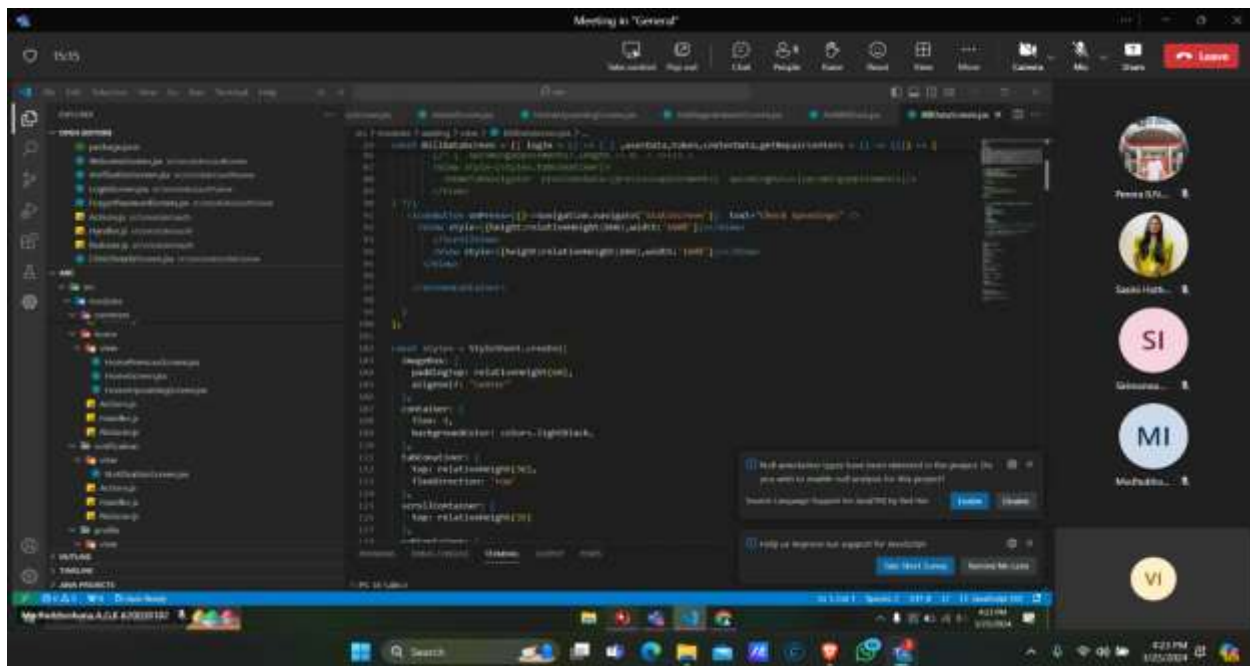
### 2.2 Teams Calls with Research Team



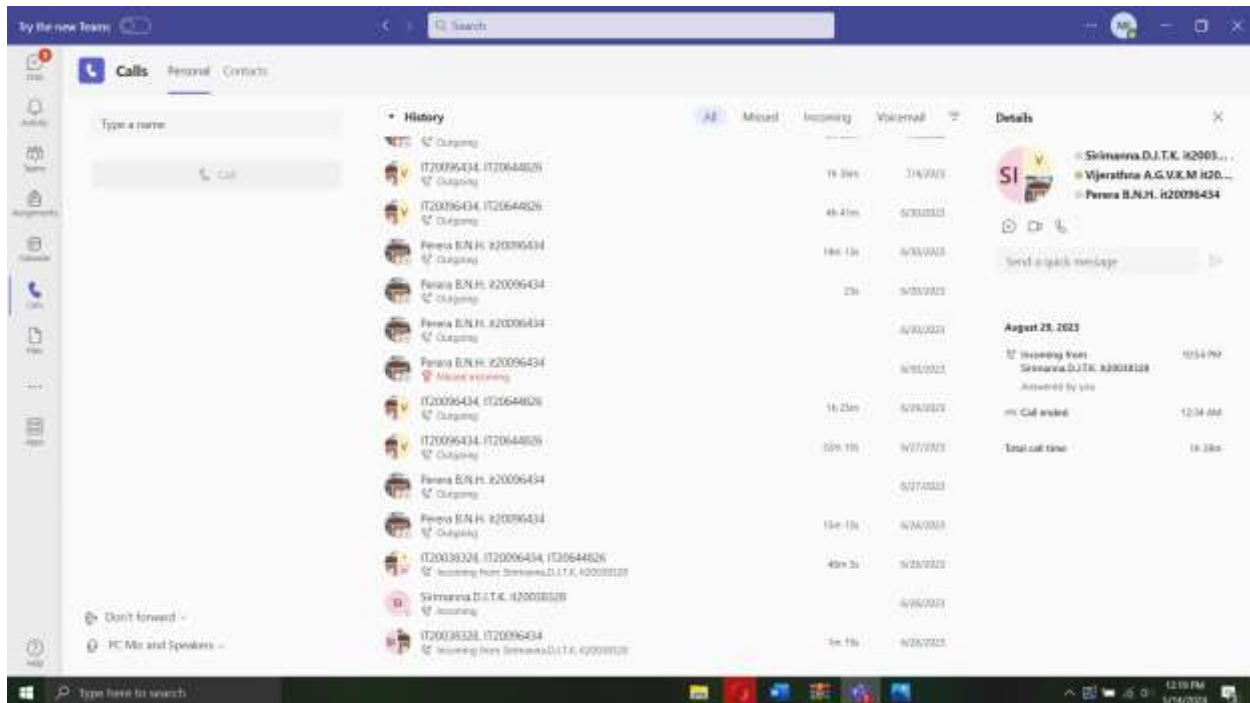


## 2.3 Teams calls with co supervisor



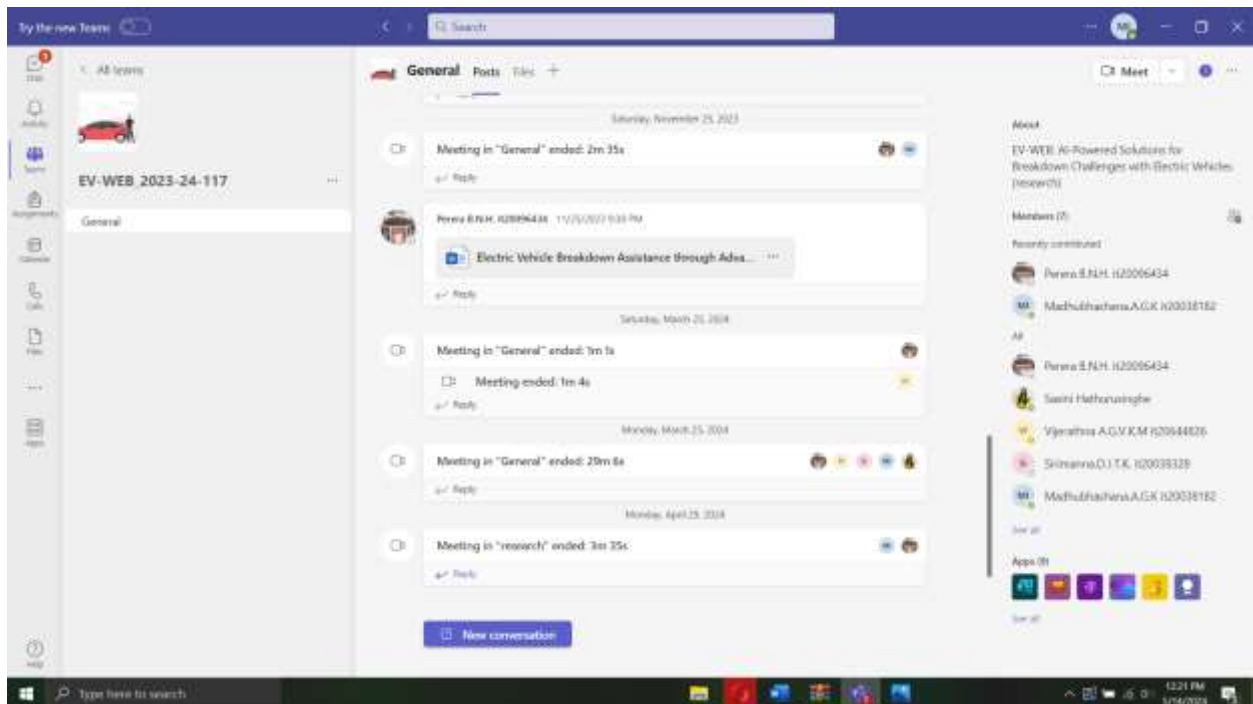


## 2.4 Teams Calls with Group members



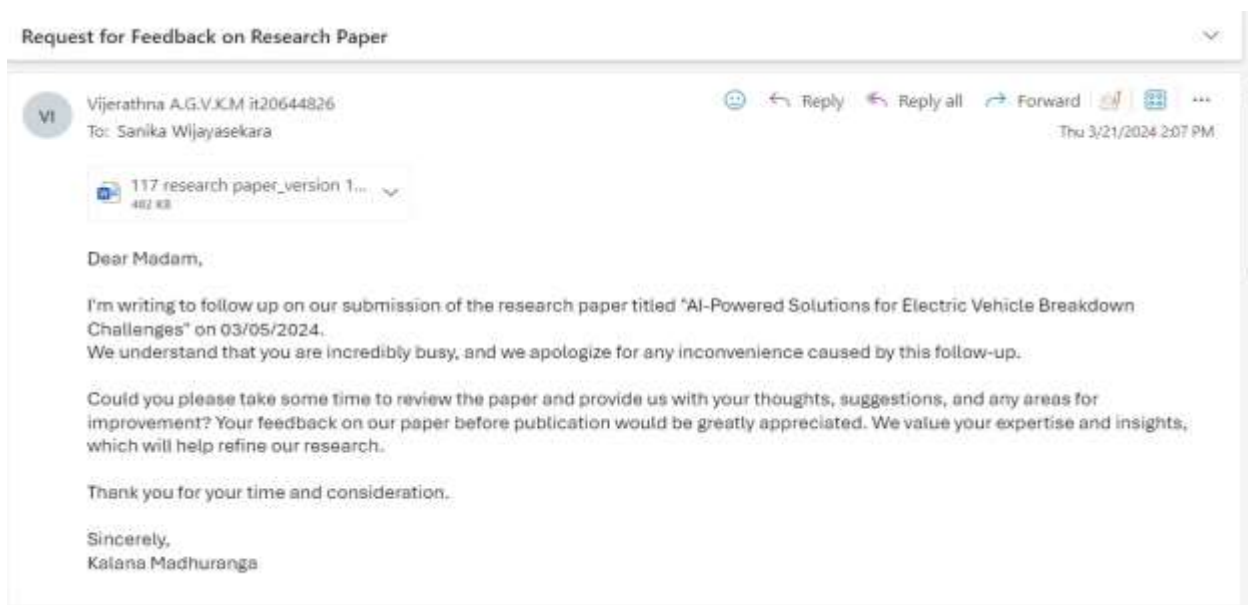


## 2.5 Teams Group Chat



## 3. Emails on Outlook

### 3.1 Outlook Mails with Supervisor





Sanika Wijayasekara

To: Vijerathna A.G.V.K.M it20644826

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Dear Student,

Thank you for your email. What is the conference that you are targeting to submit the manuscript?

Thank You,

Sanika K. Wijayasekara (PhD)  
Assistant Professor  
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[sanika.w@slit.lk](mailto:sanika.w@slit.lk) | [wijayasekarasanika@ieee.org](mailto:wijayasekarasanika@ieee.org)

⋮

#### Request for Feedback on Research Paper

VI

Vijerathna A.G.V.K.M it20644826

To: Sanika Wijayasekara

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Dear Madam,

Thank you for your response.

We are targeting the [IEEE CFP] ICETCI 2024 | Mahindra University, Hyderabad | Aug 22-24, 2024 for the submission of our manuscript.

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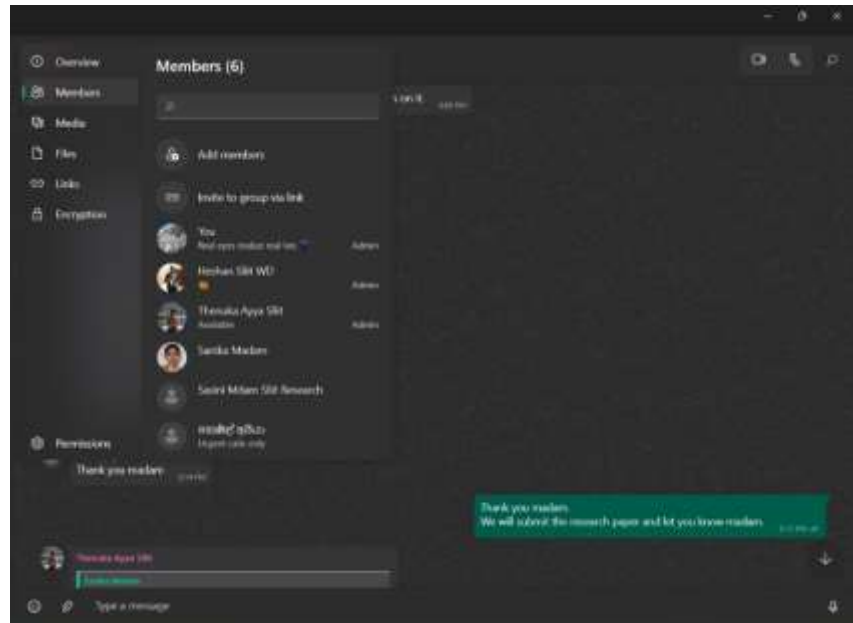
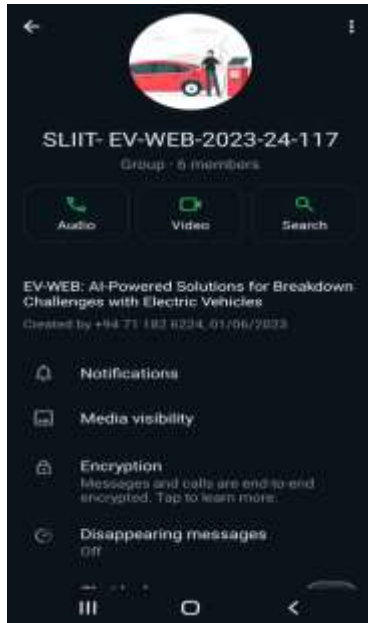
Thank You,

Sanika K. Wijayasekara (PhD)  
Assistant Professor  
Department of Computer System Engineering  
Faculty of Computing  
SLIIT, Malabe Campus, Sri Lanka.

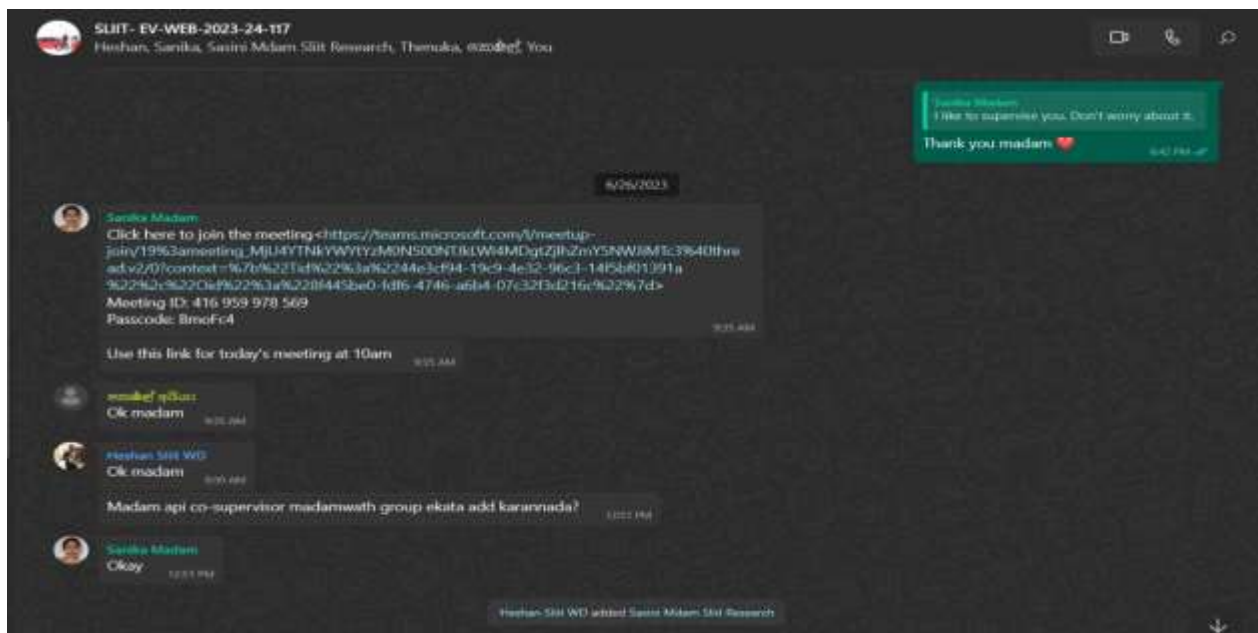


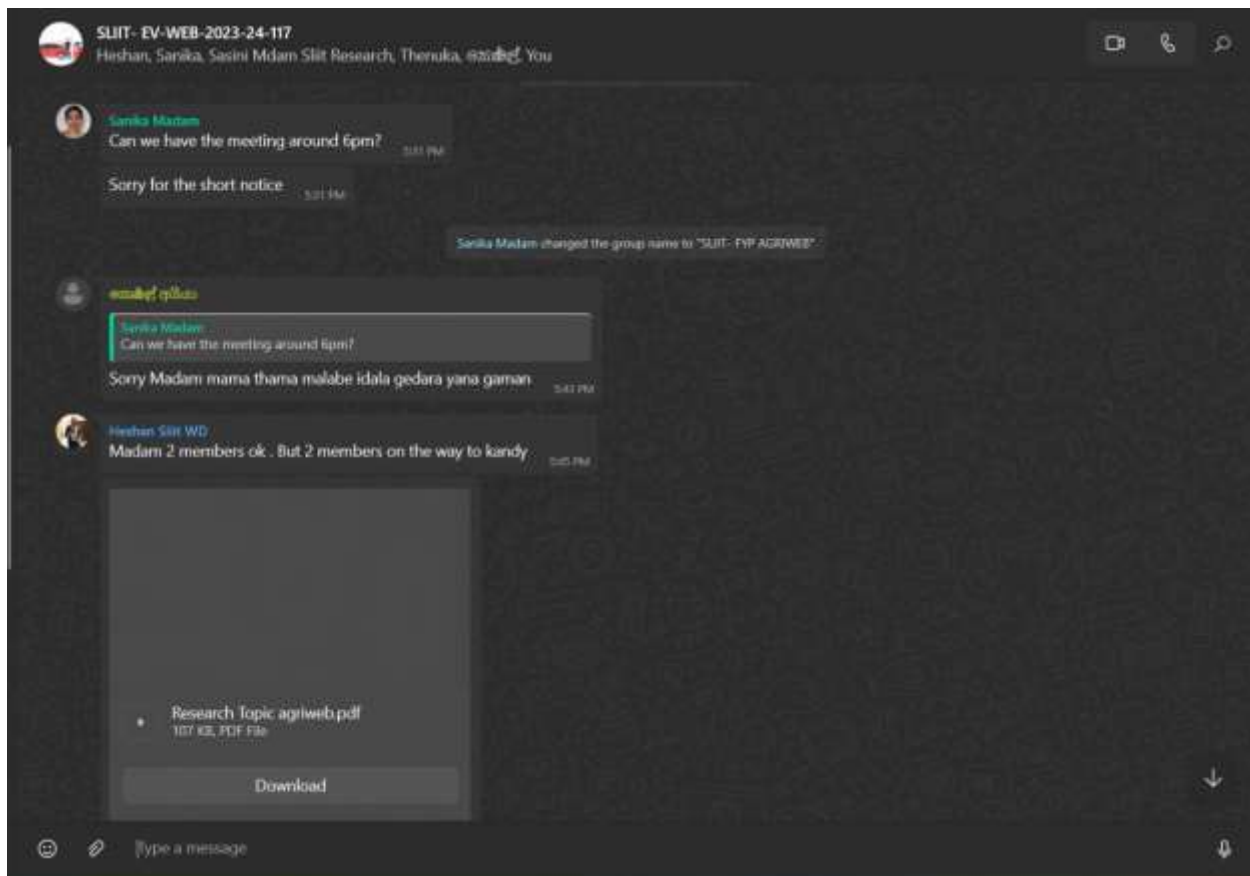
## 4. Maintain the WhatsApp Group

### 4.1 WhatsApp Group Details



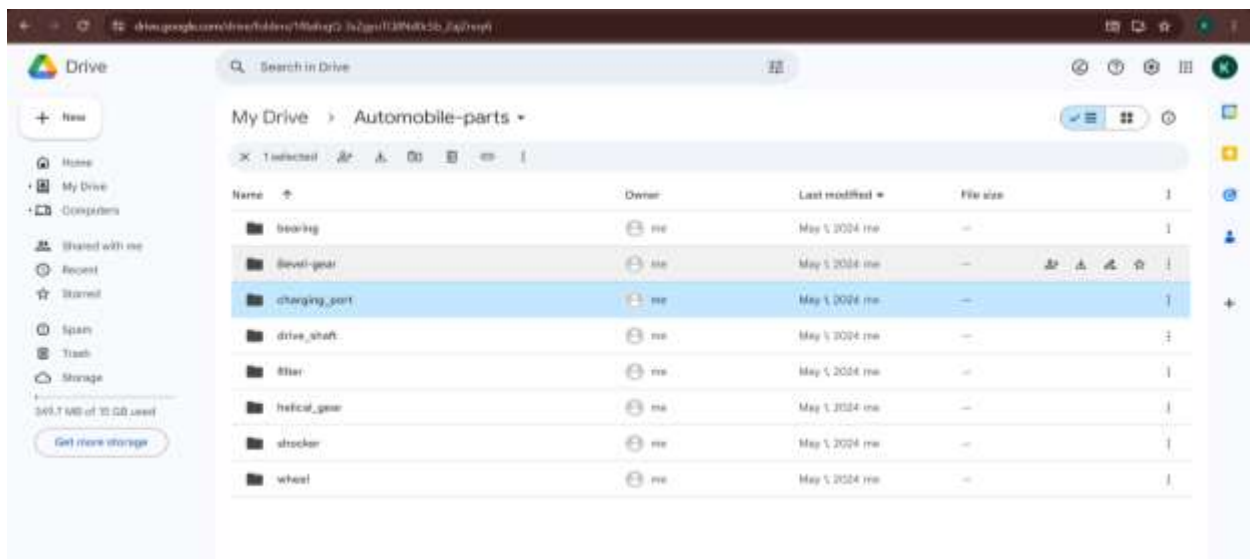
### 4.2 WhatsApp Group Chats



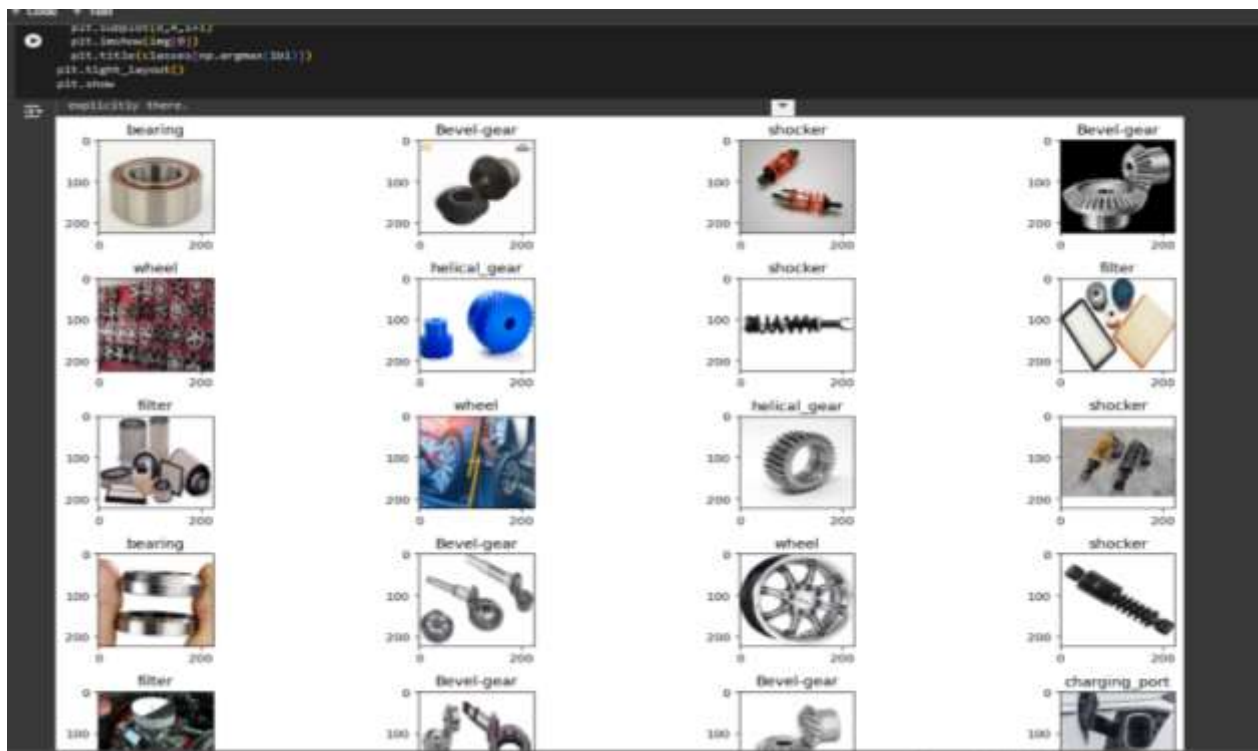


## 5. Test Results

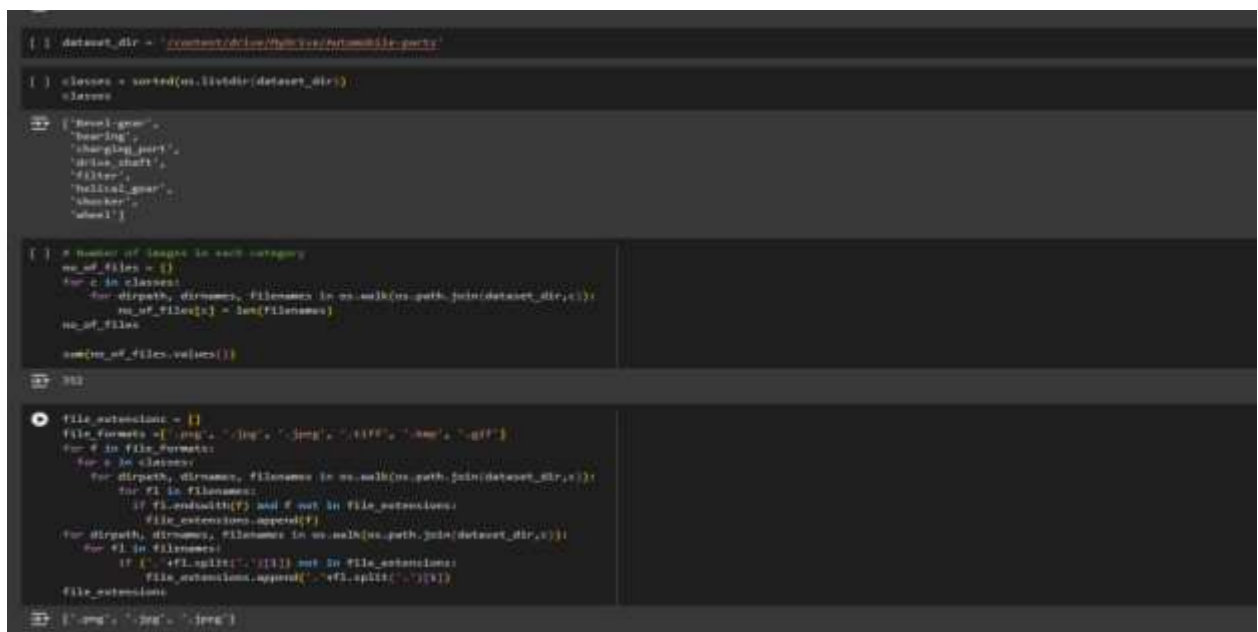
### 5.1 Datasets



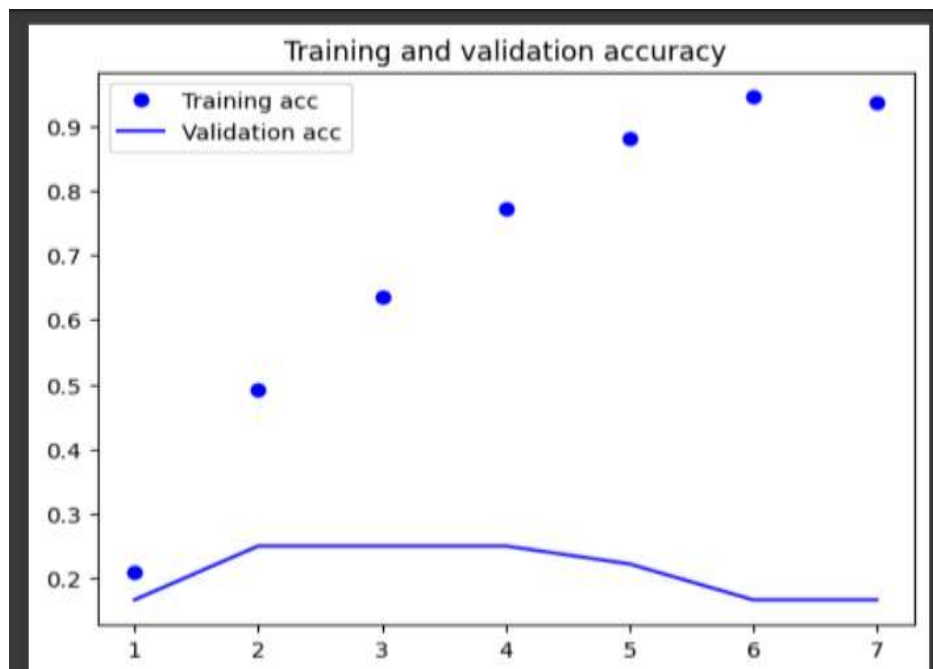
## 5.2 Figures



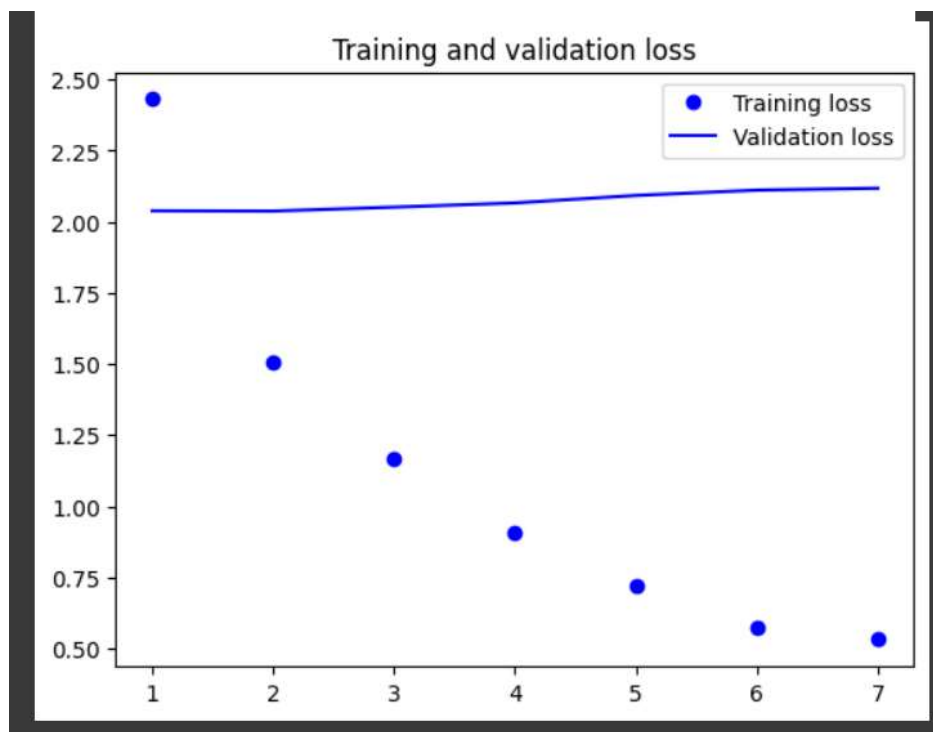
## 5.3 Classification



## 5.4 Model Accuracy



## 5.5 Model Loss



## 5.6 Model Summary

Model: "sequential"

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 223, 223, 8)	136
batch_normalization (Batch Normalization)	(None, 223, 223, 8)	32
max_pooling2d (MaxPooling2D)	(None, 111, 111, 8)	0
conv2d_1 (Conv2D)	(None, 110, 110, 16)	528
batch_normalization_1 (Batch Normalization)	(None, 110, 110, 16)	64
max_pooling2d_1 (MaxPooling2D)	(None, 55, 55, 16)	0
flatten (Flatten)	(None, 48400)	0
dense (Dense)	(None, 128)	6195328
batch_normalization_2 (Batch Normalization)	(None, 128)	512
dense_1 (Dense)	(None, 32)	4128
batch_normalization_3 (Batch Normalization)	(None, 32)	128
dense_2 (Dense)	(None, 8)	264

=====  
Total params: 6201120 (23.66 MB)  
Trainable params: 6200752 (23.65 MB)  
Non-trainable params: 368 (1.44 KB)  
=====

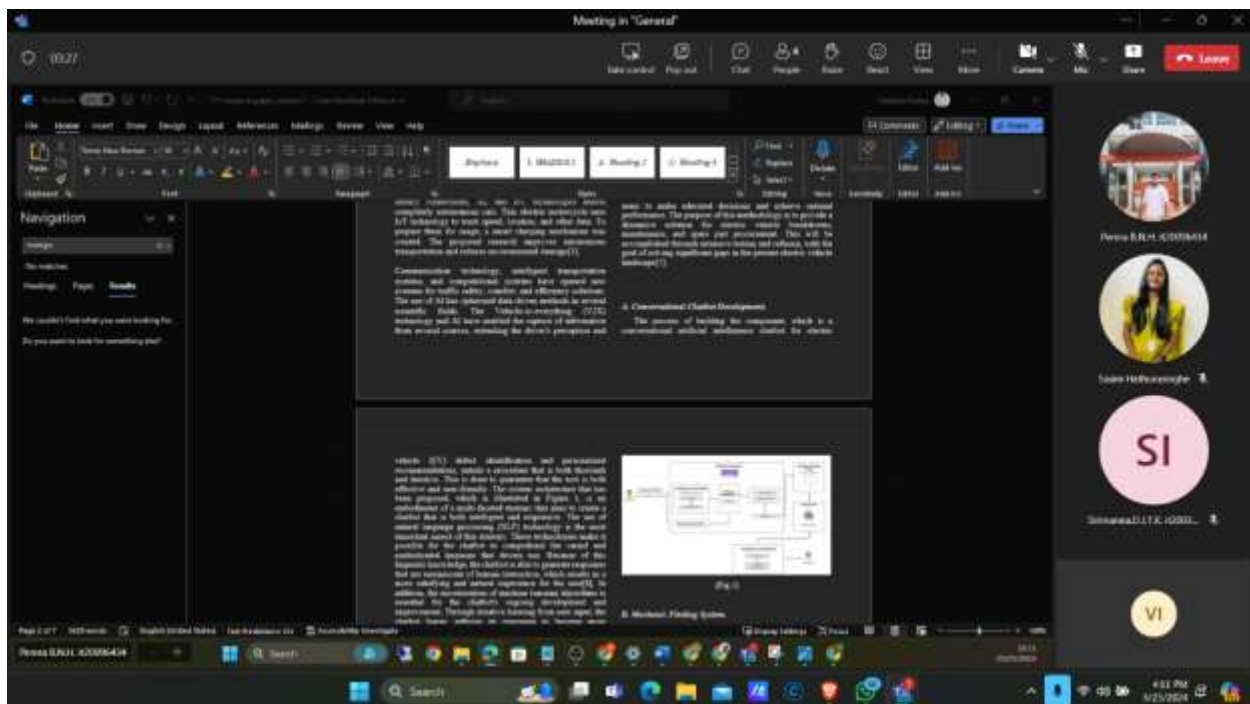
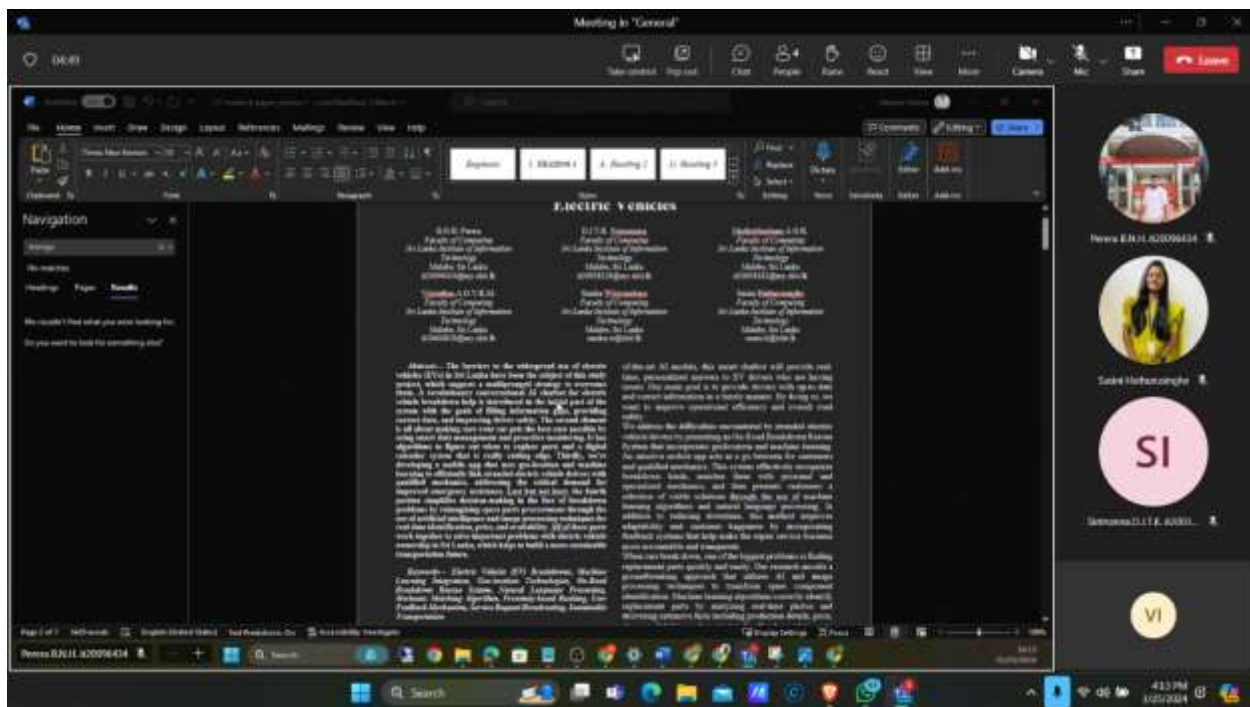
## 5.7 Training Model Output

```
[ ] predicted_part_index = np.argmax(predictions[0])
    predicted_part_name = classes[predicted_part_index]

▶ print("Predicted car part:", predicted_part_name)

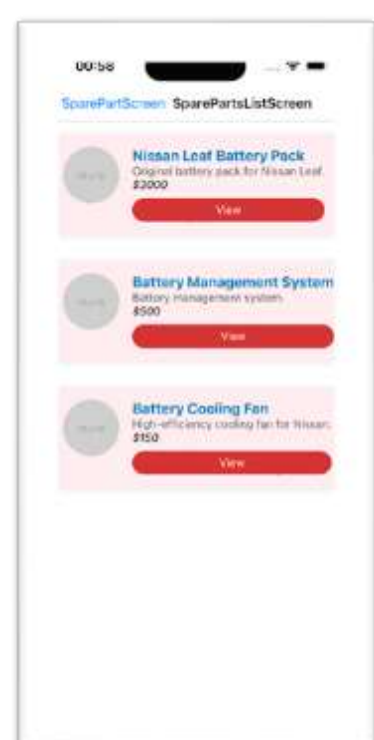
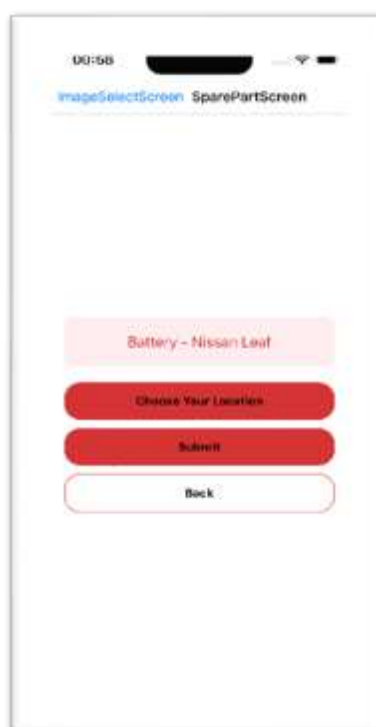
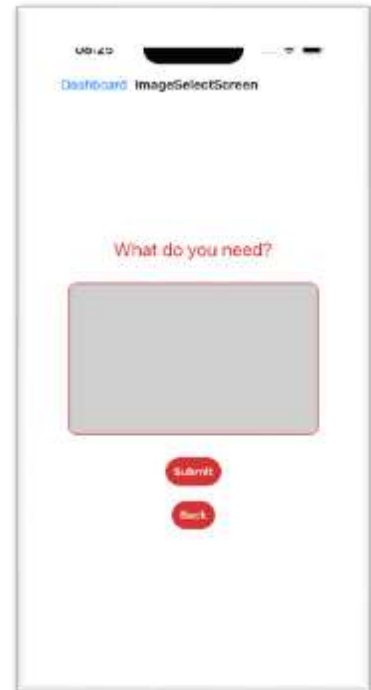
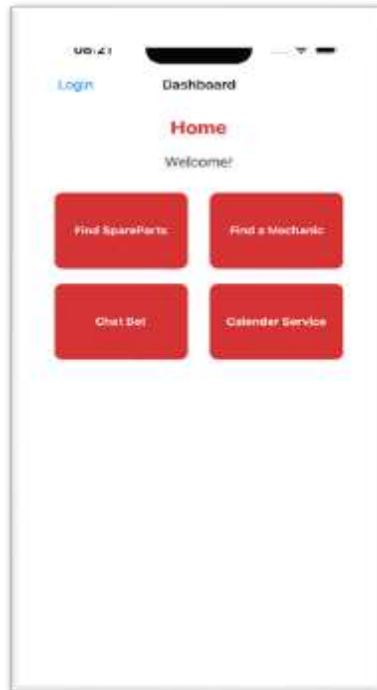
↔ Predicted car part: shocker
```

## 6. Research Paper Works





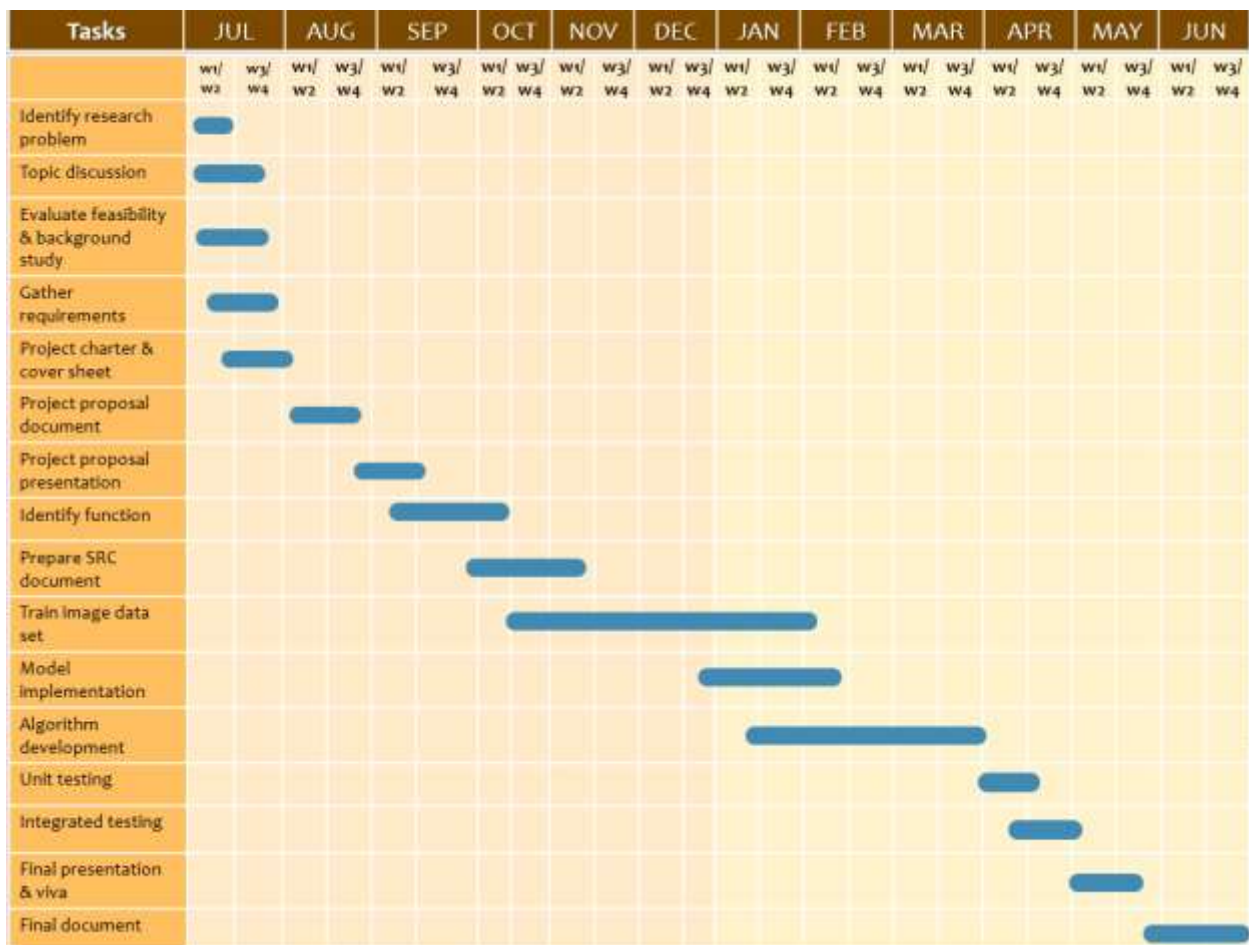
## 7. Mobile Application



## 8. App Logo



## 9. Gantt Chart



## 10. Work Breakdown Chart

