



**REVOLUTIONIZING REMOTE HEALTH MONITORING:
AUTONOMOUS DETECTION OF CARDIAC ABNORMALITIES
WITH CUSTOMIZED DIETARY PLANNING**

R24-019

Status Document II

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1. SCREENSHOTS OF THE PROJECT MANAGEMENT TOOL

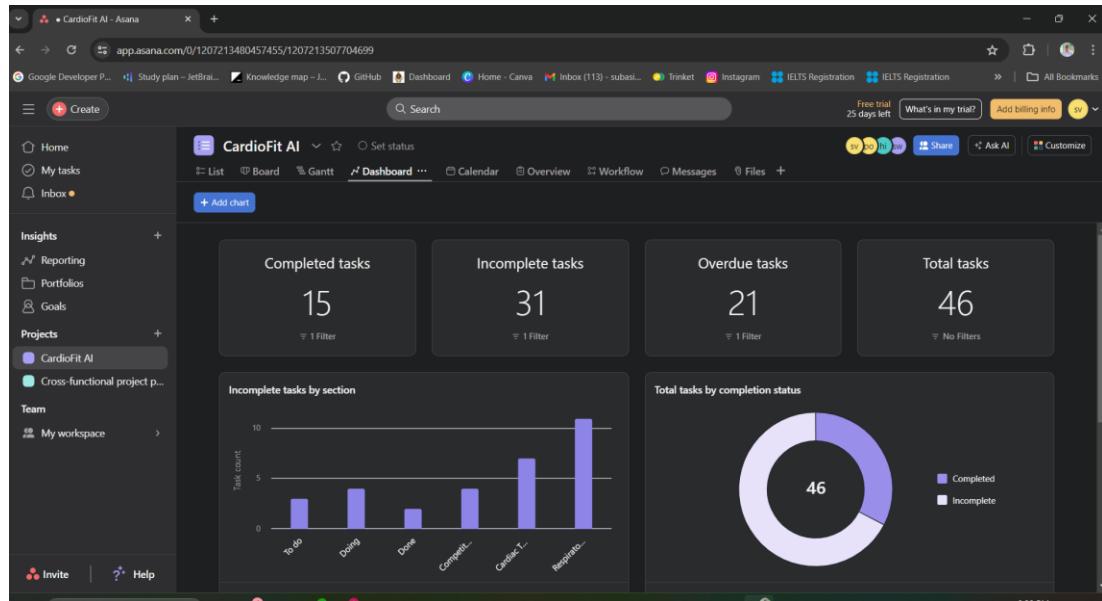


Figure 1: Project Management tool

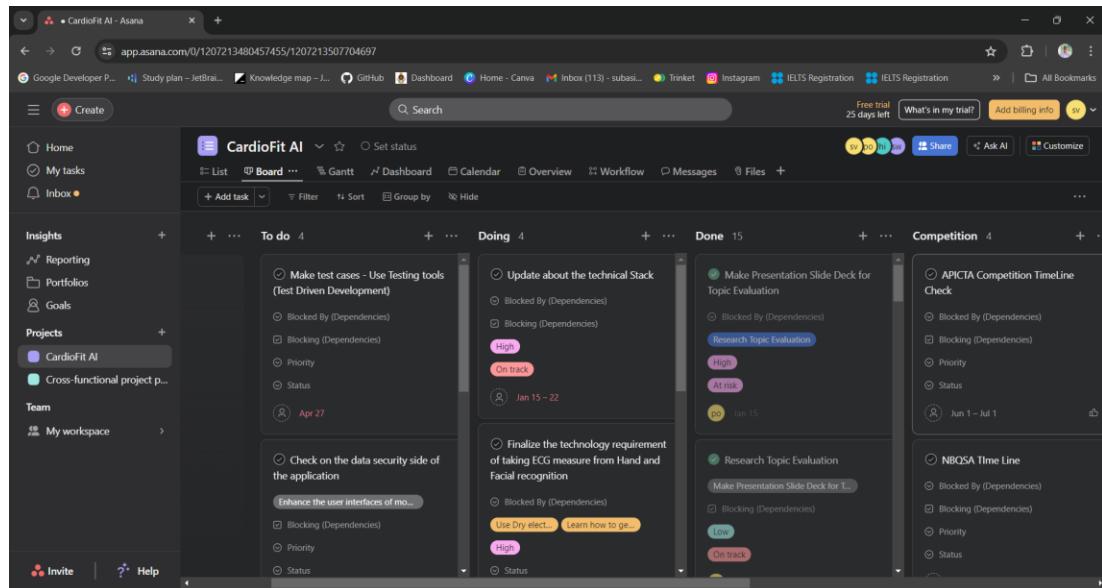


Figure 2 : Project Mangement Tool

2. SCREENSHOTS OF GOOGLE DRIVE FOLDERS

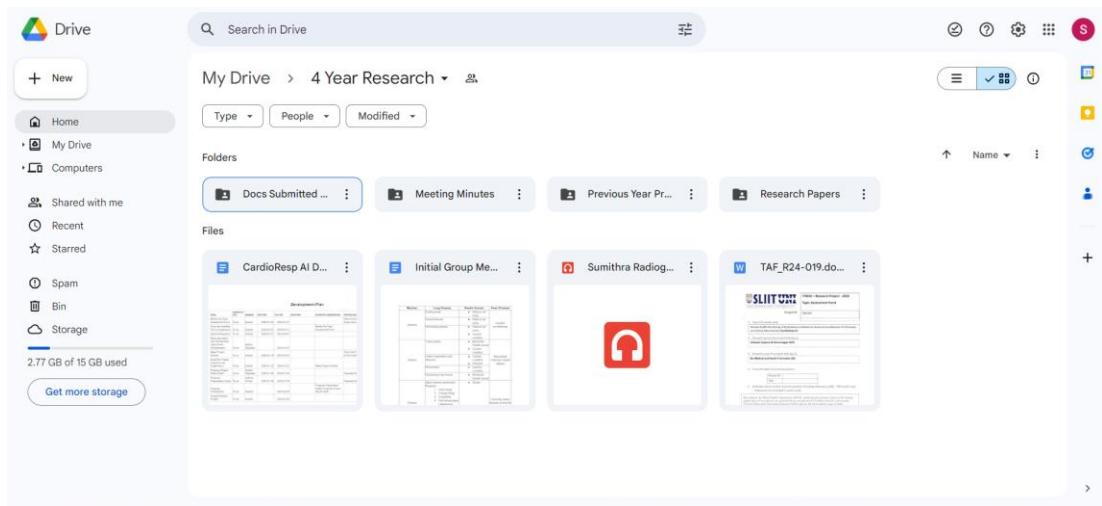


Figure 3 : Google Drive Folder

3. SCREENSHOTS OF THE TEAMS MEETING HISTORY

This screenshot shows a Microsoft Teams meeting history in a channel named "Research". The meeting is titled "BrainStorming Session 01" and was scheduled for Saturday, November 25, 2023, at 8:00 PM. The meeting ended at 8:35 PM on November 25, 2023, after 34m 51s. A user named Vihansa S.A.S it21134180 posted a message saying "Scheduled a meeting". There is one reply from the same user. The "Join" button is visible in the top right corner of the meeting card.

Figure 4 : Teams Meeting

This screenshot shows a Microsoft Teams meeting history in a channel named "Research". The meeting is titled "Research Topic Selection - Y4" and was scheduled for Monday, November 27, 2023, at 7:30 PM. The meeting ended at 9:09 PM on November 27, 2023, after 1h 39m 21s. A user named Vihansa S.A.S it21134180 posted a message with a link to an Instagram reel: <https://www.instagram.com/reel/Cy0s7uAsNQt/?igshid=NTYzOWQzMjMA==>. Another user responded with "Sorry, No doubts sir". The "Join" button is visible in the top right corner of the meeting card.

Figure 5 : Teams Meeting

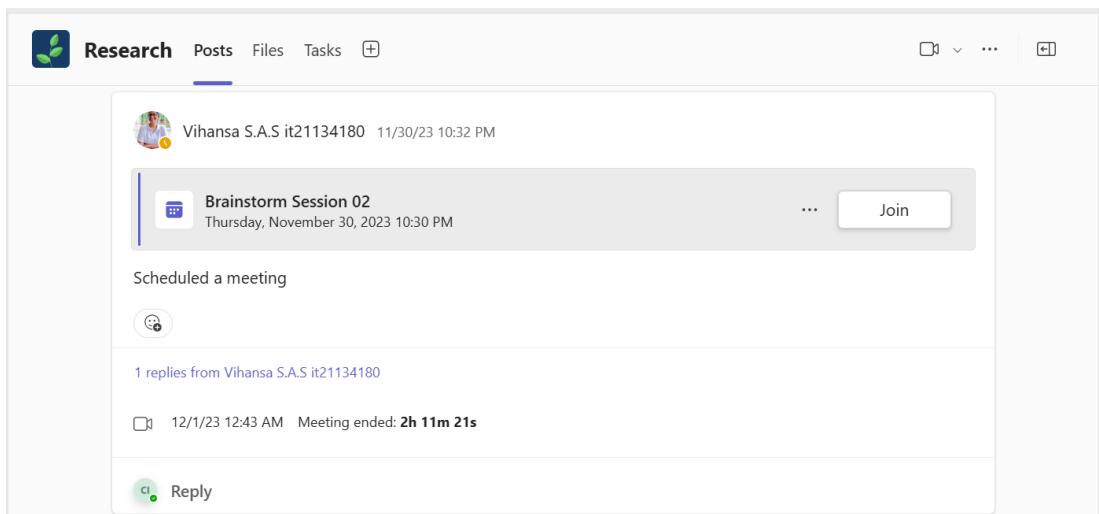


Figure 6 : Teams Meeting

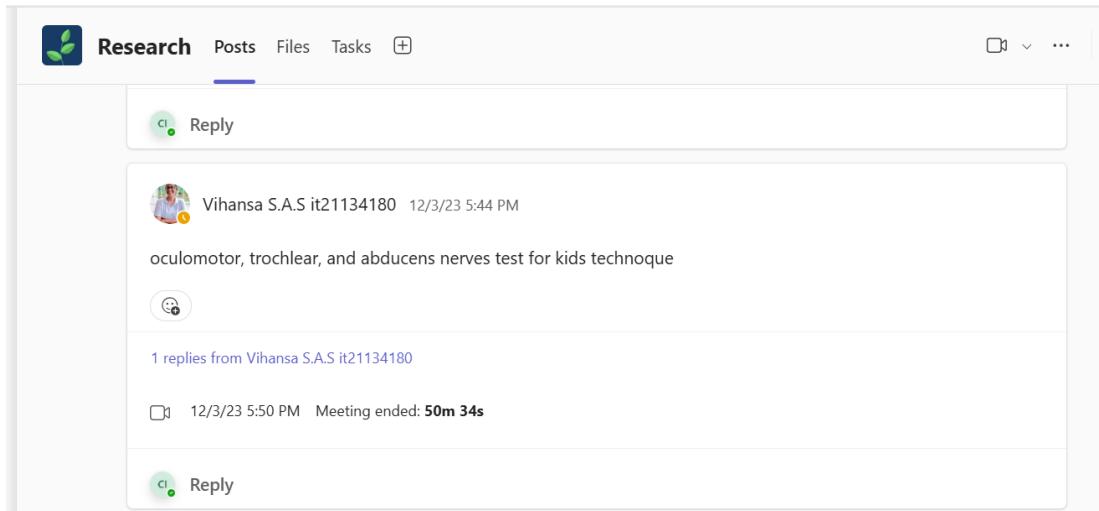


Figure 7 : Teams Meeting

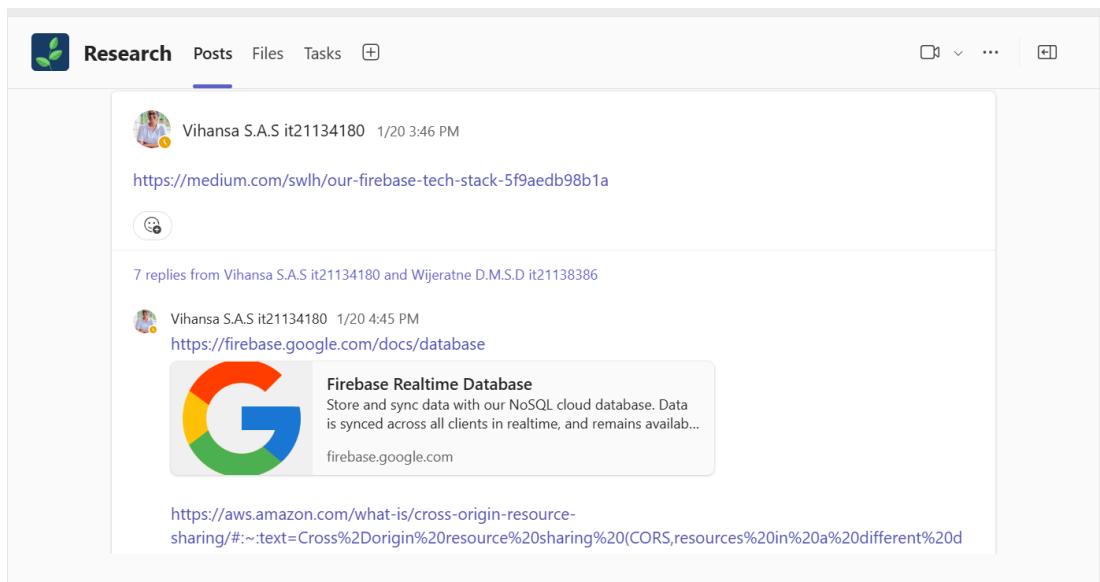


Figure 8: Teams Meeting

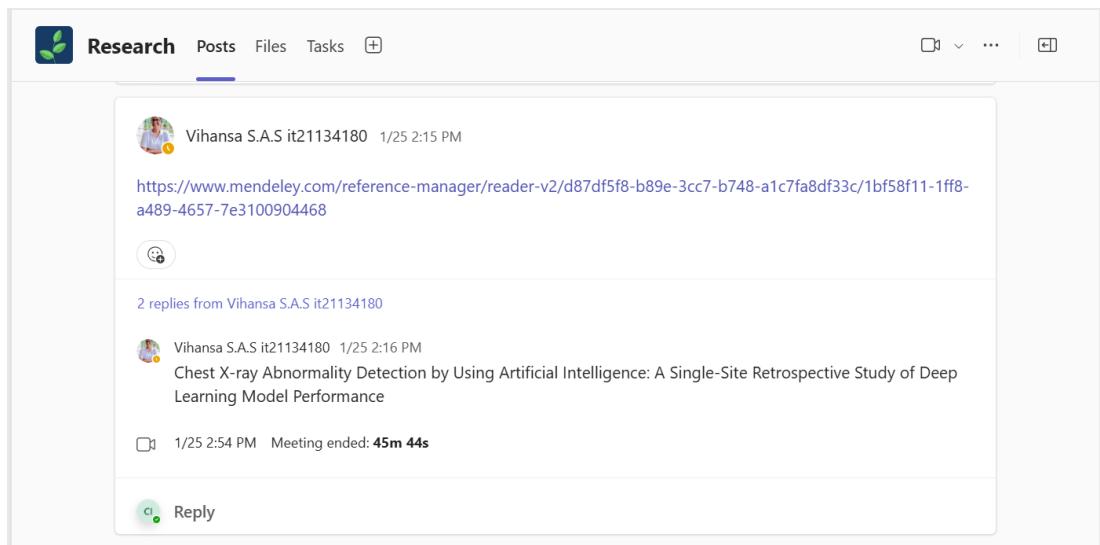


Figure 9: Teams Meeting

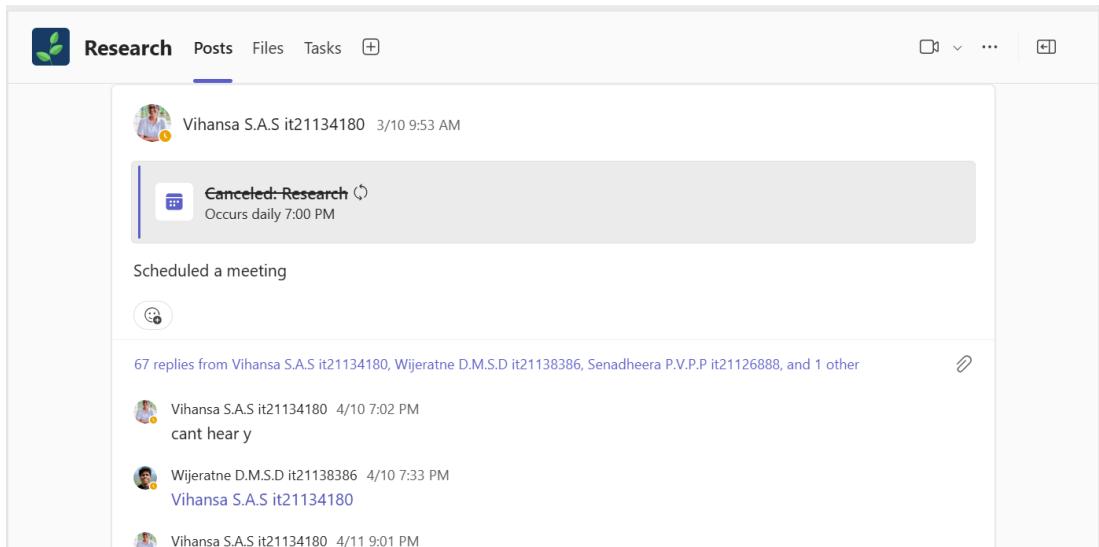


Figure 10: Teams Meeting

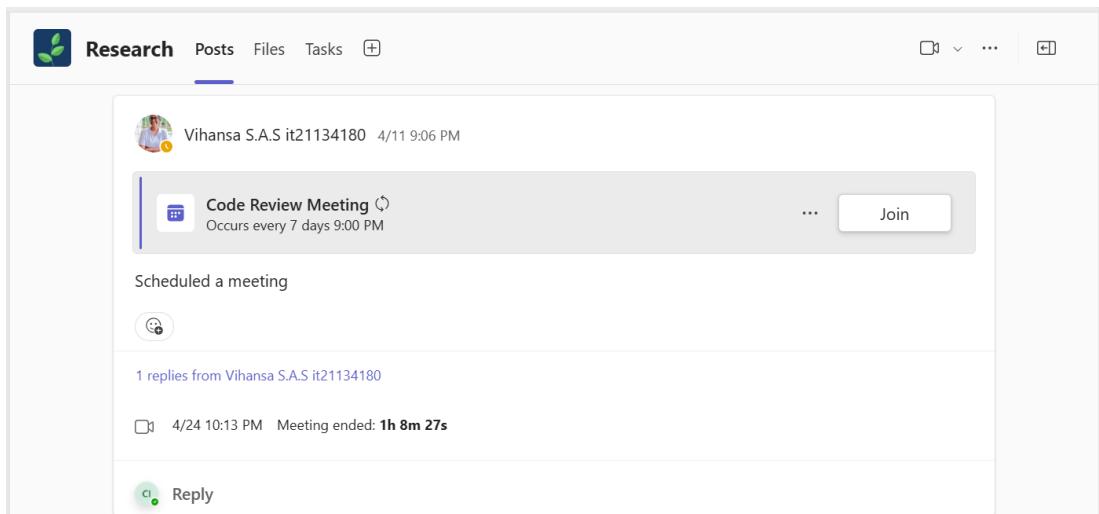


Figure 11: Teams Meeting

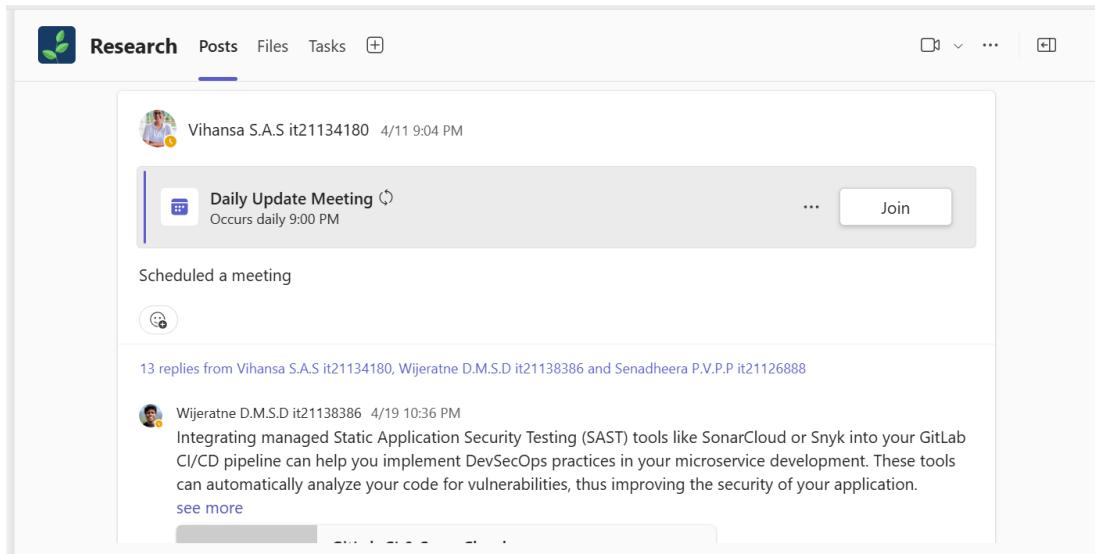


Figure 12: Teams Meeting

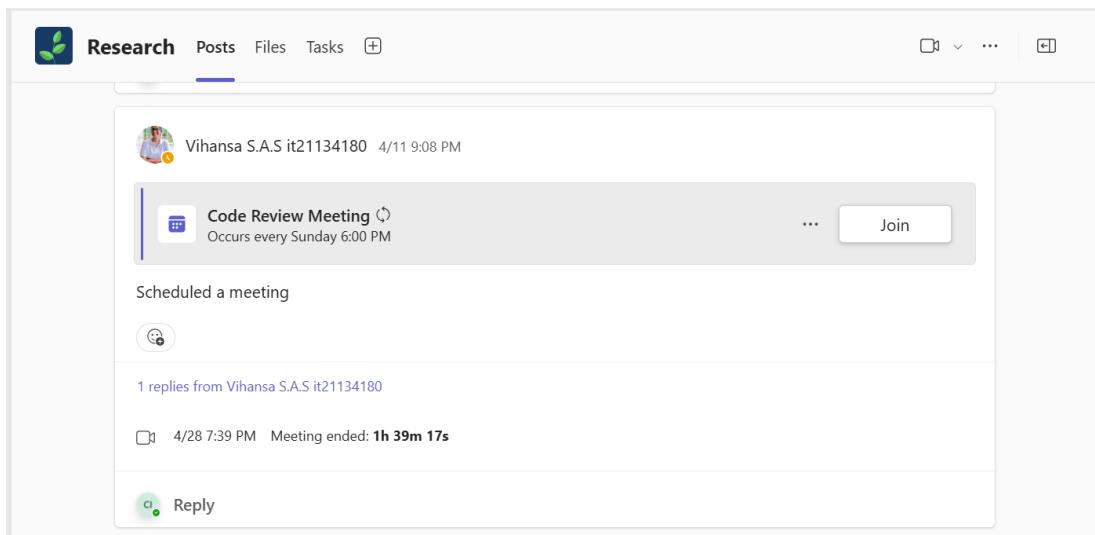


Figure 13: Teams Meeting

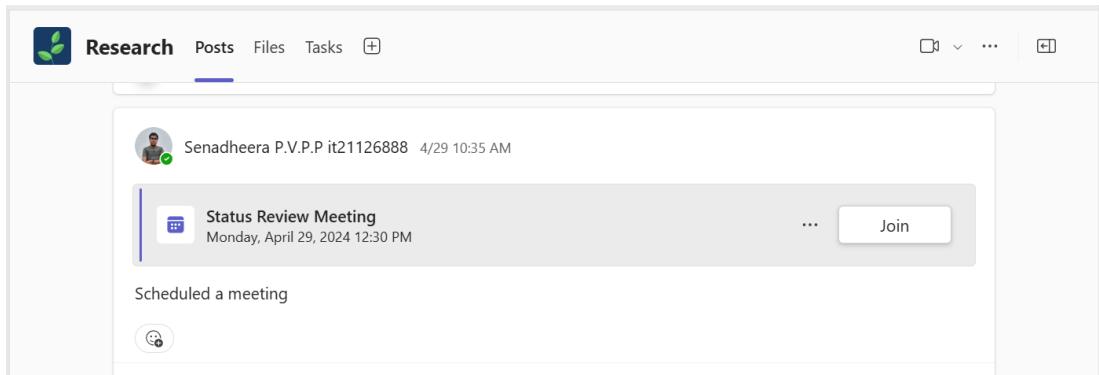


Figure 14: Teams Meeting

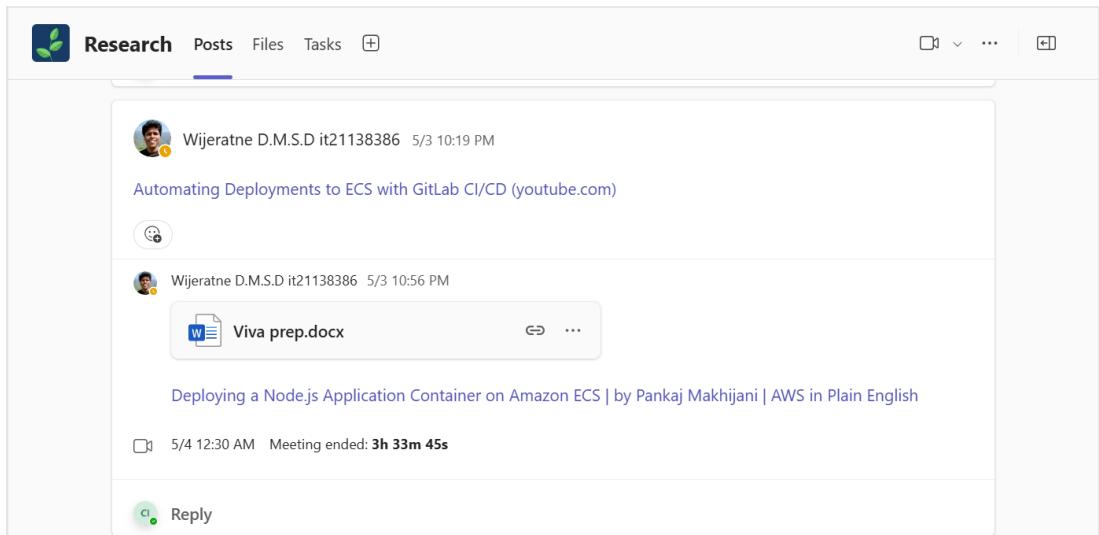


Figure 15: Teams Meeting

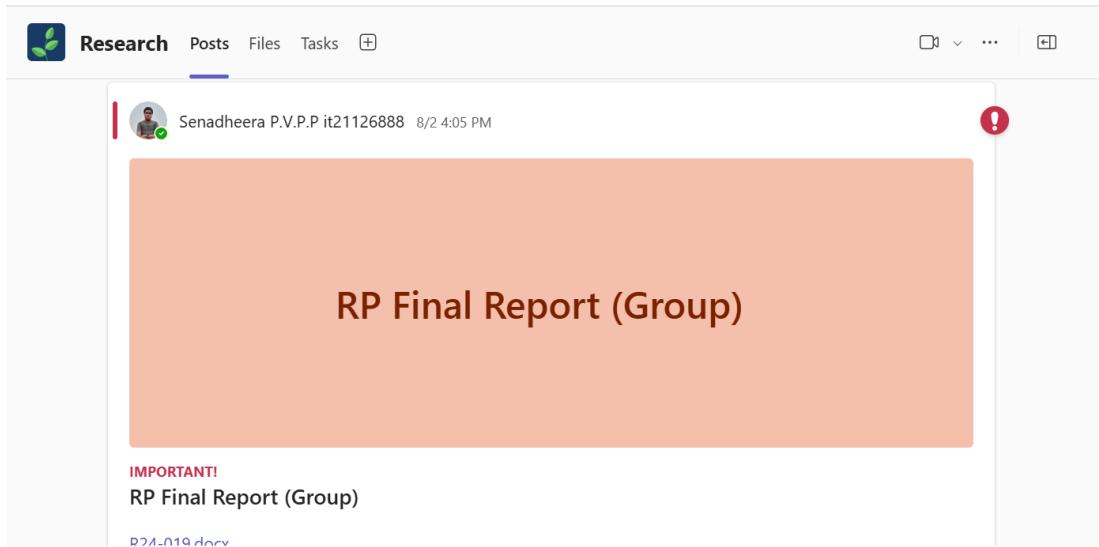


Figure 16: Teams Meeting

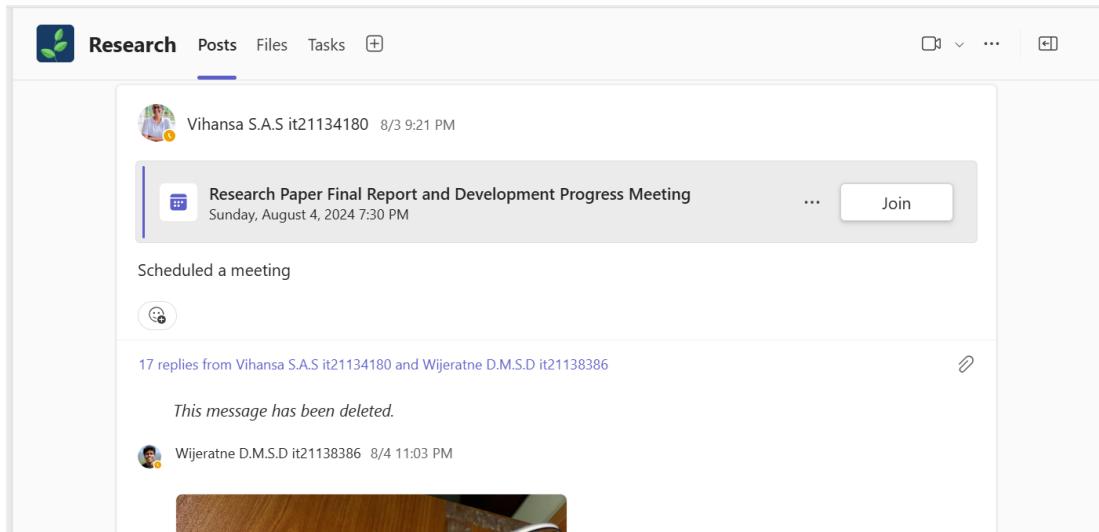


Figure 17: Teams Meeting

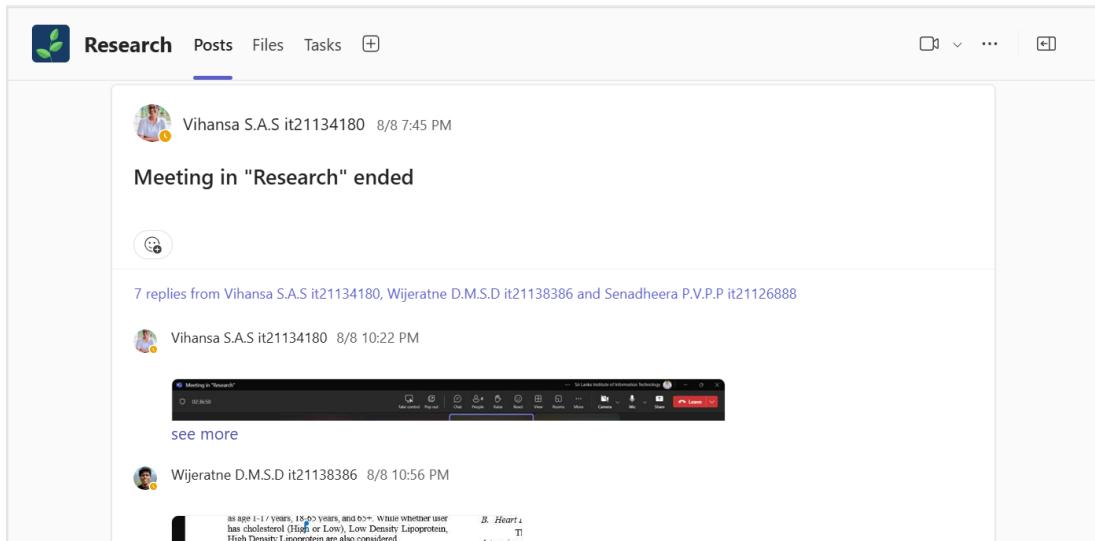


Figure 18: Teams Meeting

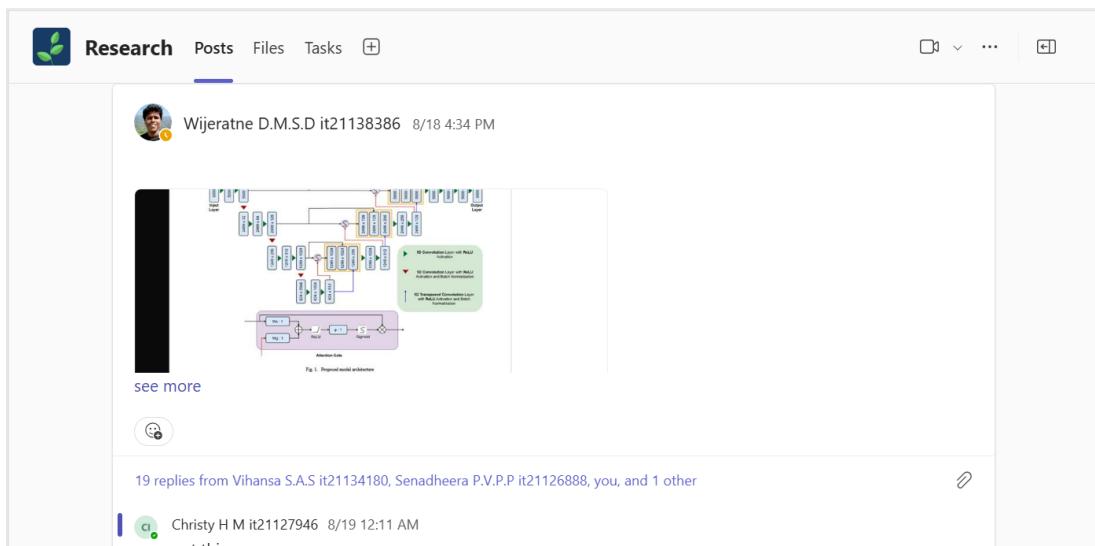


Figure 19: Teams Meeting

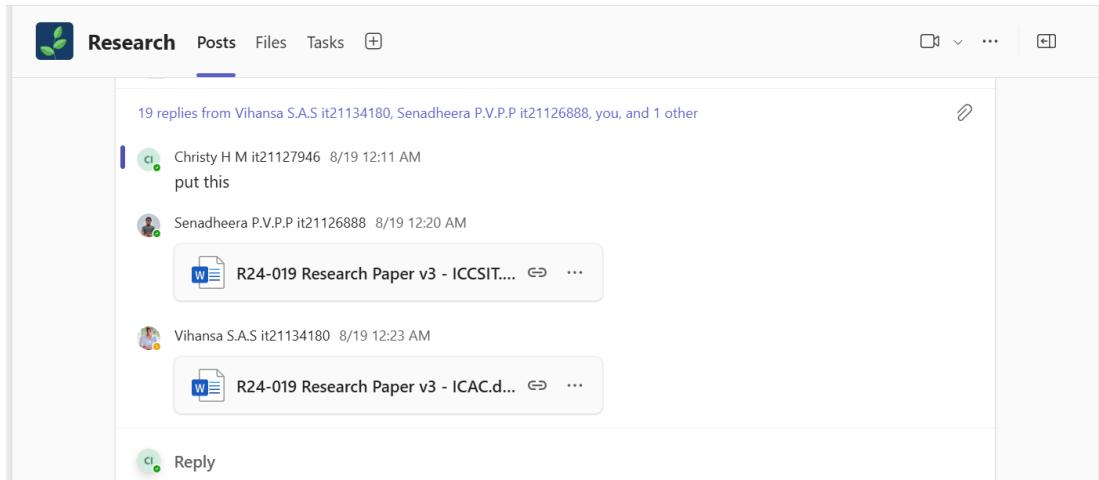


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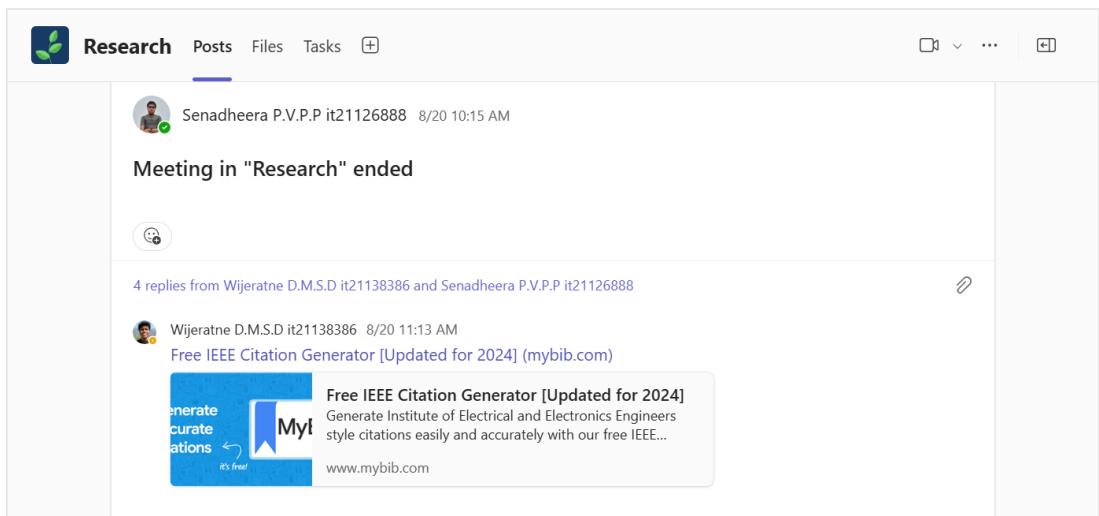


Figure 21: Teams Meeting

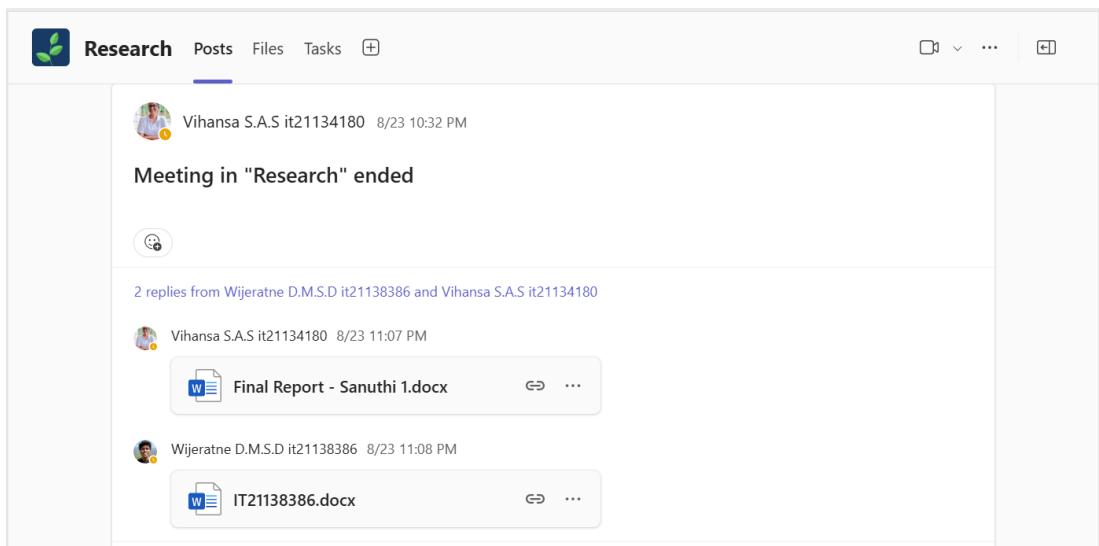


Figure 22: Teams Meeting

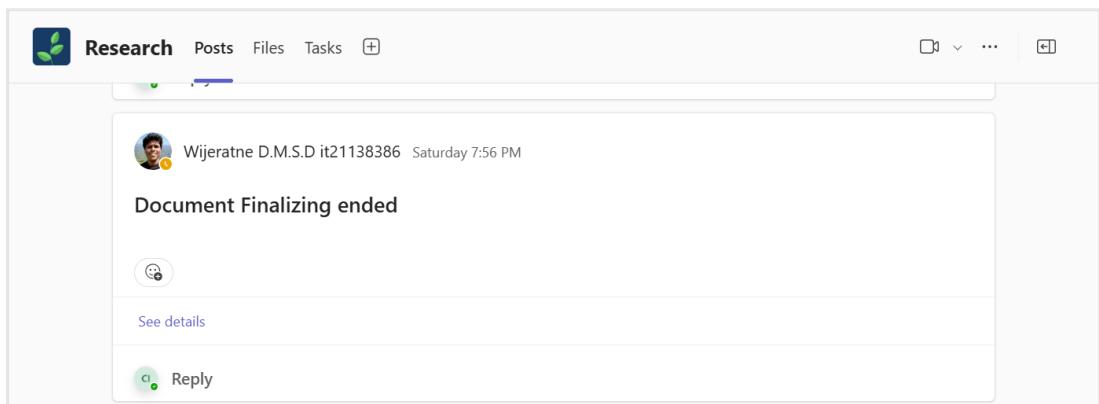


Figure 23: Teams Meeting

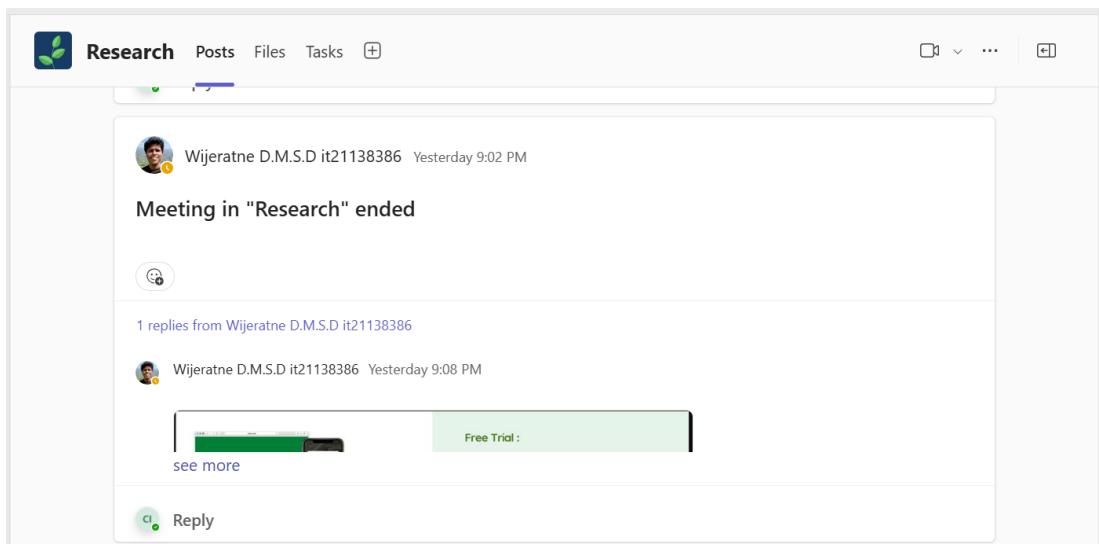


Figure 24: Teams Meeting

4. SCREENSHOTS OF THE WHATSAPP GROUP

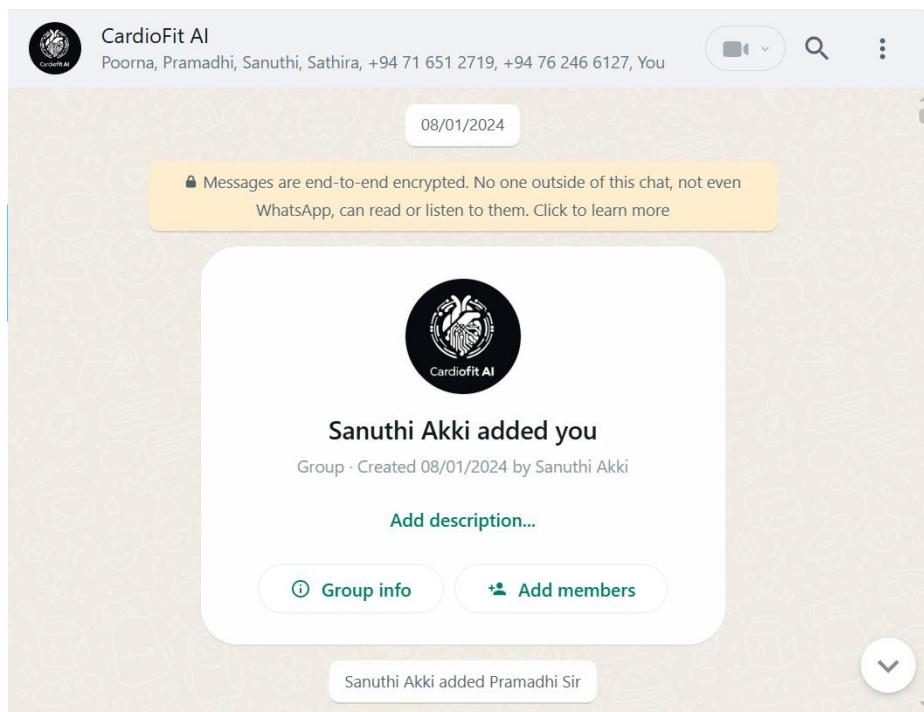


Figure 25: Whatsapp Chat

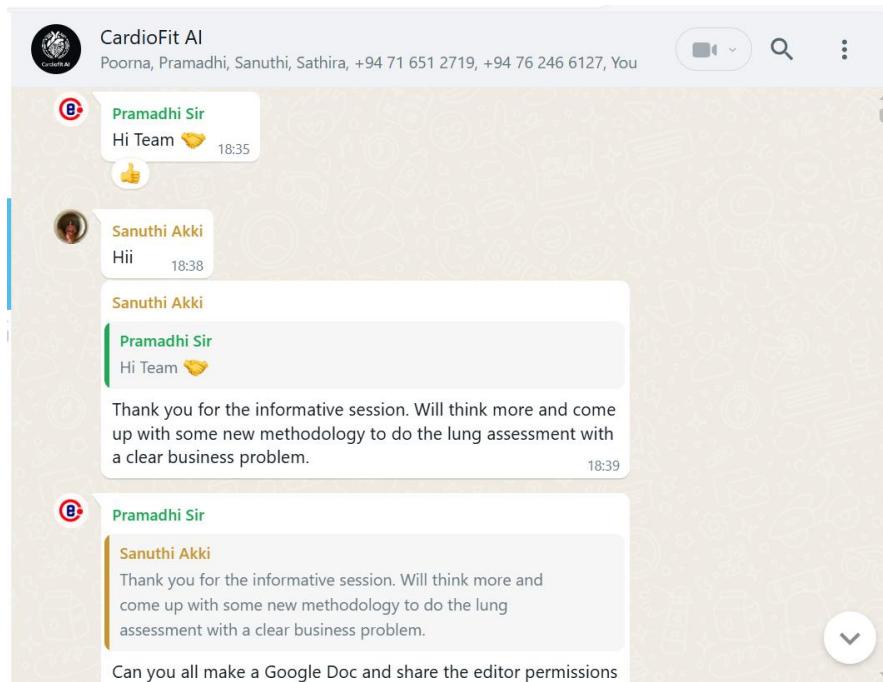


Figure 26: WhatsApp Chat

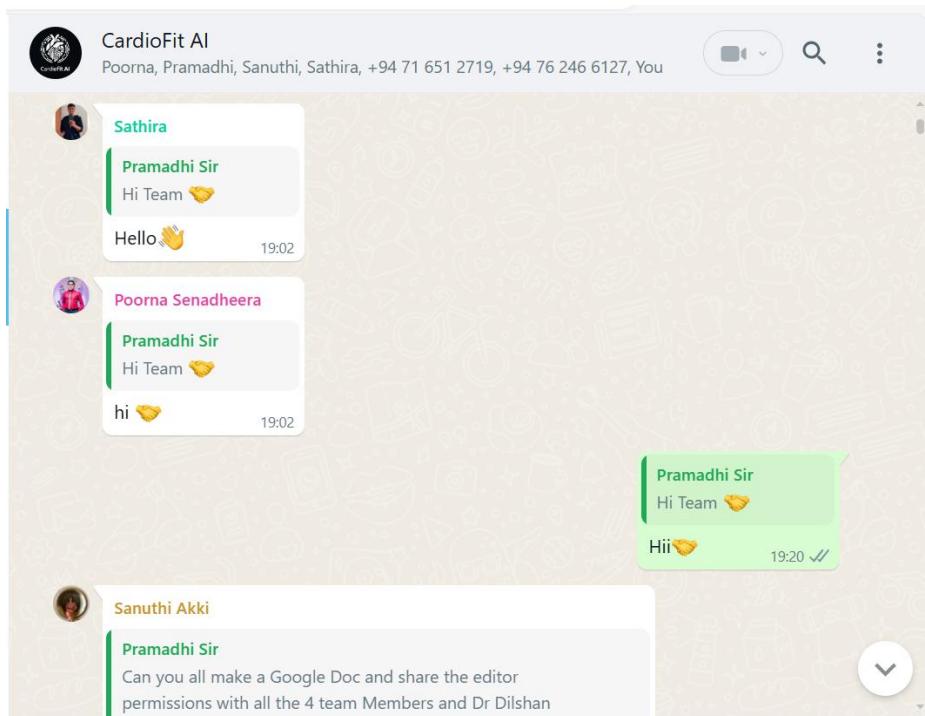


Figure 27: WhatsApp Chat

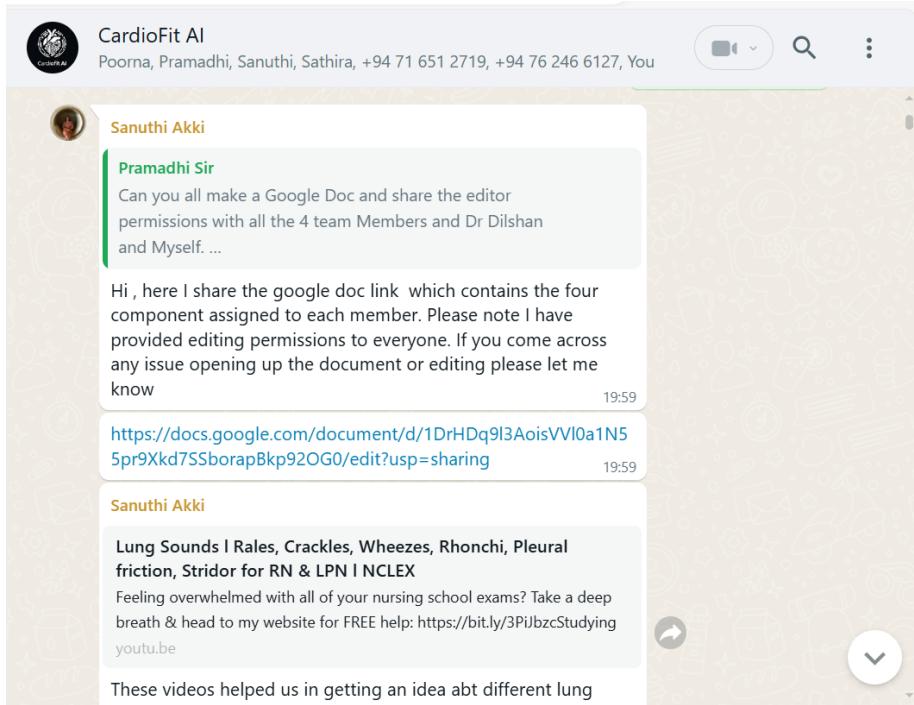


Figure 28: WhatsApp Chat

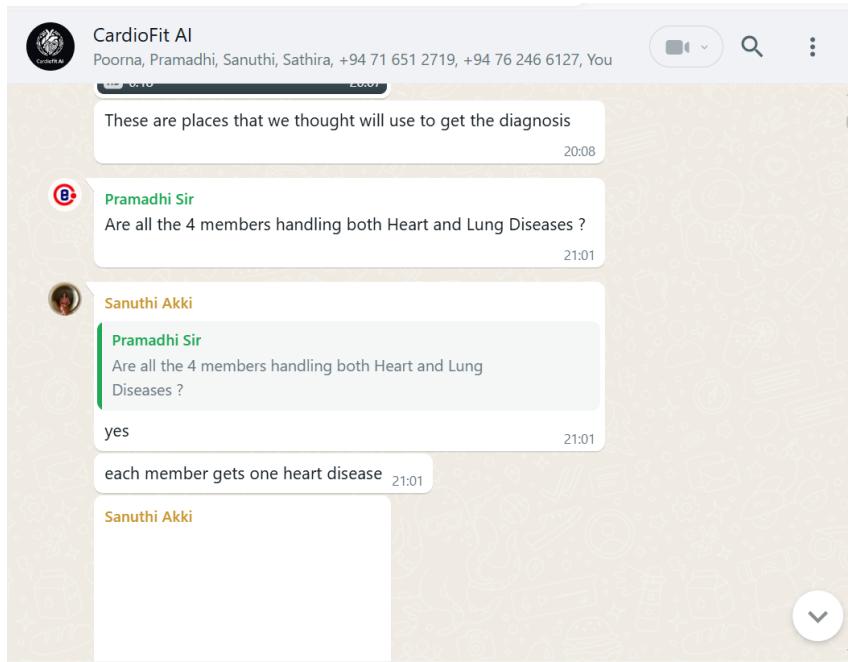


Figure 29: WhatsApp Chat

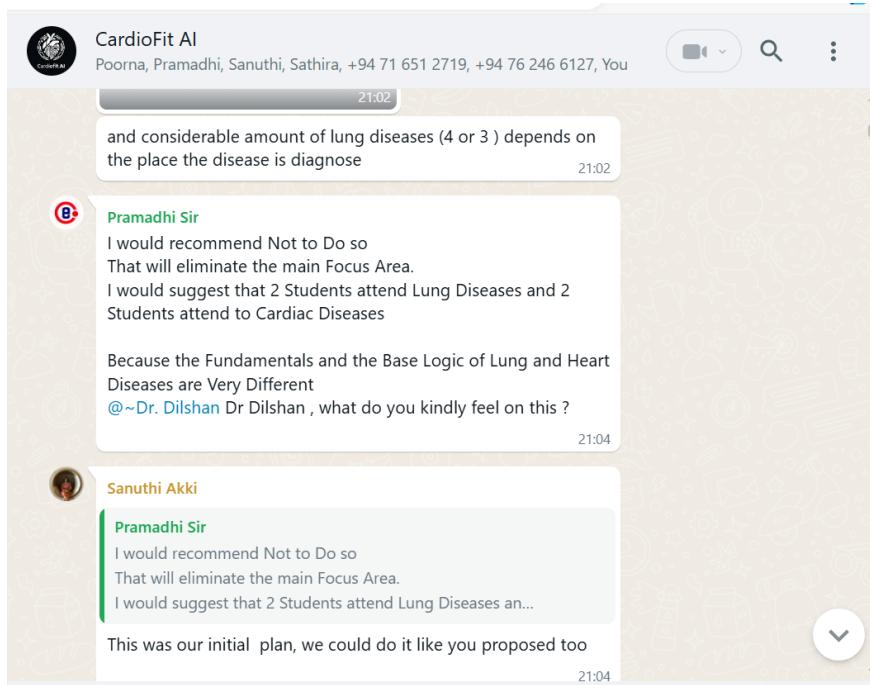


Figure 30: WhatsApp Chat

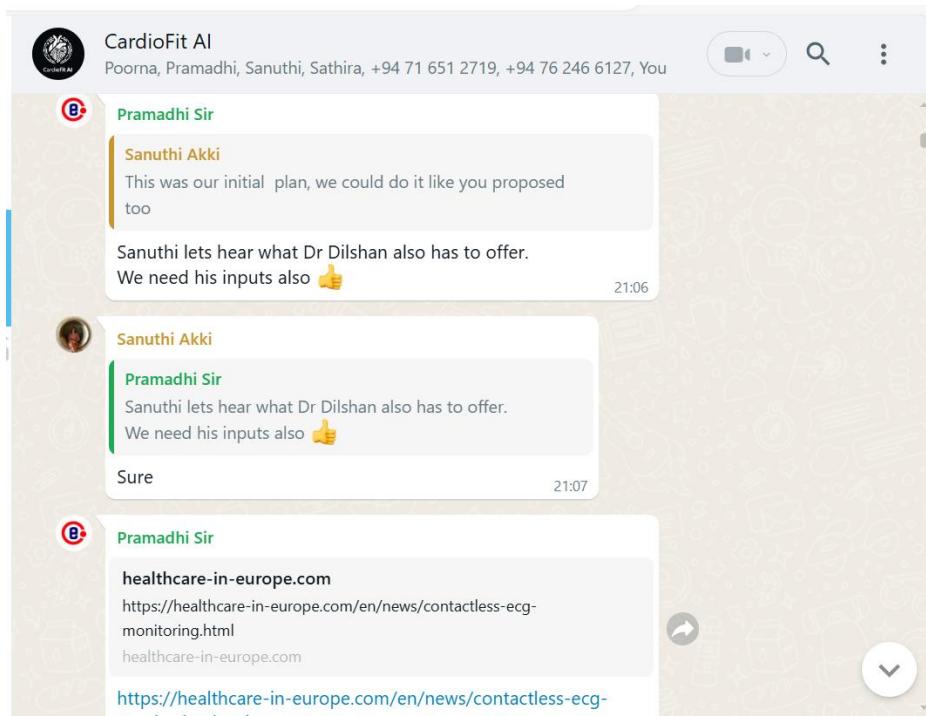


Figure 31: WhatsApp Chat

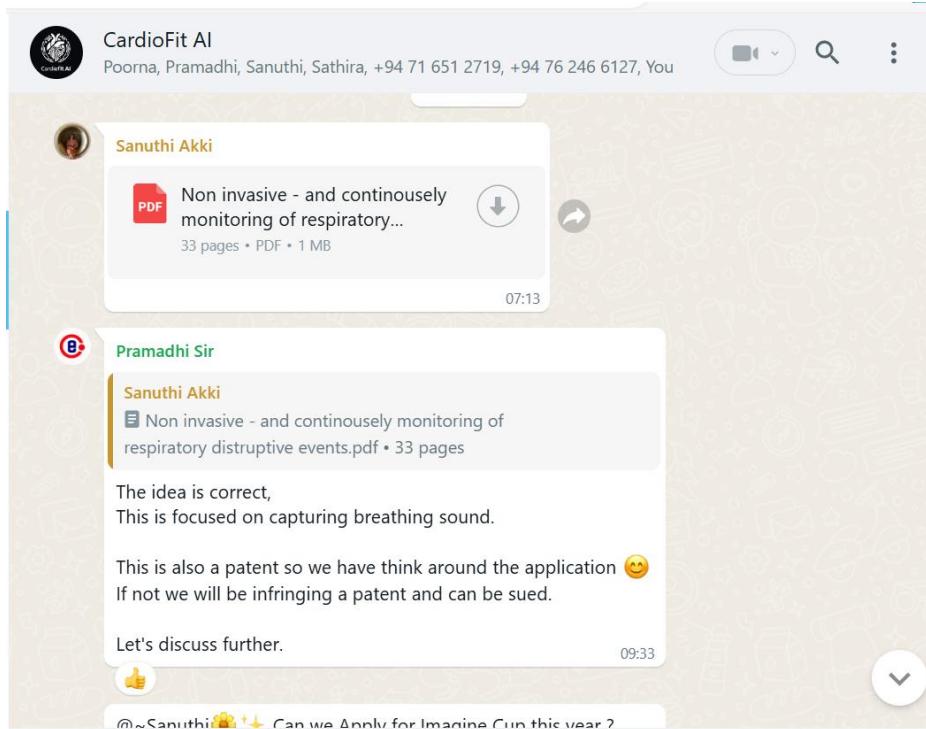


Figure 32: WhatsApp Chat

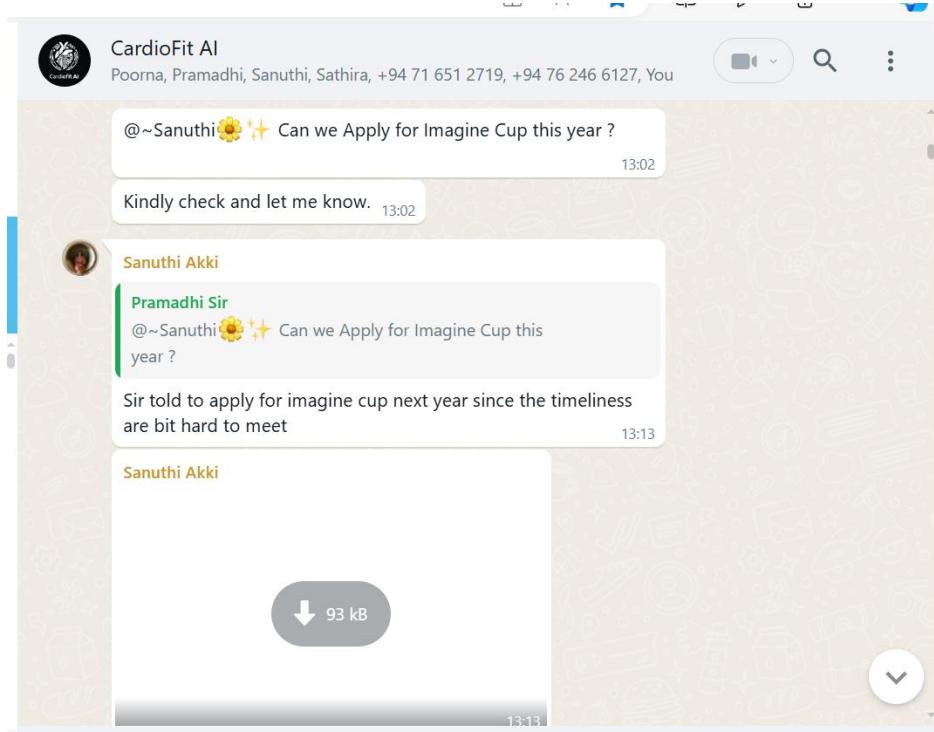


Figure 33: WhatsApp Chat

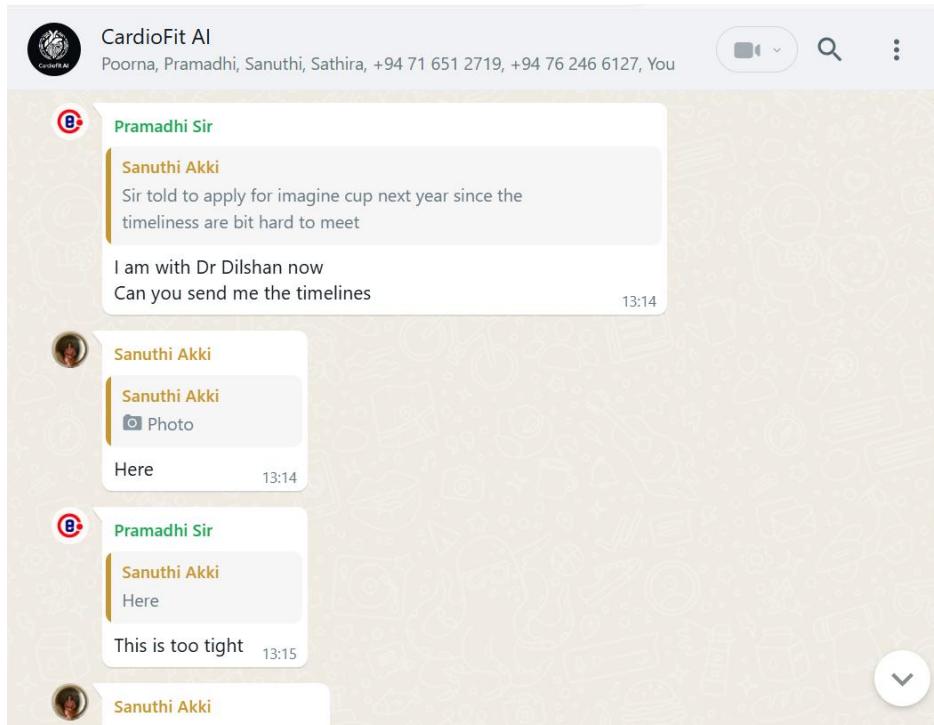


Figure 34: WhatsApp Chat

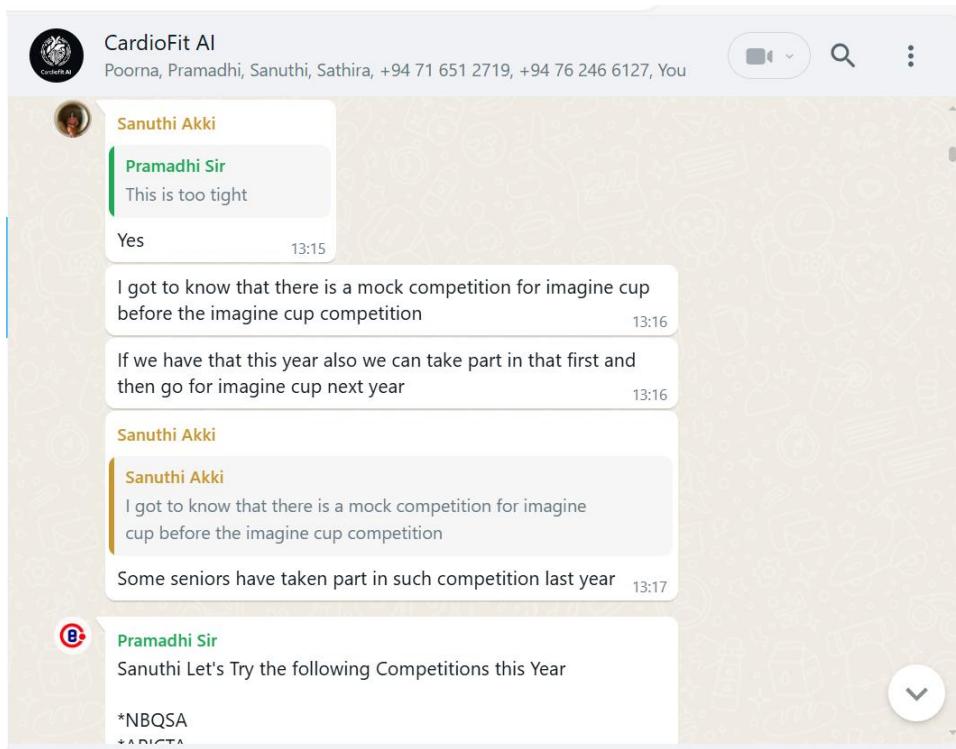


Figure 35: WhatsApp Chat

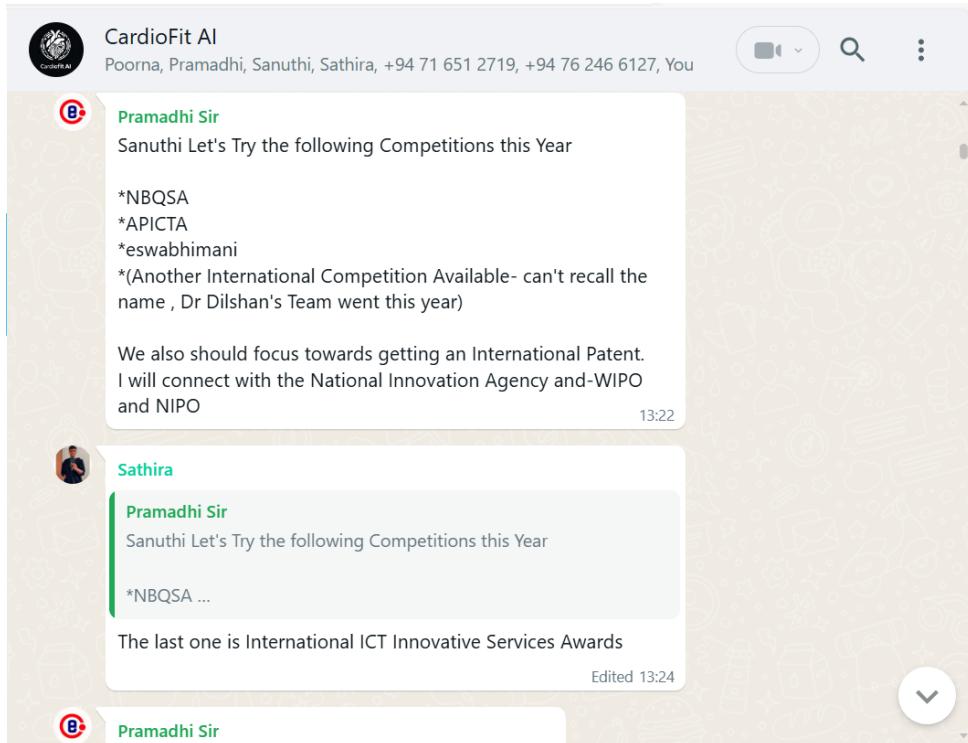


Figure 36: WhatsApp Chat

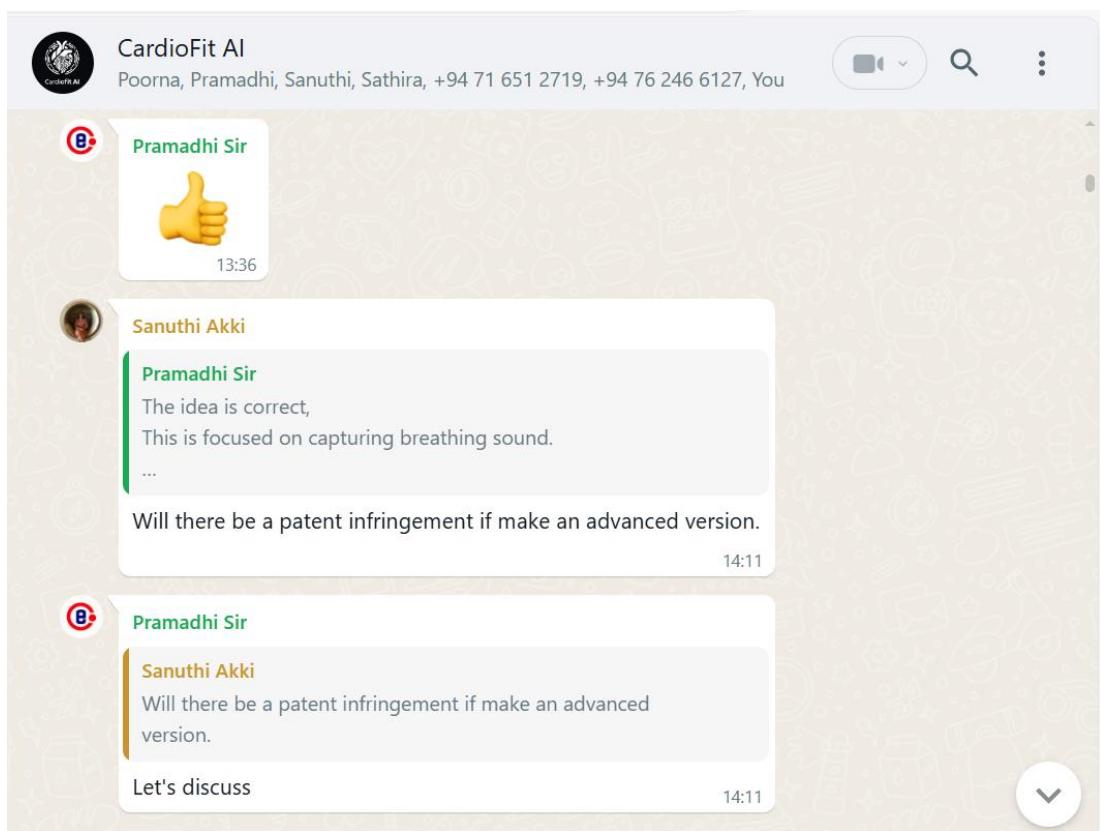


Figure 37: WhatsApp Chat

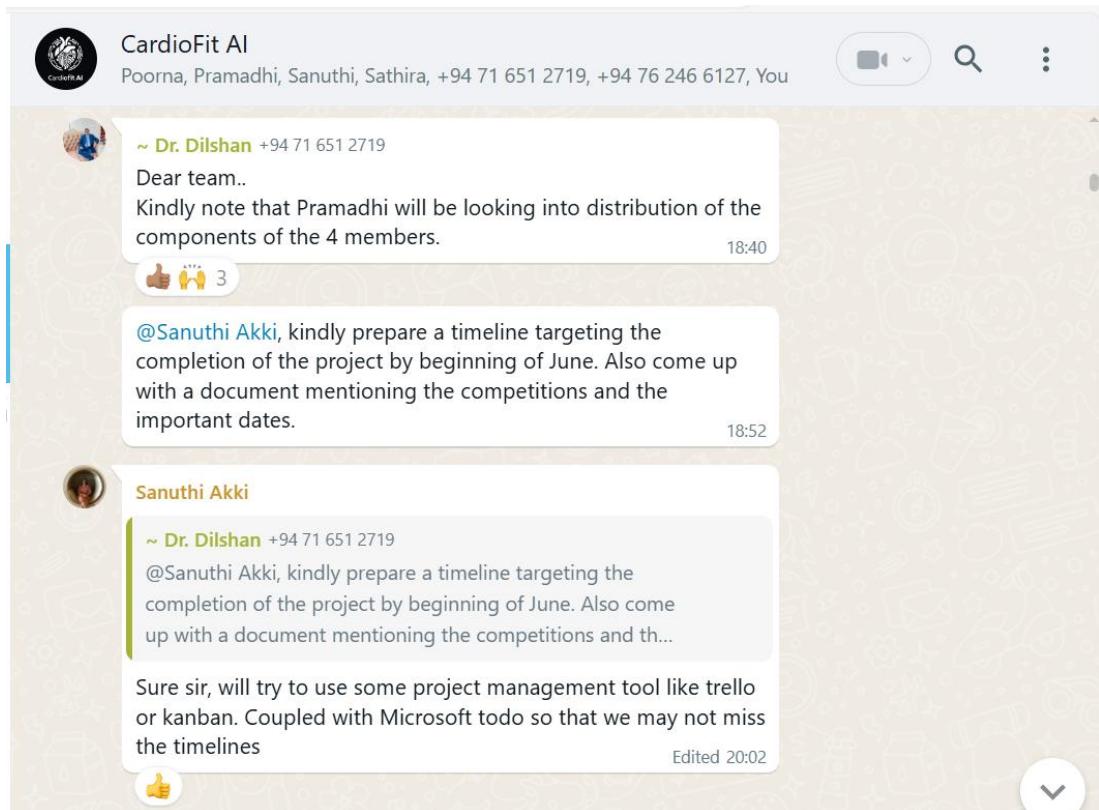


Figure 38: WhatsApp Chat

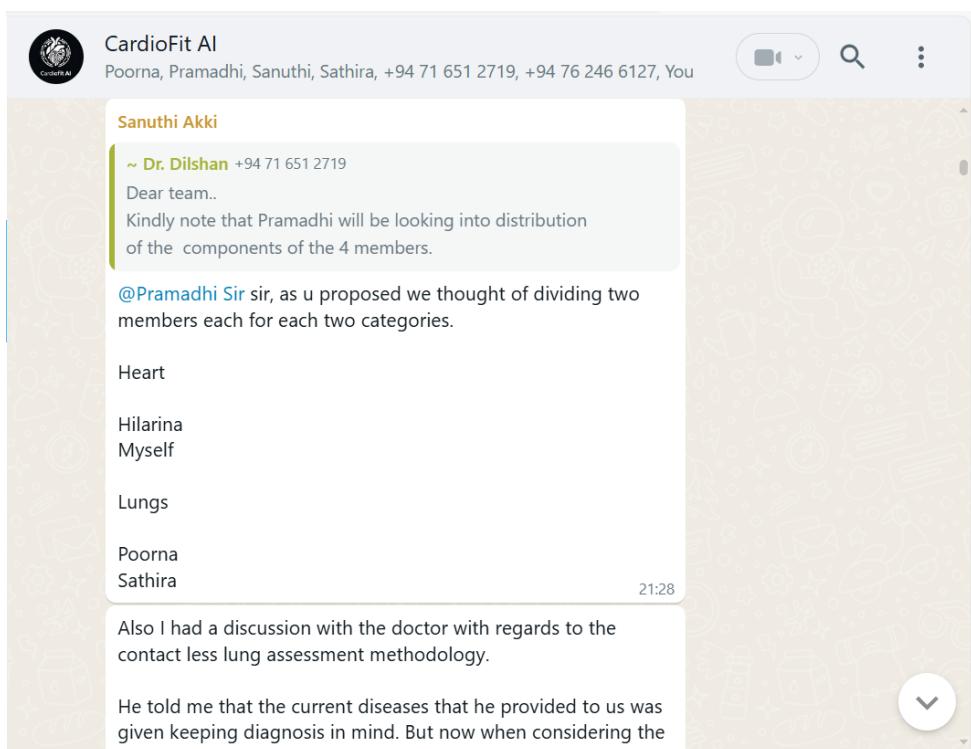


Figure 39: WhatsApp Chat

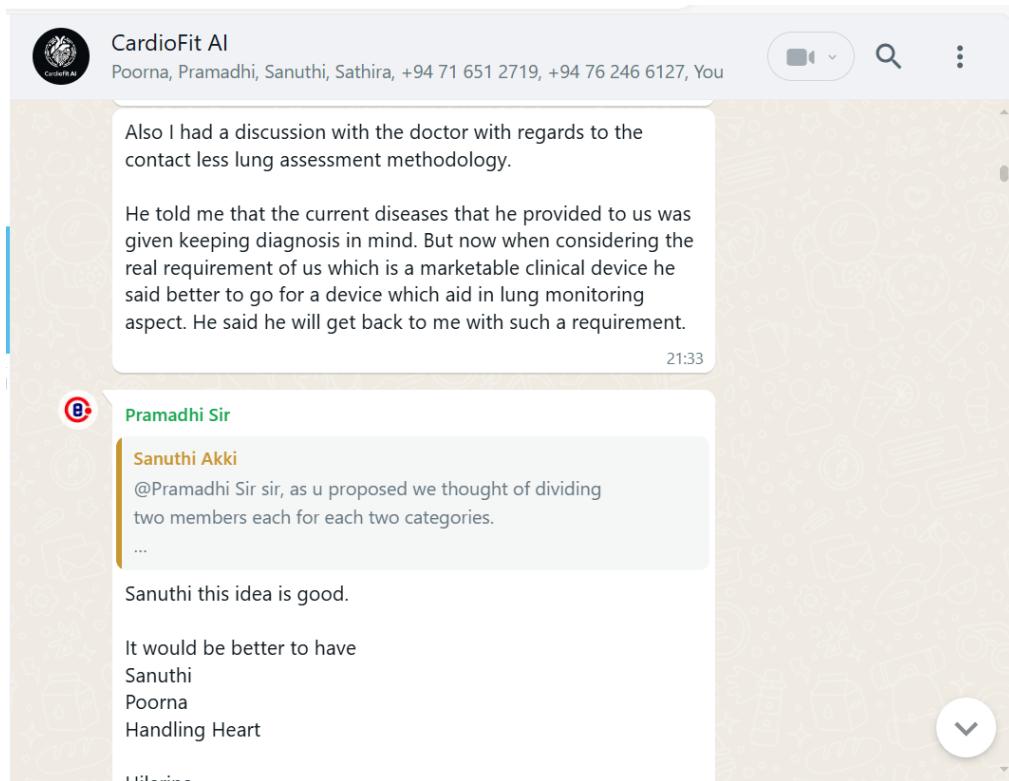


Figure 40: WhatsApp Chat

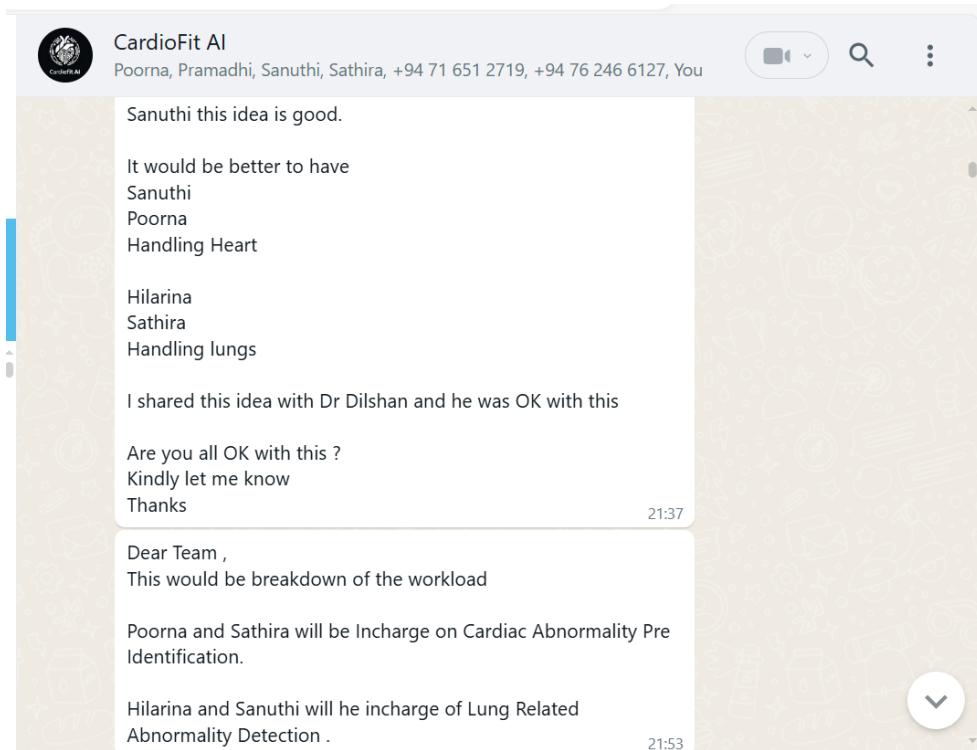


Figure 41: WhatsApp Chat

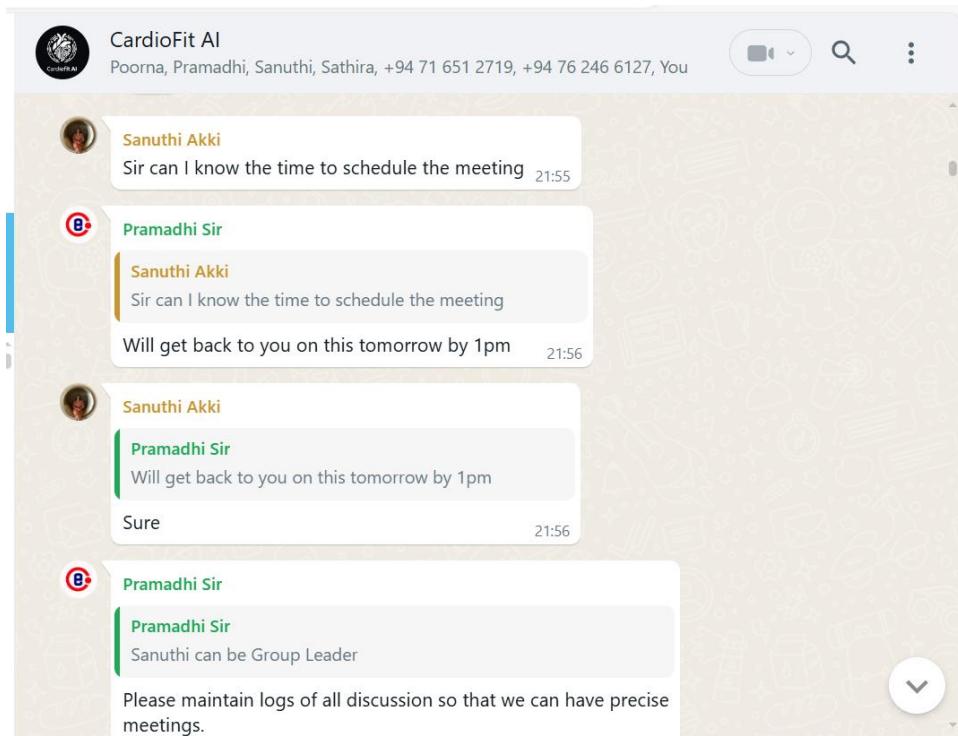


Figure 42: WhatsApp Chat

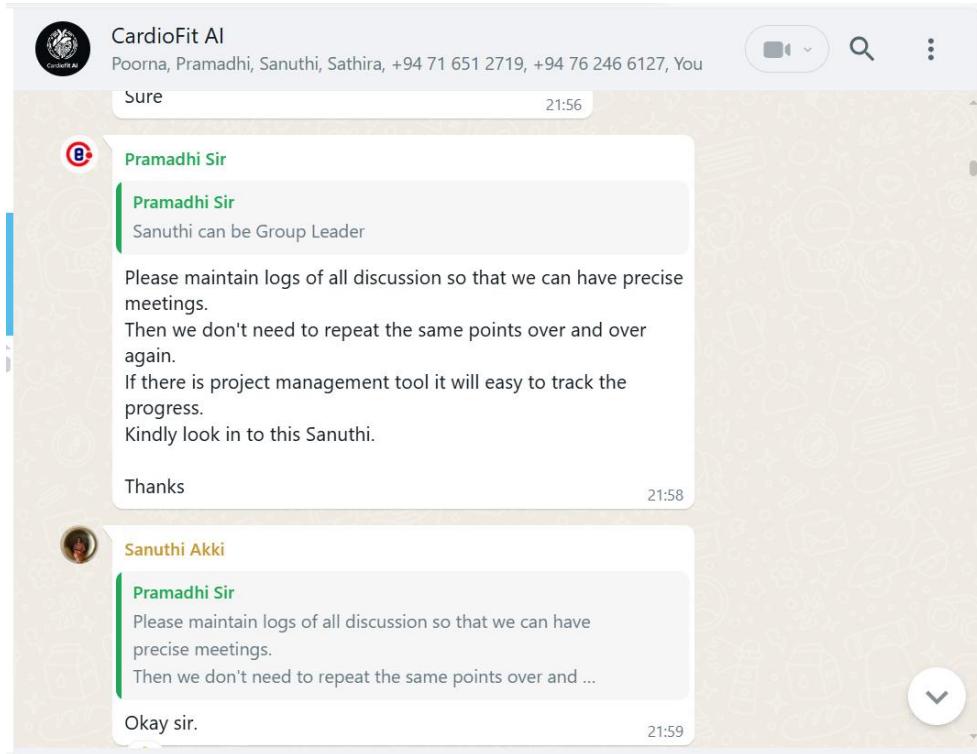


Figure 43: WhatsApp Chat

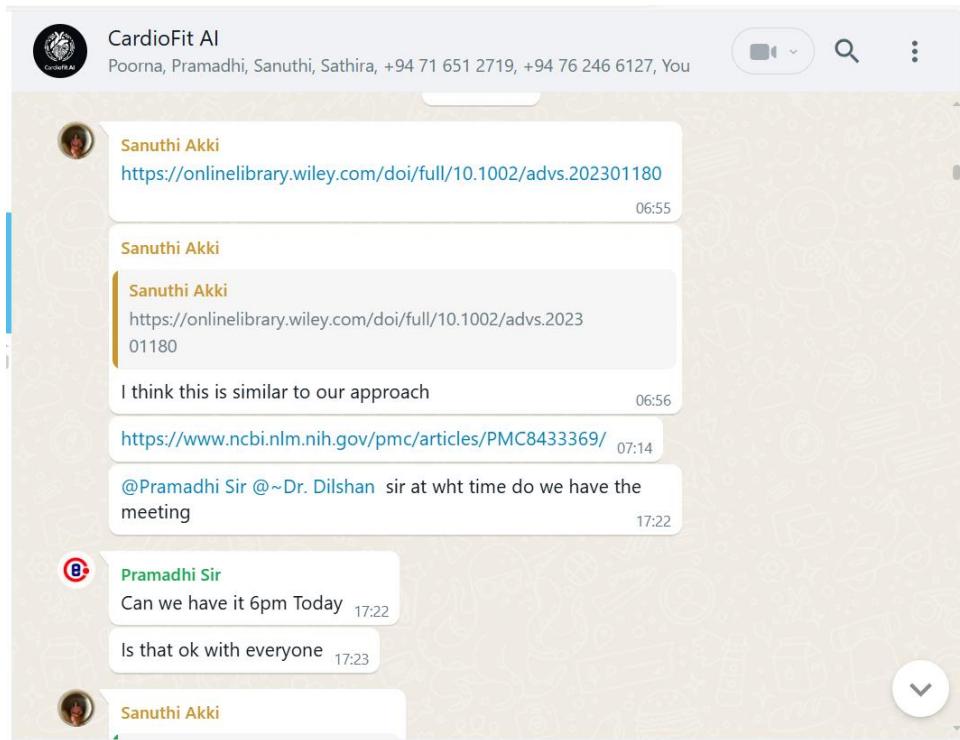


Figure 44: WhatsApp Chat

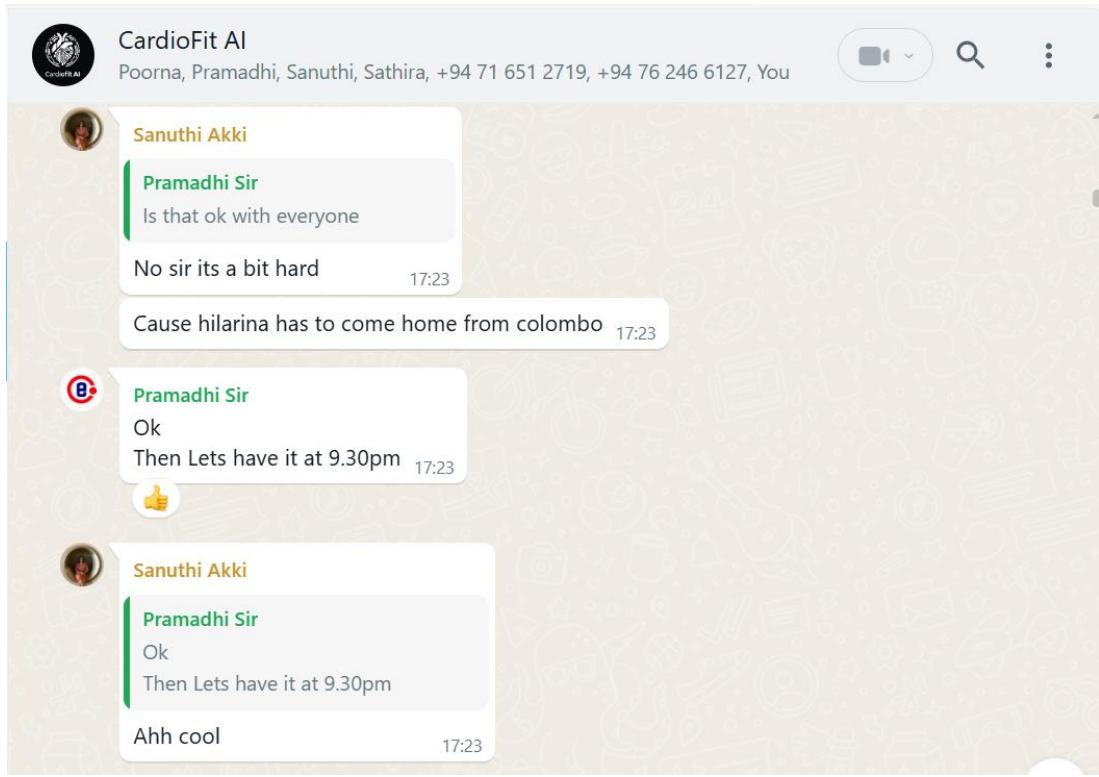


Figure 45: WhatsApp Chat

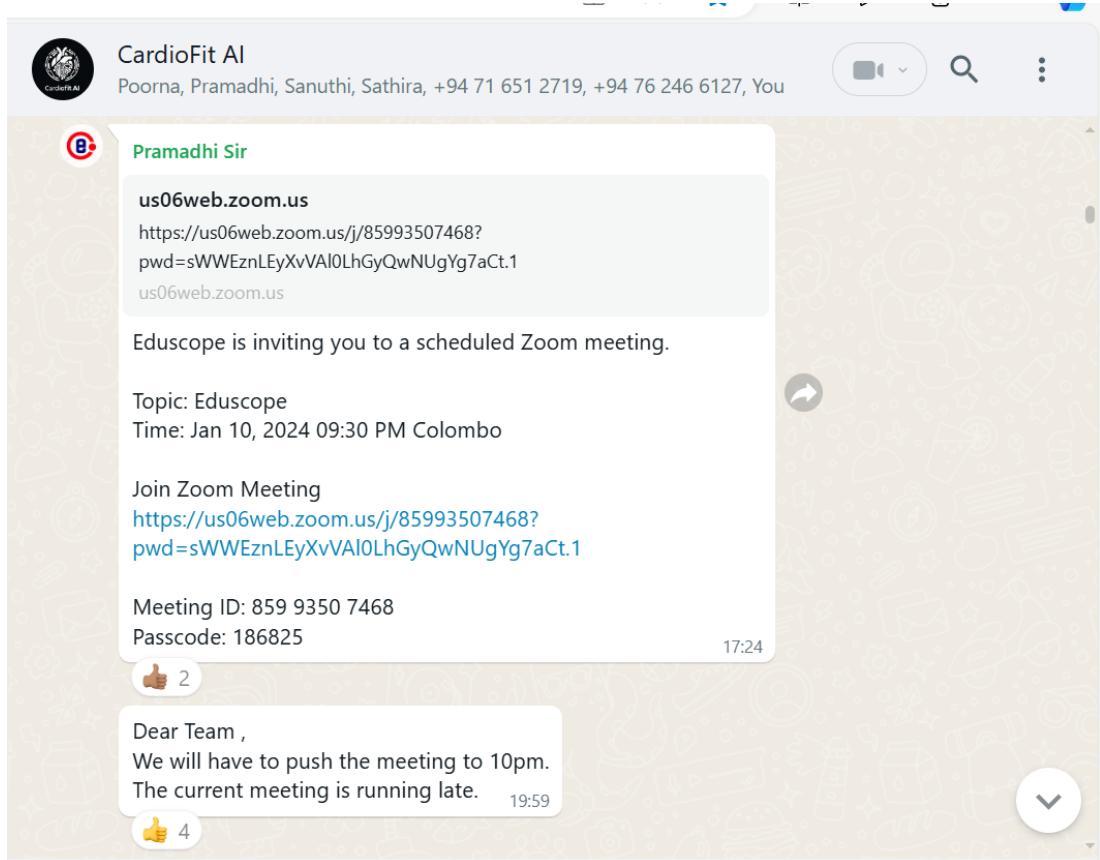


Figure 46: WhatsApp Chat

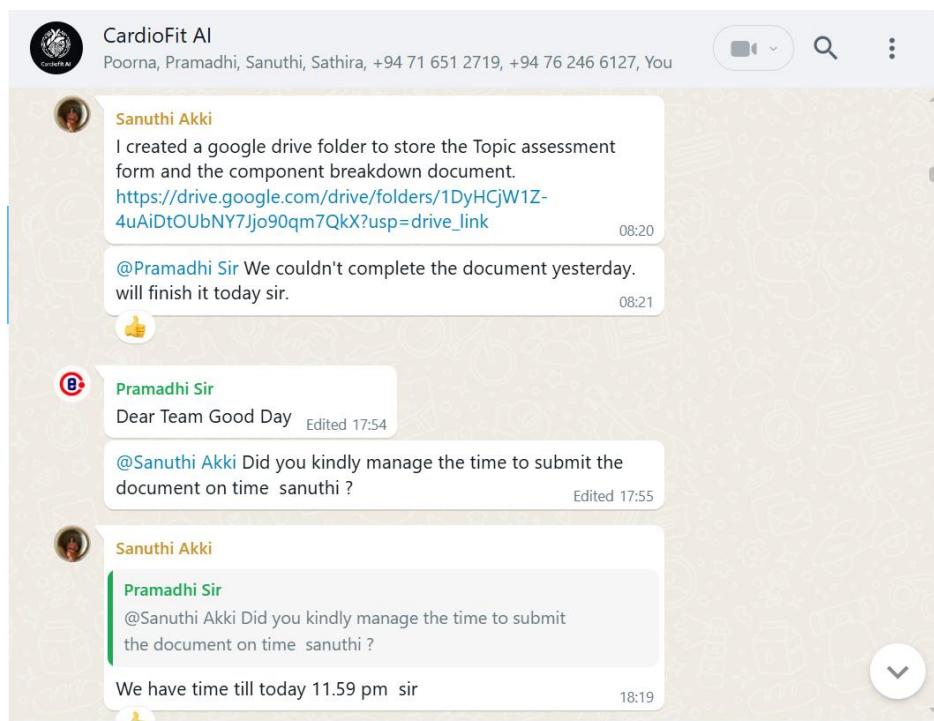


Figure 47: WhatsApp Chat

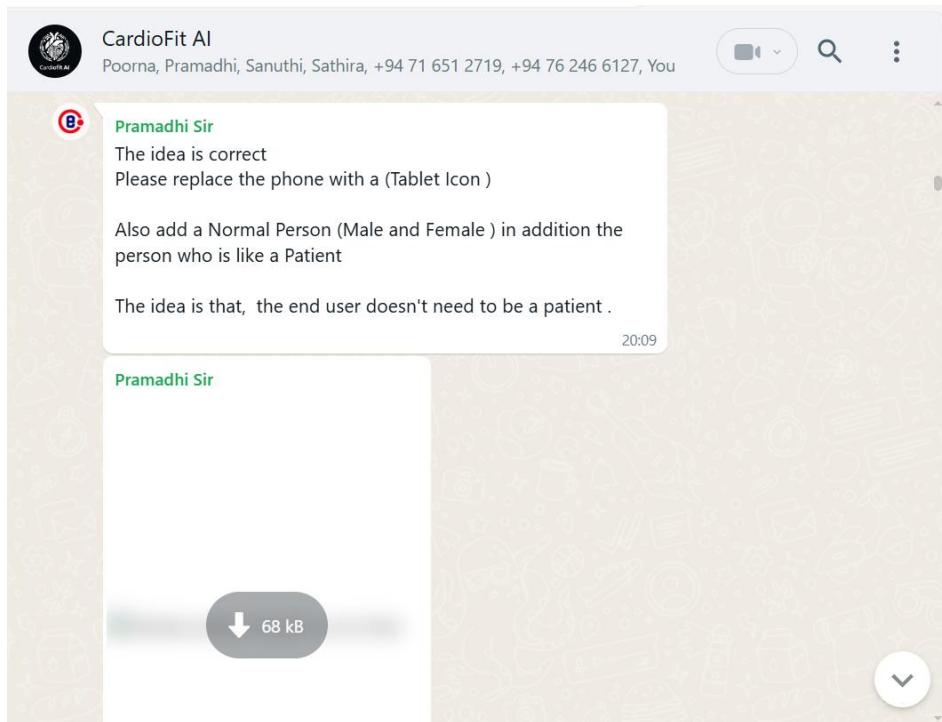


Figure 48: WhatsApp Chat

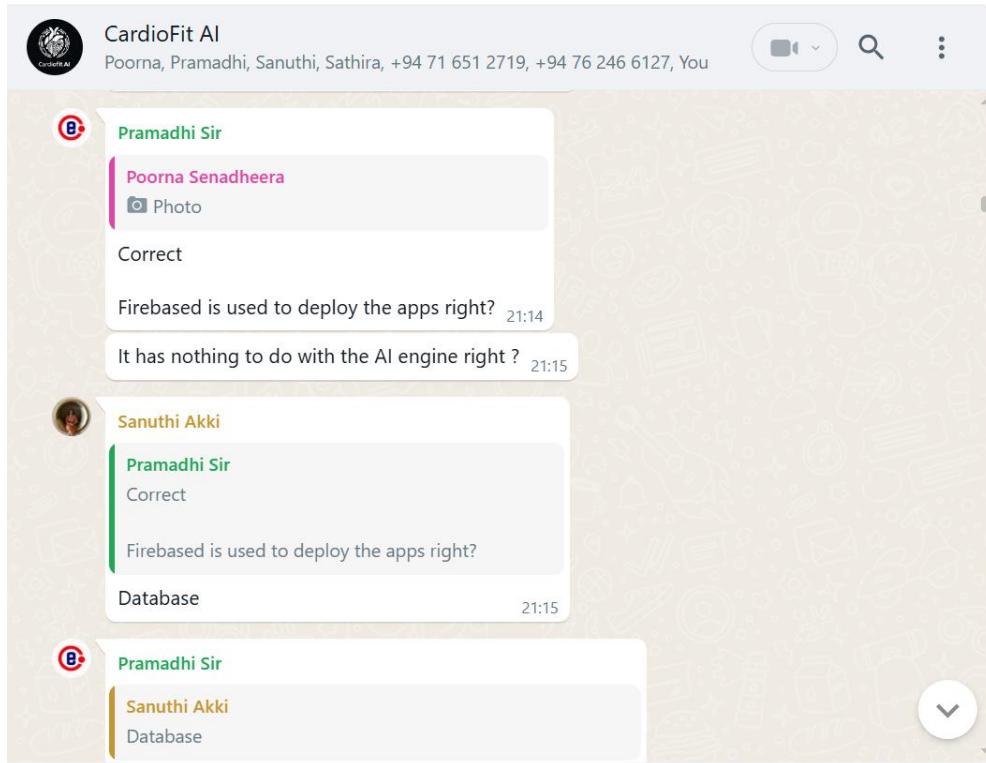


Figure 49: WhatsApp Chat

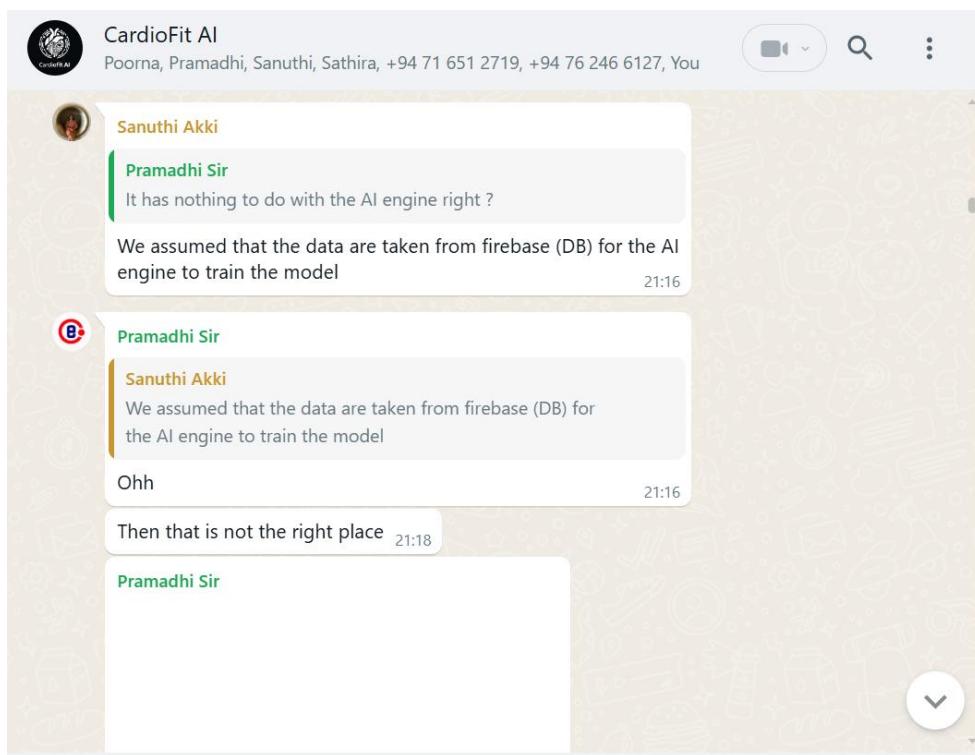


Figure 50: WhatsApp Chat

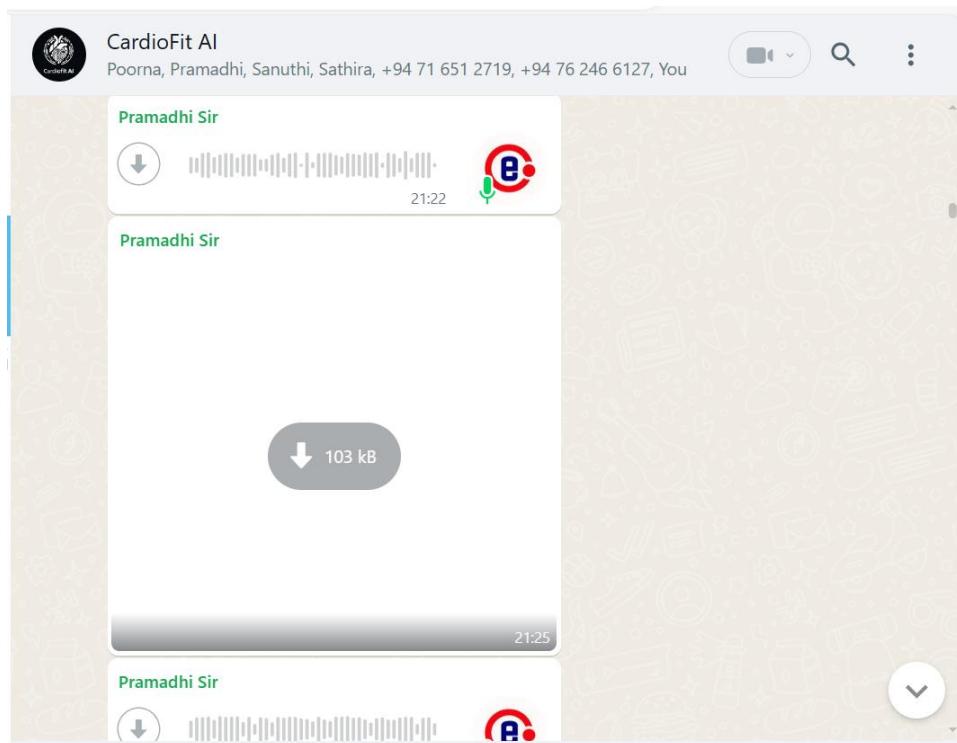


Figure 51: WhatsApp Chat

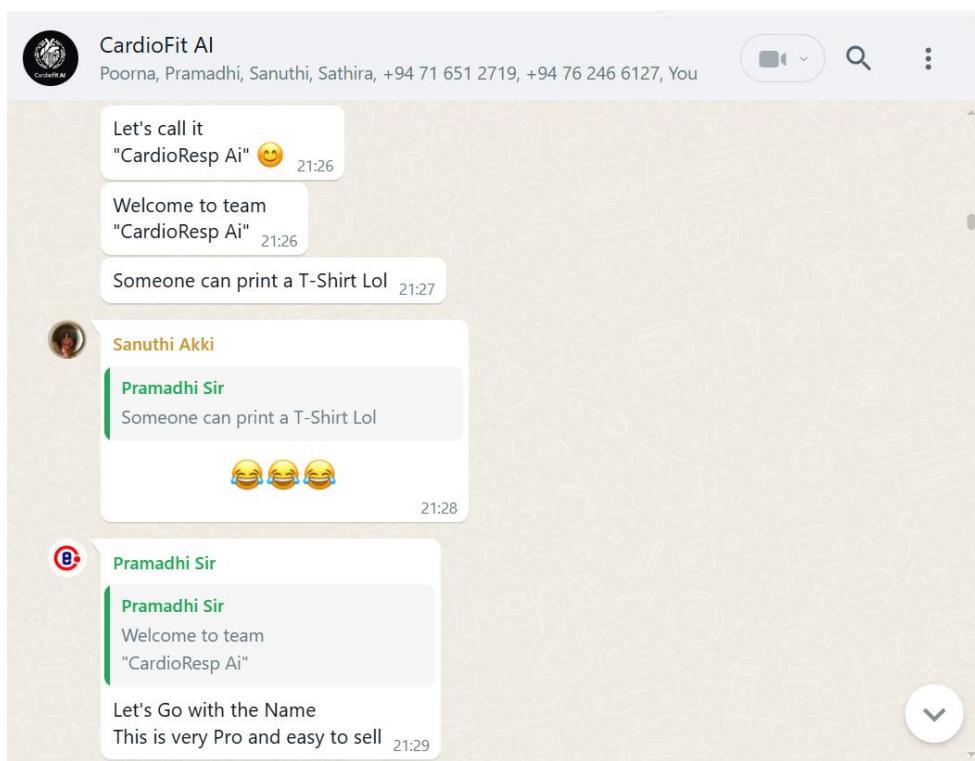


Figure 52: WhatsApp Chat

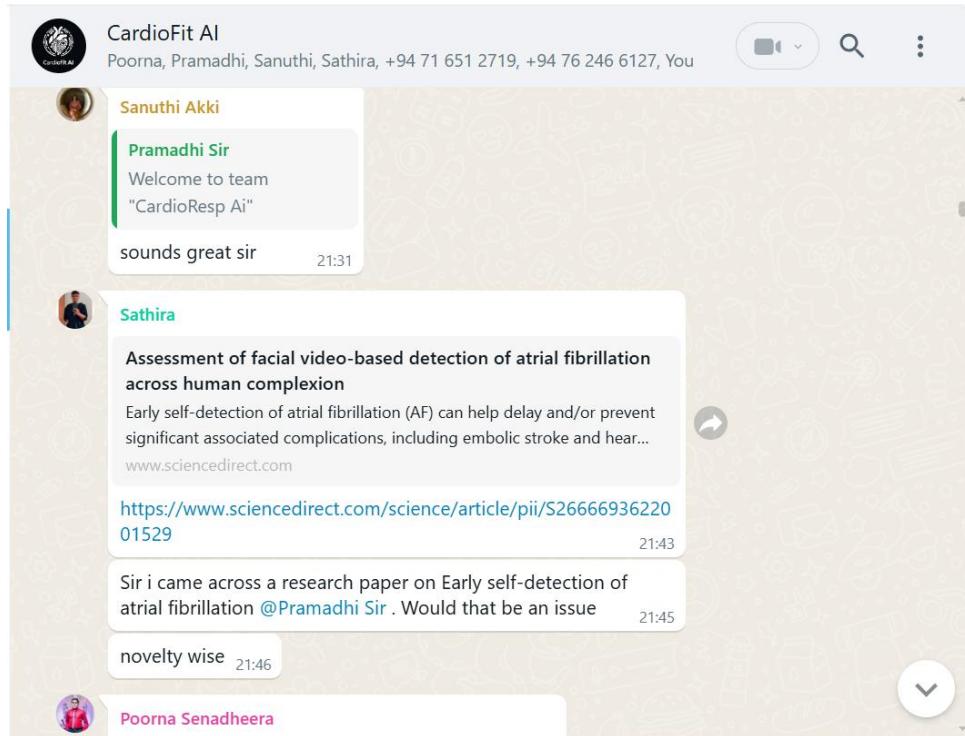


Figure 53: WhatsApp Chat

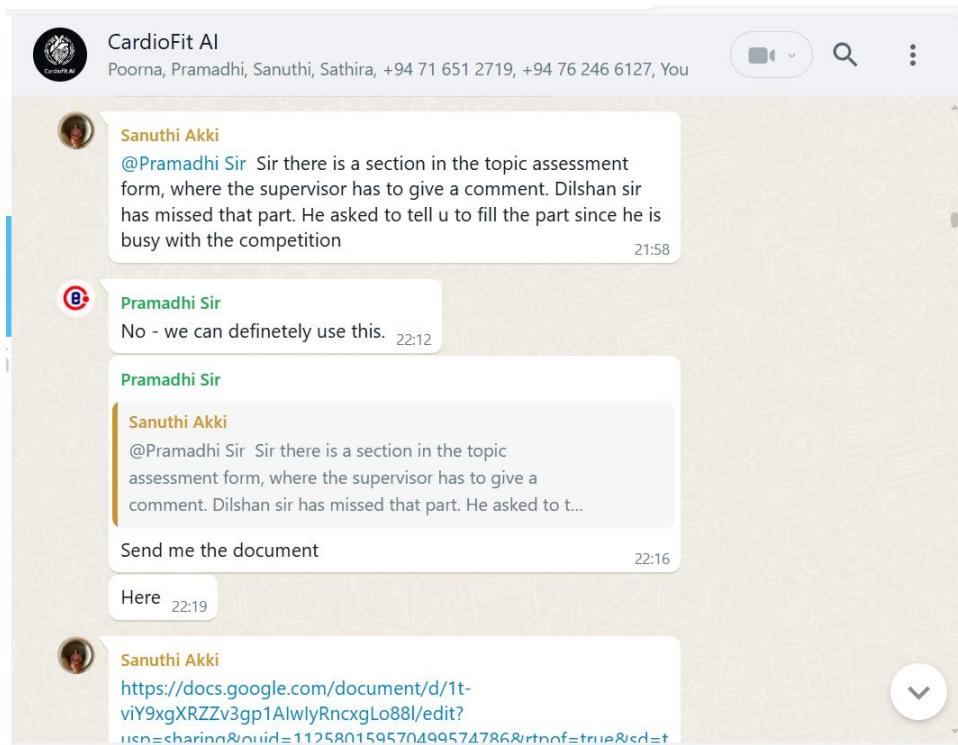


Figure 54: WhatsApp Chat

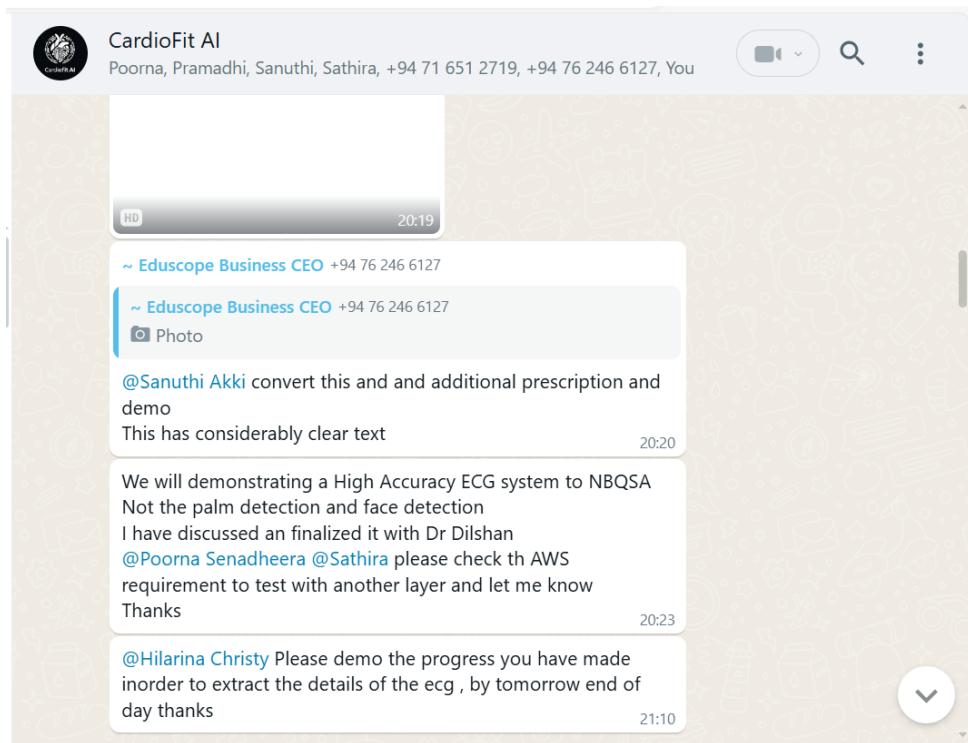


Figure 55: WhatsApp Chat

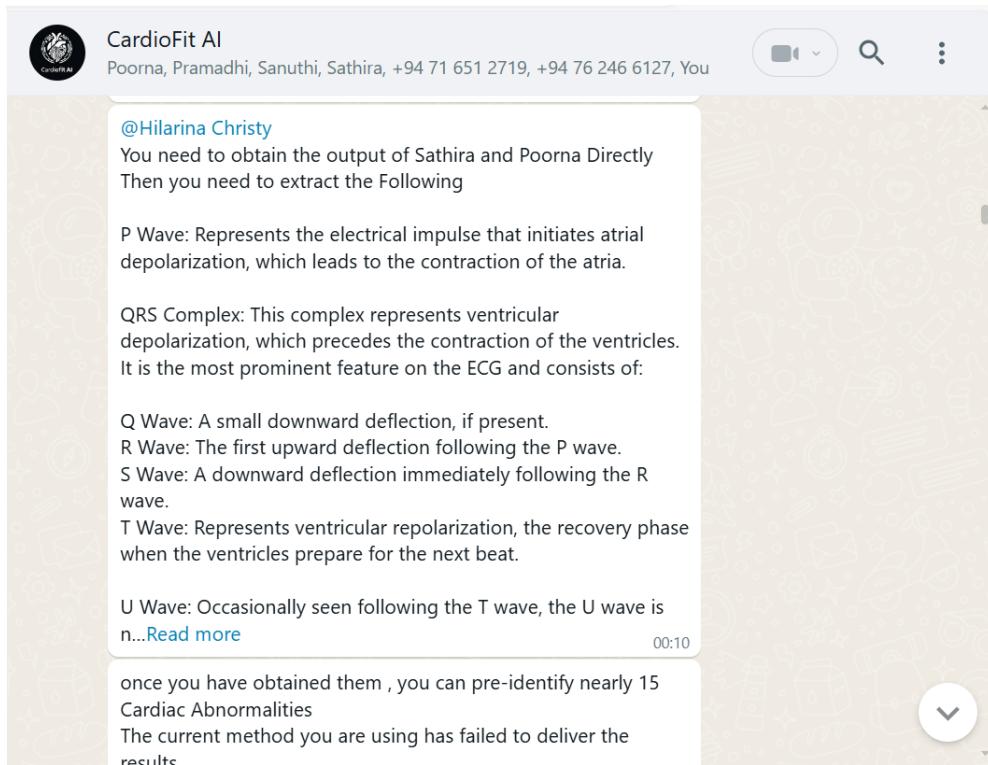


Figure 56: WhatsApp Chat

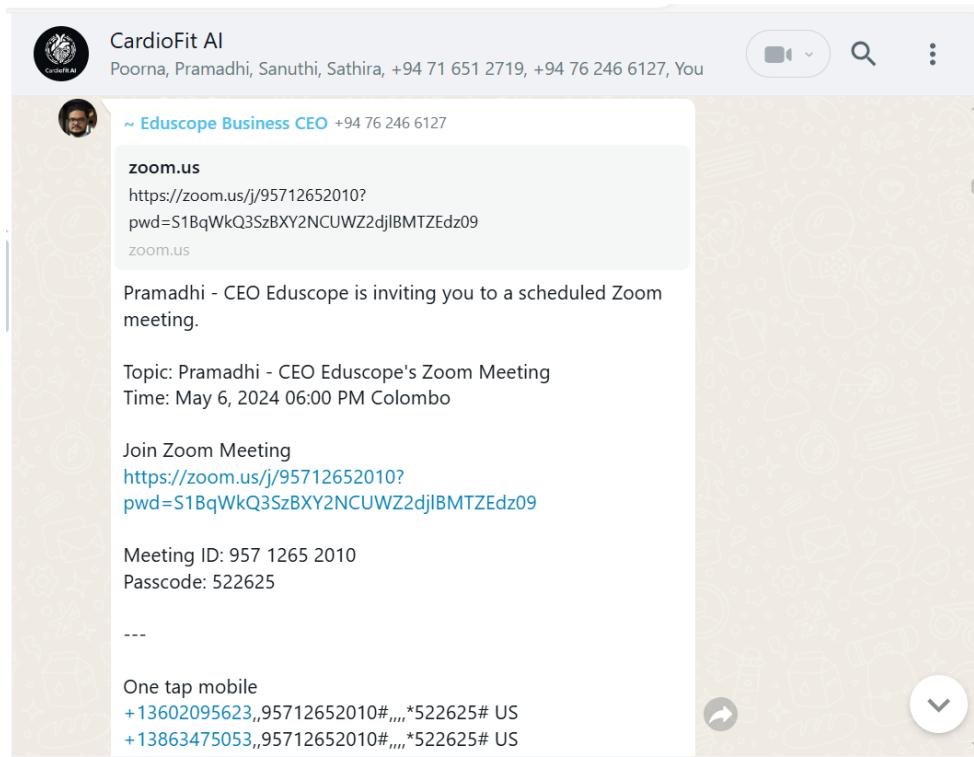


Figure 57: WhatsApp Chat

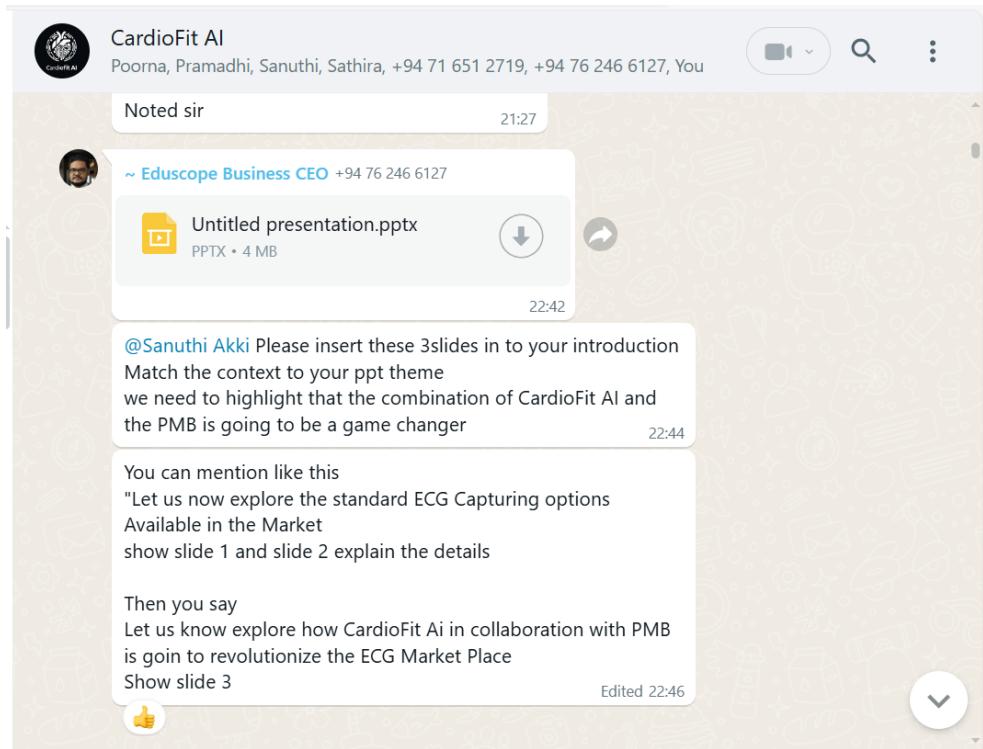


Figure 58: WhatsApp Chat

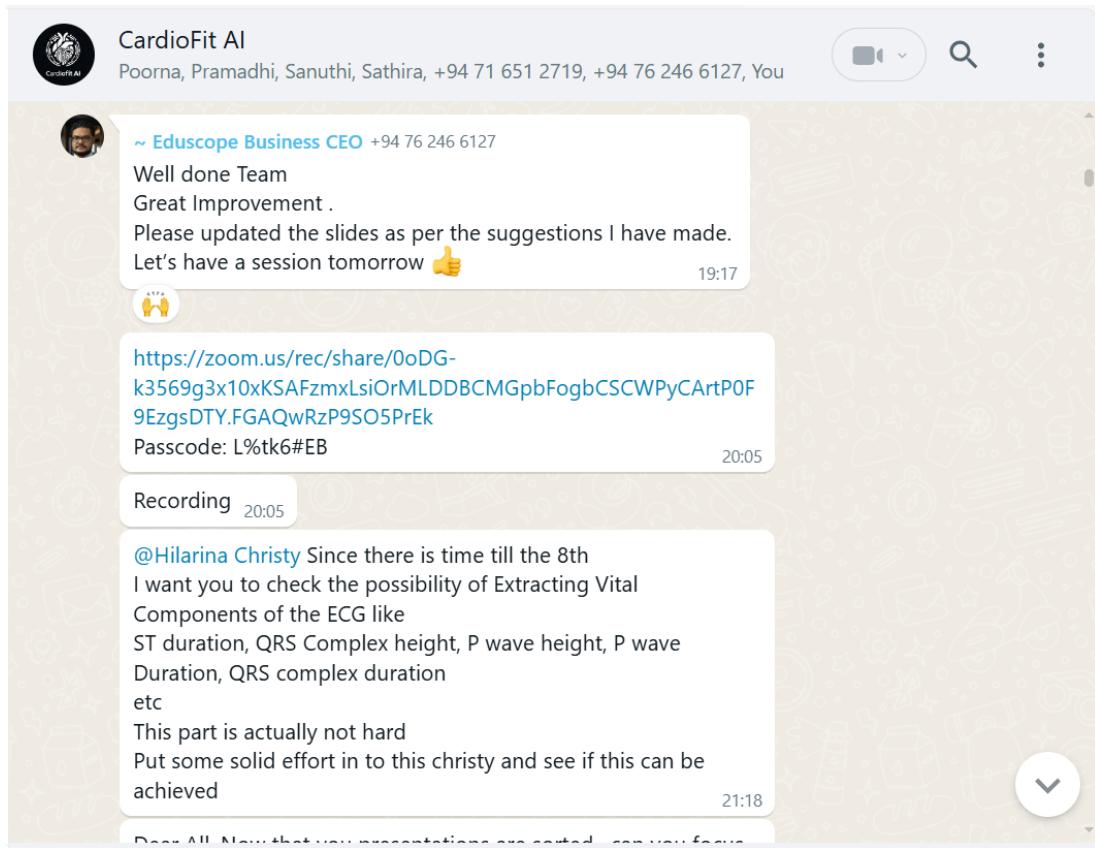


Figure 59: WhatsApp Chat

5. FIGMA PROTOTYPE DESIGNING

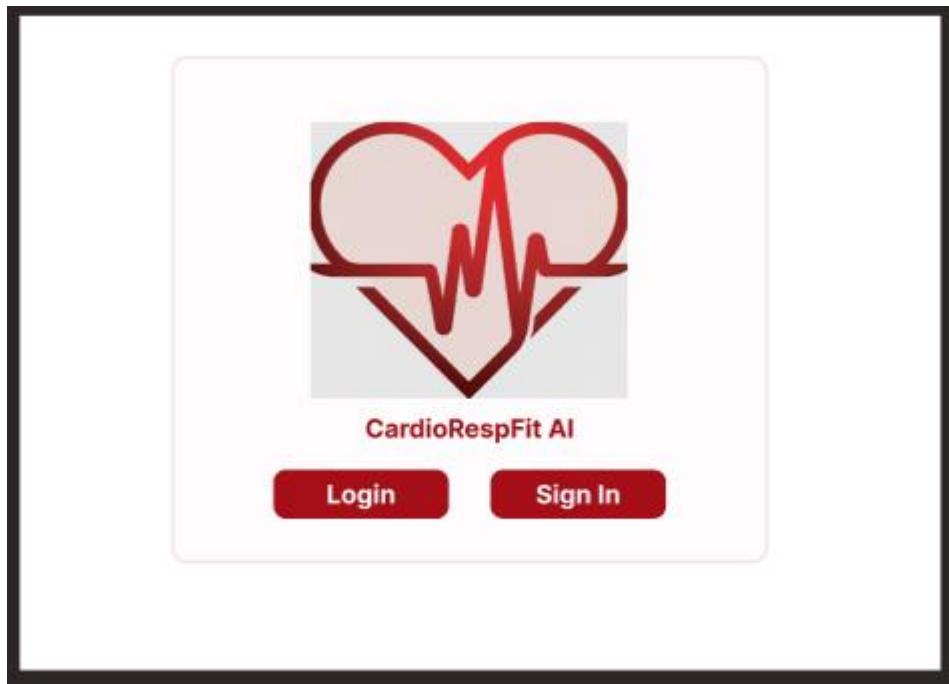


Figure 60: Prototype 1

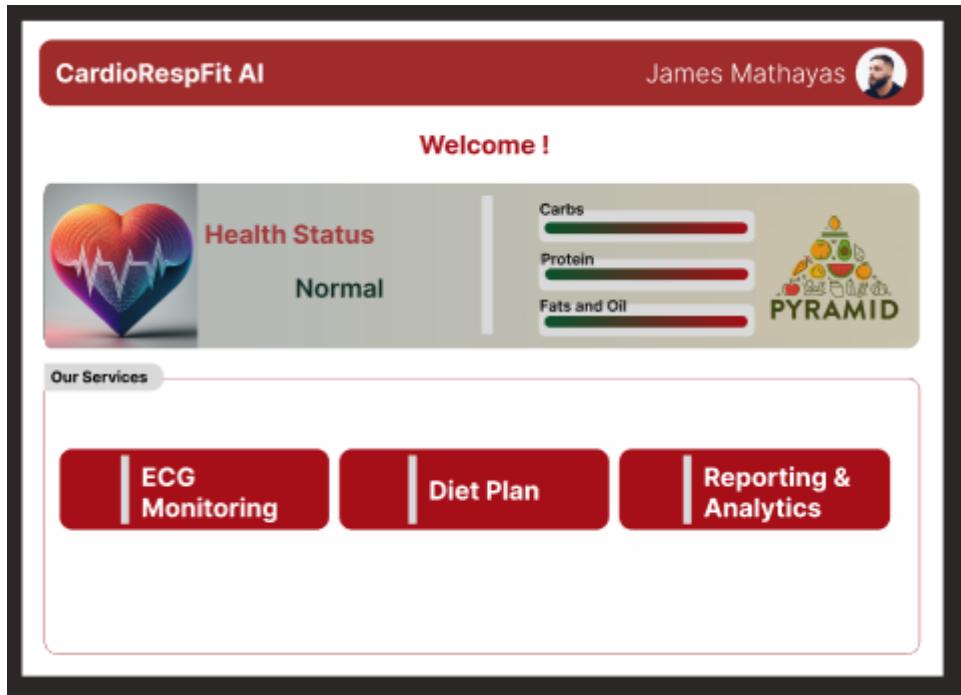


Figure 61: Prototype 2

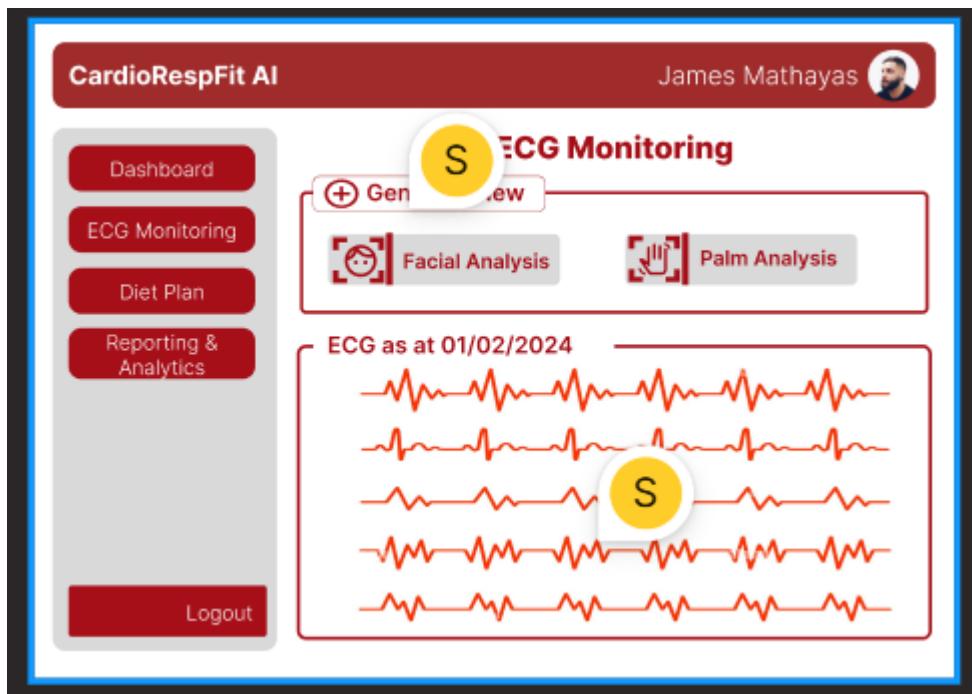


Figure 62: Prototype 3

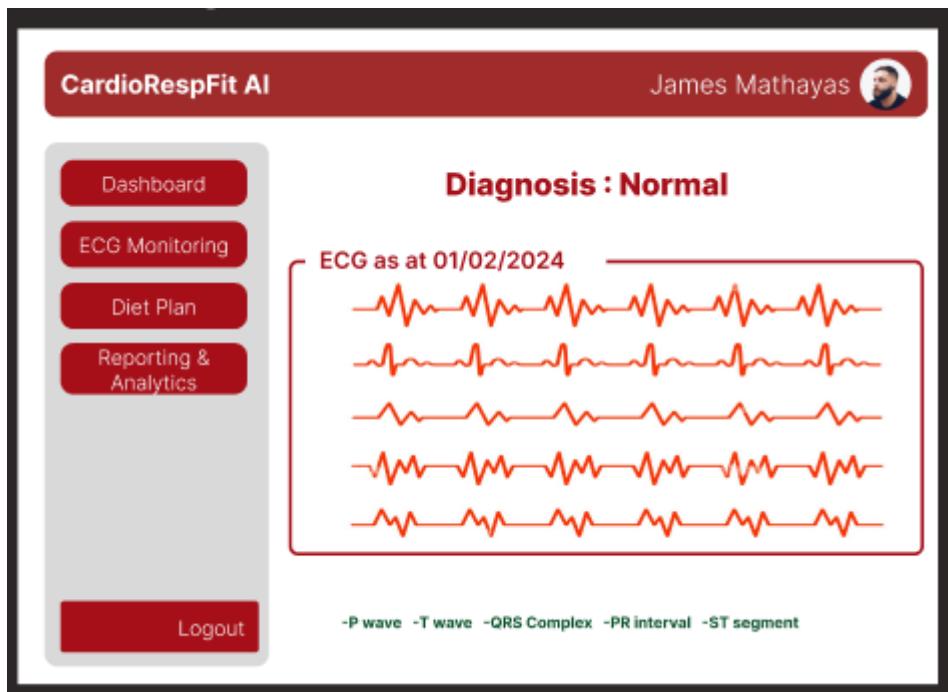


Figure 63: Prototype 4

6. EVIDENCE FOR DEVELOPMENT



Figure 64: Field Visit

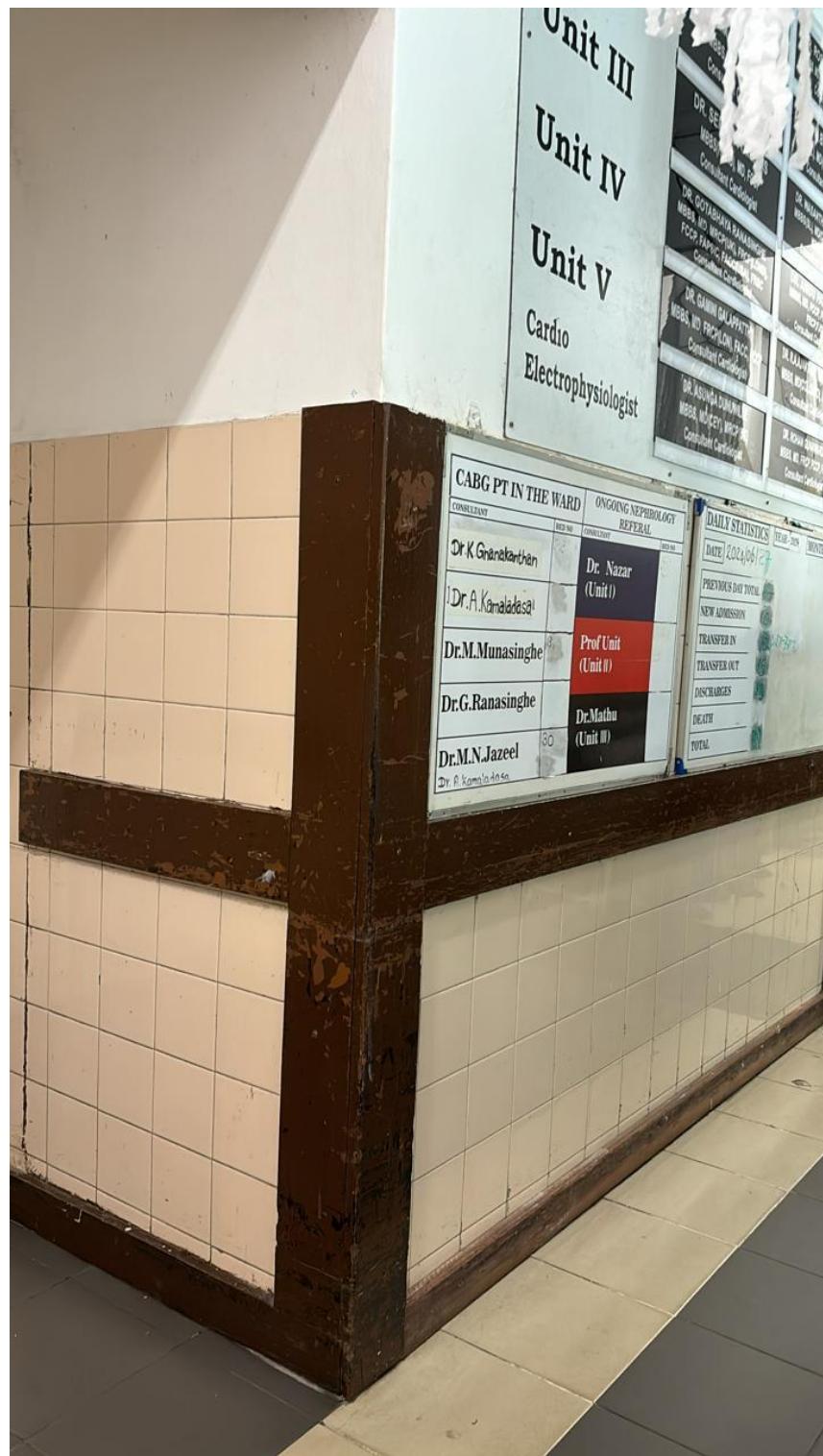


Figure 65: Field Visit



Figure 66: Field Visit

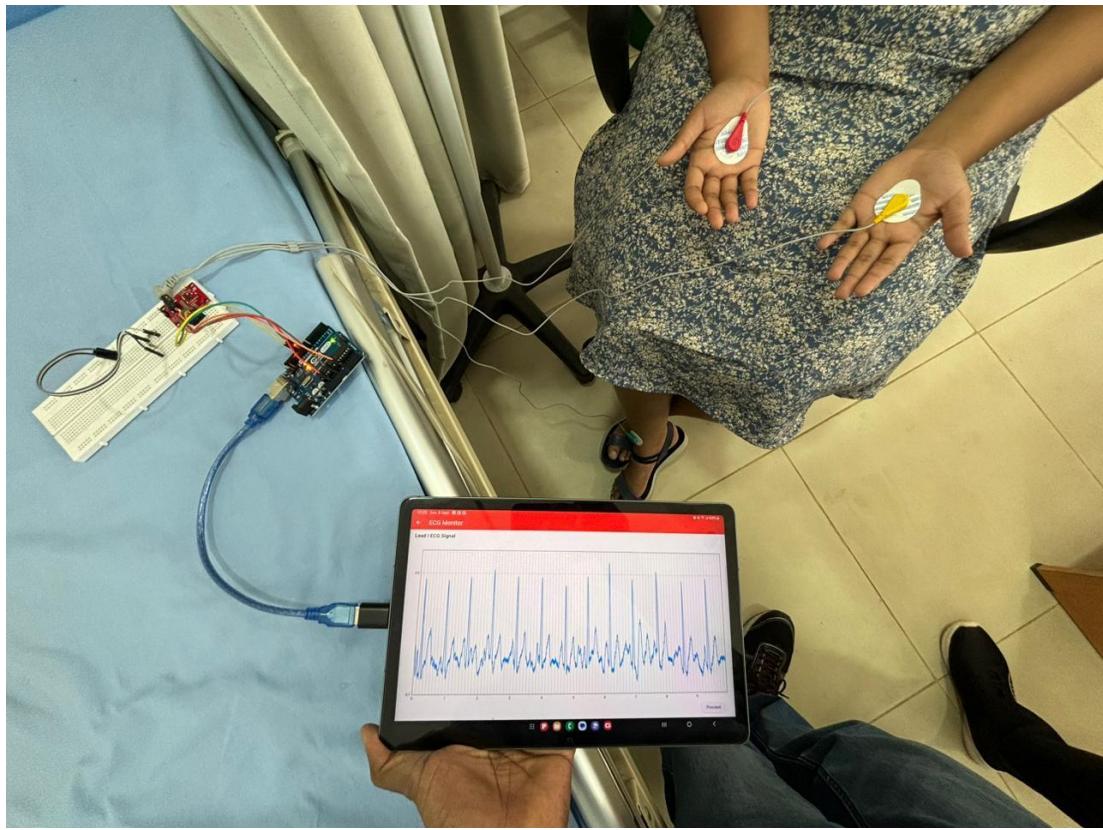


Figure 67: Field Visit

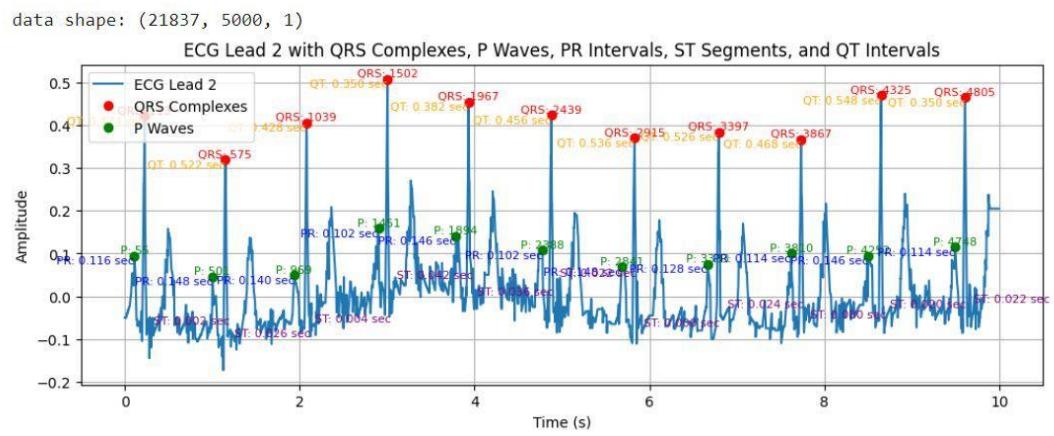


Figure 68: Feature Extraction

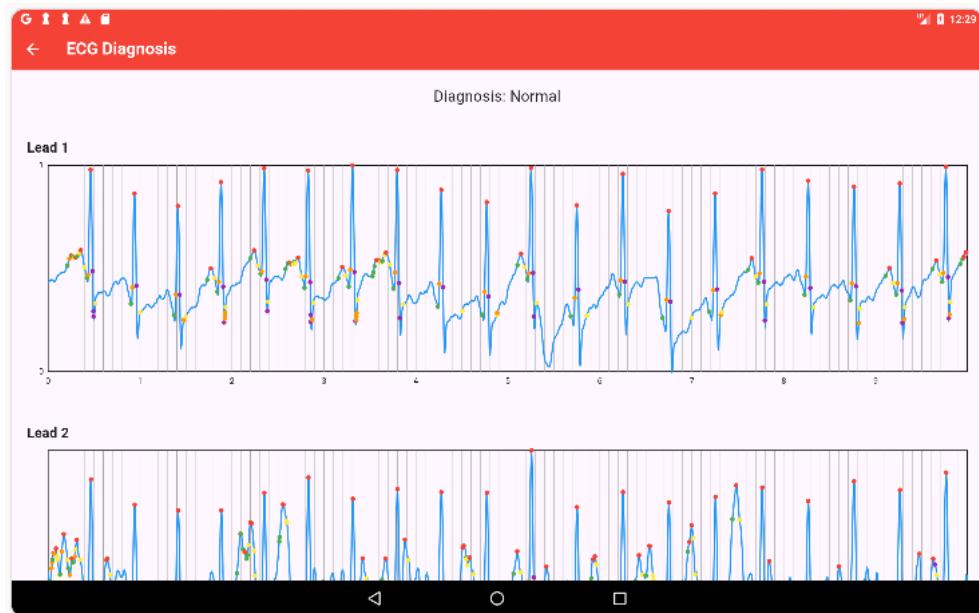


Figure 69: Mobile Application



Figure 70: Mobile Application

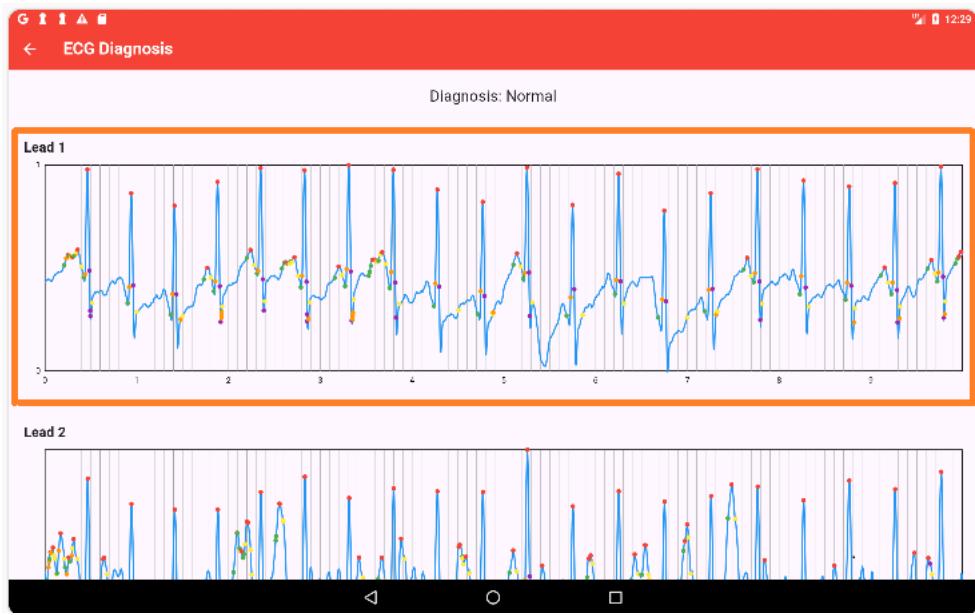


Figure 71:Mobile Application



Figure 72:Mobile Application

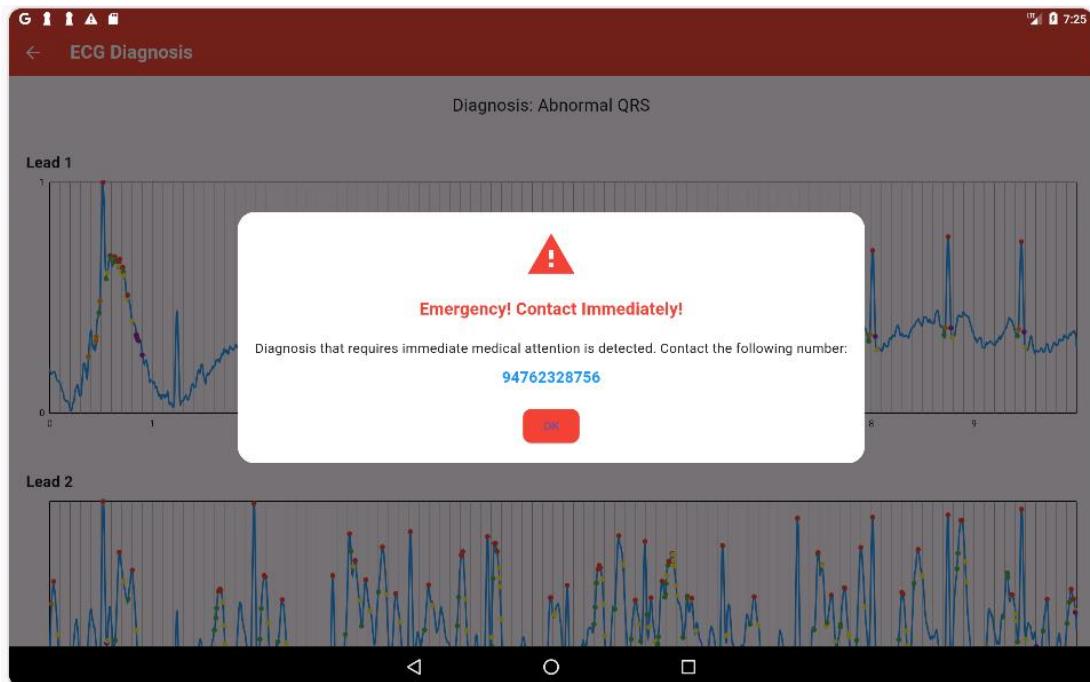


Figure 73: Mobile Application

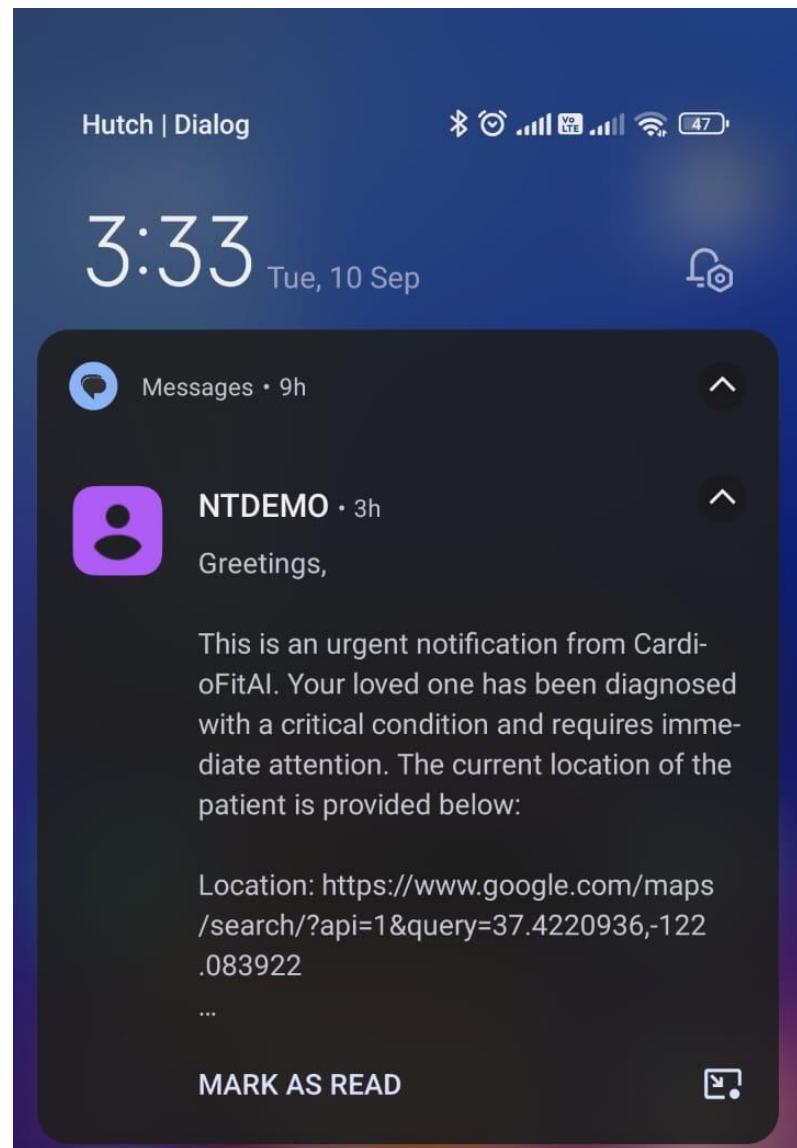


Figure 74: Mobile Application

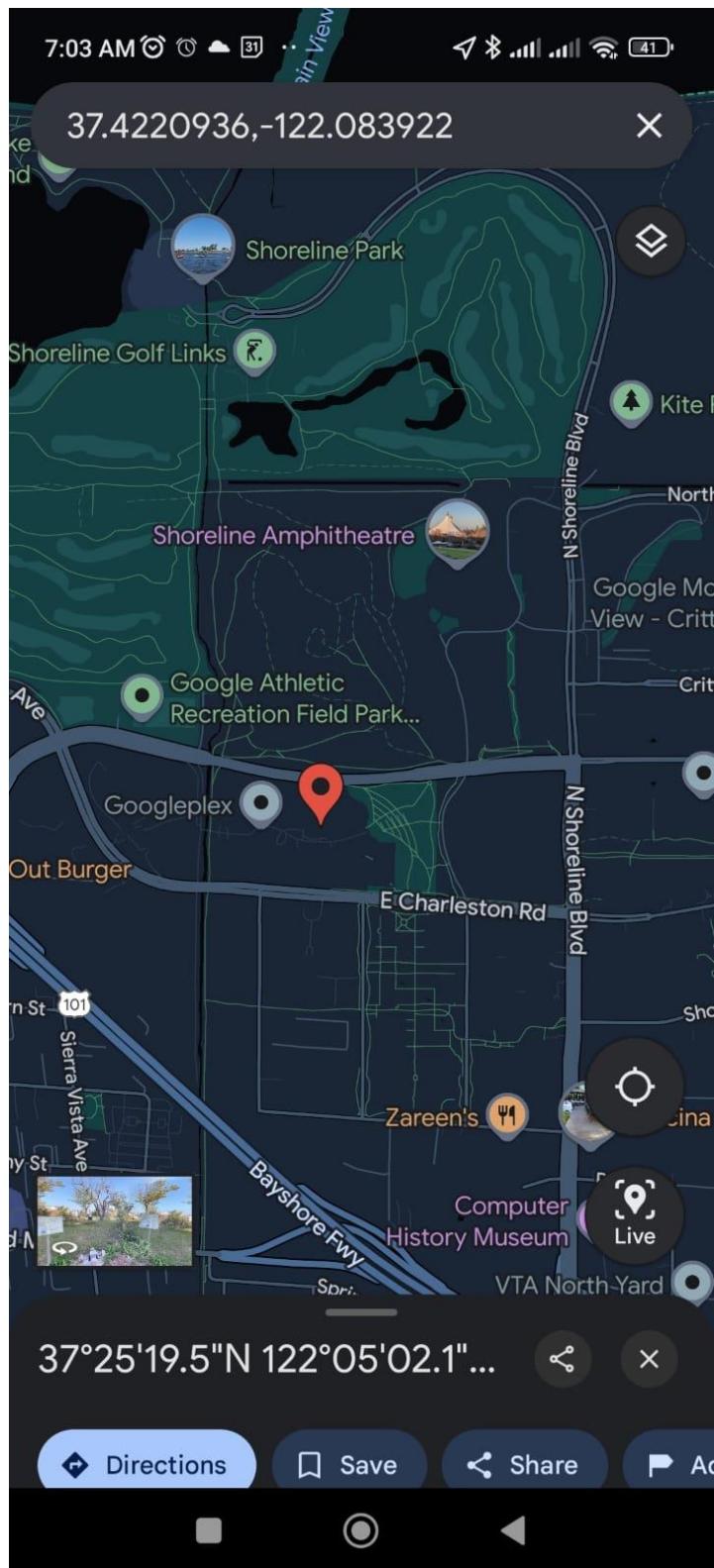


Figure 75: Mobile Application

7. TEST CASES

Table 1: Test Case 1

Test Case Id	01
Test Case	Model Loading & Prediction
Test Scenario	Verify the model loading from Firebase and ECG data prediction
Input	Uploaded JSON file containing ECG data
Expected Output	Predicted class label with 200 status code
Actual Result	Predicted class label displayed with 200 status code
Status	Pass

Table 2: Test Case 2

Test Case Id	02
Test Case	ECG Data Preprocessing
Test Scenario	Verify preprocessing of ECG data
Input	JSON file with raw ECG data
Expected Output	Properly formatted ECG data for prediction
Actual Result	ECG data successfully preprocessed and formatted
Status (Pass/Fail)	Pass
Test Case Id	01
Test Case	Model Loading & Prediction
Test Scenario	Verify the model loading from Firebase and ECG data prediction
Input	Uploaded JSON file containing ECG data
Expected Output	Predicted class label with 200 status code

Actual Result	Predicted class label displayed with 200 status code
Status	Pass

Table 3: Test Case 3

Test Case Id	03
Test Case	API Response Verification
Test Scenario	Verify API response structure and status codes
Input	POST request to /predict endpoint
Expected Output	JSON response containing prediction results
Actual Result	Accurate JSON response with correct status codes
Status (Pass/Fail)	Pass

Table 4: test Case 4

Test Case Id	04
Test Case	Model Performance Evaluation
Test Scenario	Evaluate model performance with test ECG data
Input	JSON file with test ECG data
Expected Output	High prediction accuracy
Actual Result	High prediction accuracy observed

Status (Pass/Fail)	Pass
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Table 5: Test Case 5

Test Case Id	05
Test Case	Mobile Application Integration
Test Scenario	Verify integration between mobile app and Flask API
Input	ECG data captured via mobile app
Expected Output	Accurate disease prediction displayed on the app
Actual Result	Prediction correctly displayed on mobile app
Status (Pass/Fail)	Pass

Table 6: test Case 6

Test Case Id	06
Test Case	Validate empty phone number
Test Scenario	None
Input	<ol style="list-style-type: none"> 1. Enter an empty phone number. 2. Submit the form.
Expected Output	Error message "Member Phone No is required!" is displayed
Actual Result	Error message "Member Phone No is required!" is displayed

Status (Pass/Fail)	Pass
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Table 7: Test Case 7

Test Case Id	07
Test Case	Validate phone number with incorrect prefix
Test Scenario	None
Input	1. Enter a phone number that does not start with "947". 2. Submit the form.
Expected Output	Error message "Phone Number must start with '947'!" is displayed
Actual Result	Error message "Phone Number must start with '947'!" is displayed
Status (Pass/Fail)	Pass

Table 8: Test Case 8

Test Case Id	08
Test Case	Validate SMS failure due to location unavailability
Test Scenario	Location services turned off or unavailable
Input	1. Trigger the EmergencyDialog. 2. Press "OK".

Expected Output	Error message "Failed to get location or send SMS" is logged.
Actual Result	Error message "Failed to get location or send SMS" is logged.
Status (Pass/Fail)	Pass

Table 9: Test Case 9

Test Case Id	09
Test Case	Validate SMS failure due to invalid phone number
Test Scenario	Invalid contact number
Input	<ol style="list-style-type: none"> 1. Trigger the EmergencyDialog. 2. Press "OK".
Expected Output	Error message "Failed to send SMS: Invalid phone number" is logged.
Actual Result	Error message "Failed to send SMS: Invalid phone number" is logged.
Status (Pass/Fail)	Pass