SMART POULTRY FARM IN SRI LANKA USING IOT

Status Document – 01

Supervisor: Mr. Kanishka Yapa

Co-supervisor: Ms. Pipuni Wijesiri

22_23-J 35

B.M.W.S.WIJESEKARA – IT19958248

.Sc. (Hons) Degree in Information Technology specialization in Information Technology

February 2023

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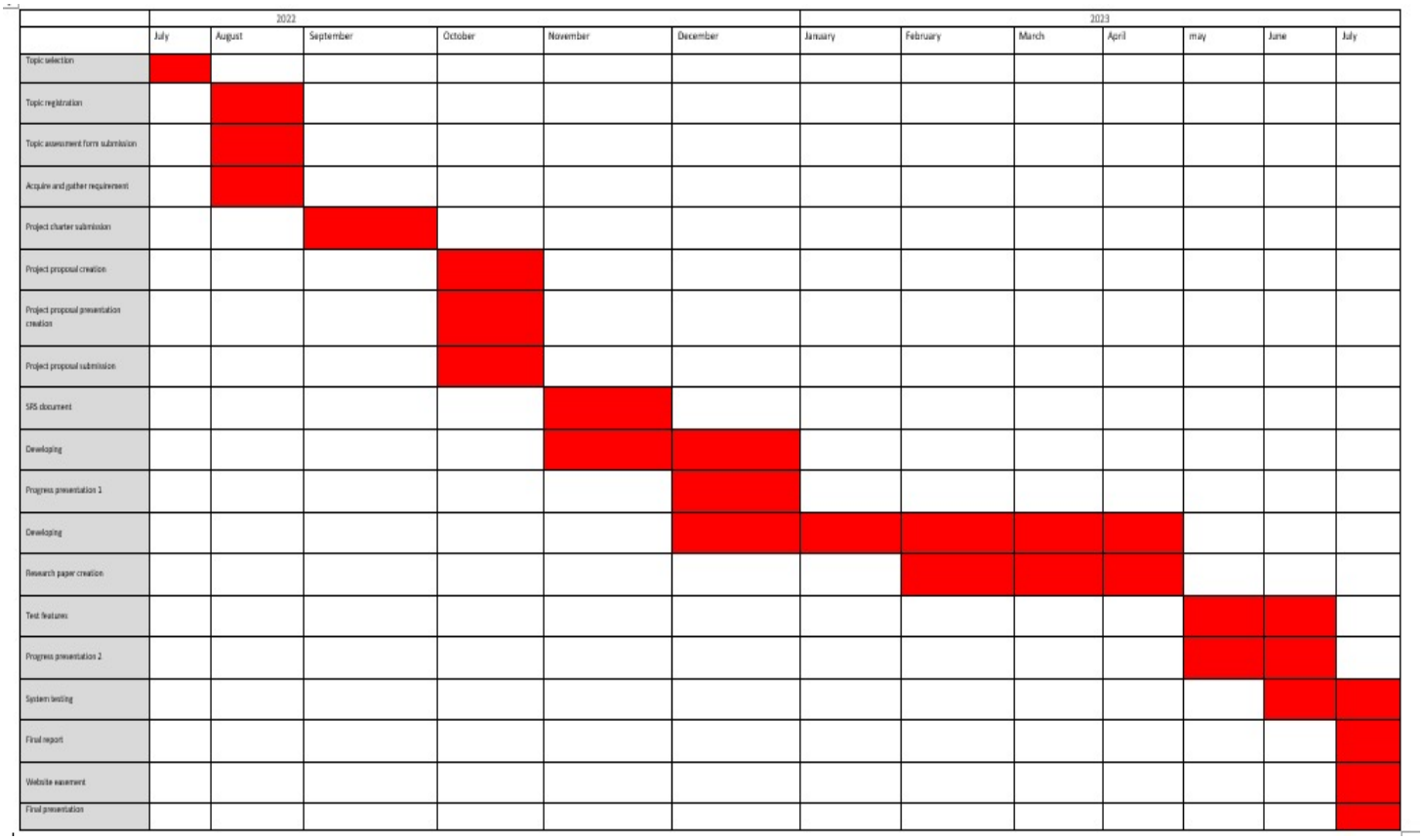
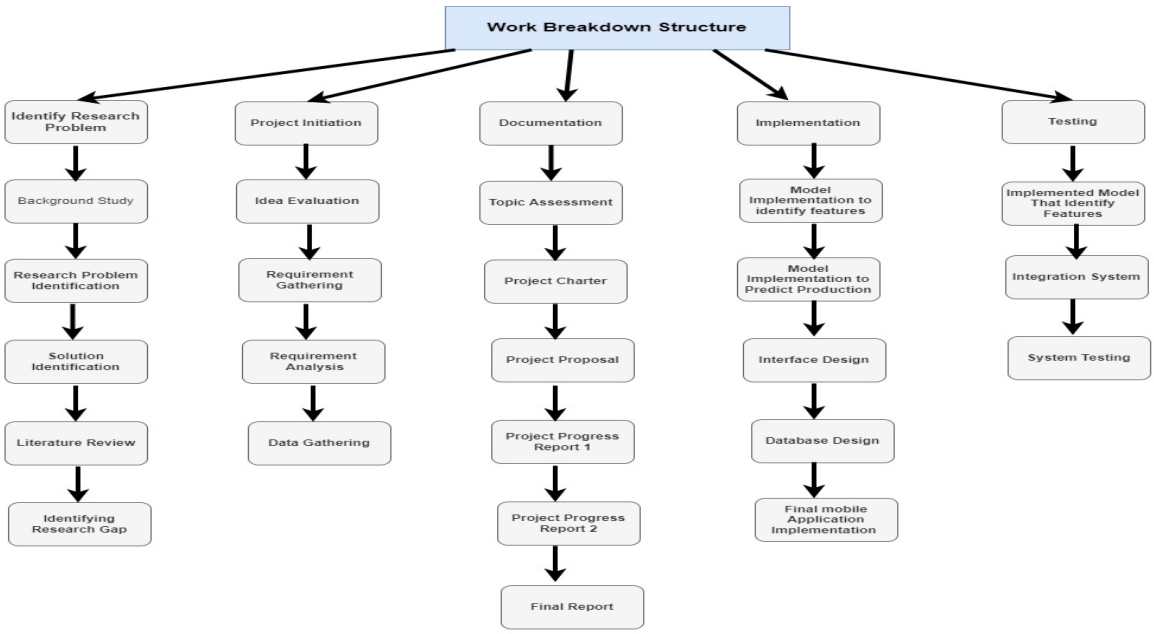
1. Gantt Chart

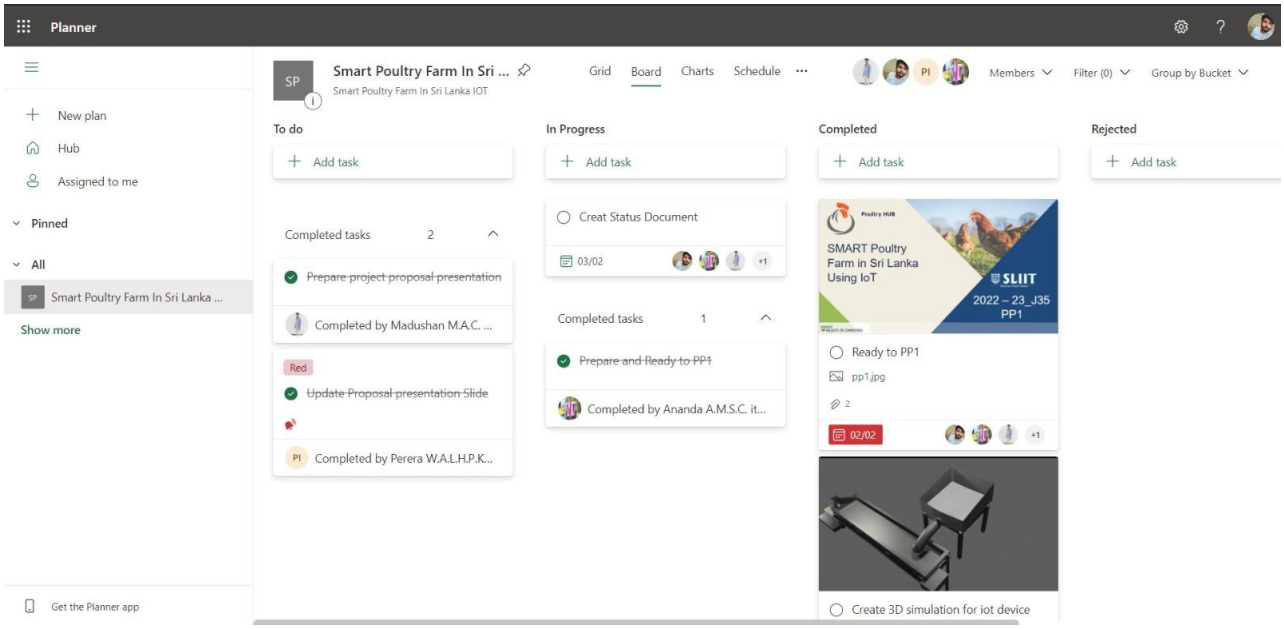


2. Work Breakdown Chart



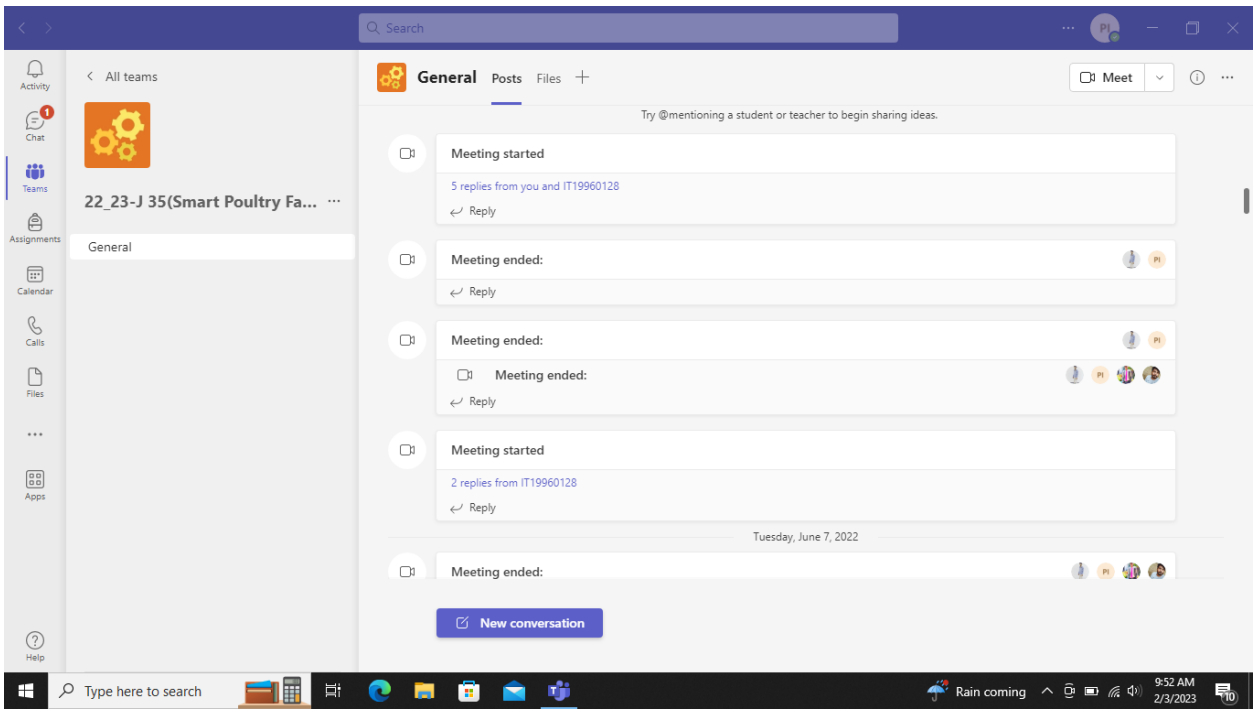
3. Project Management Tool

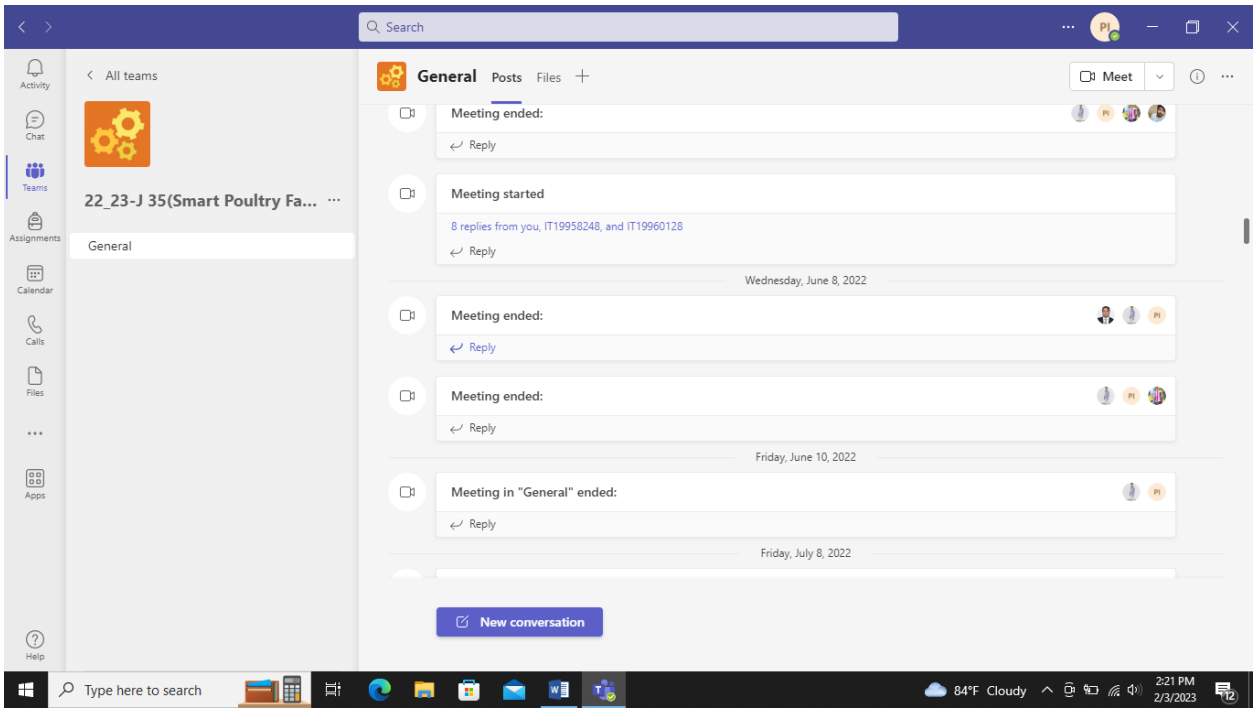
3.1 Tasks Allocation

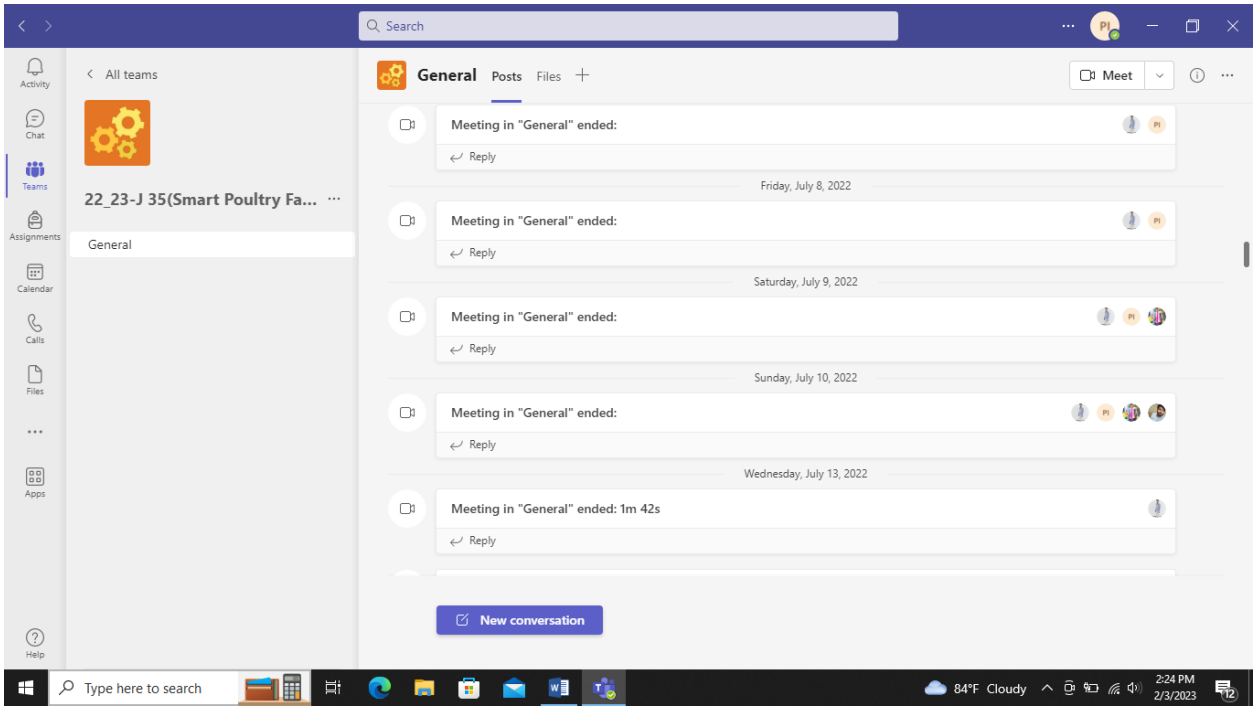


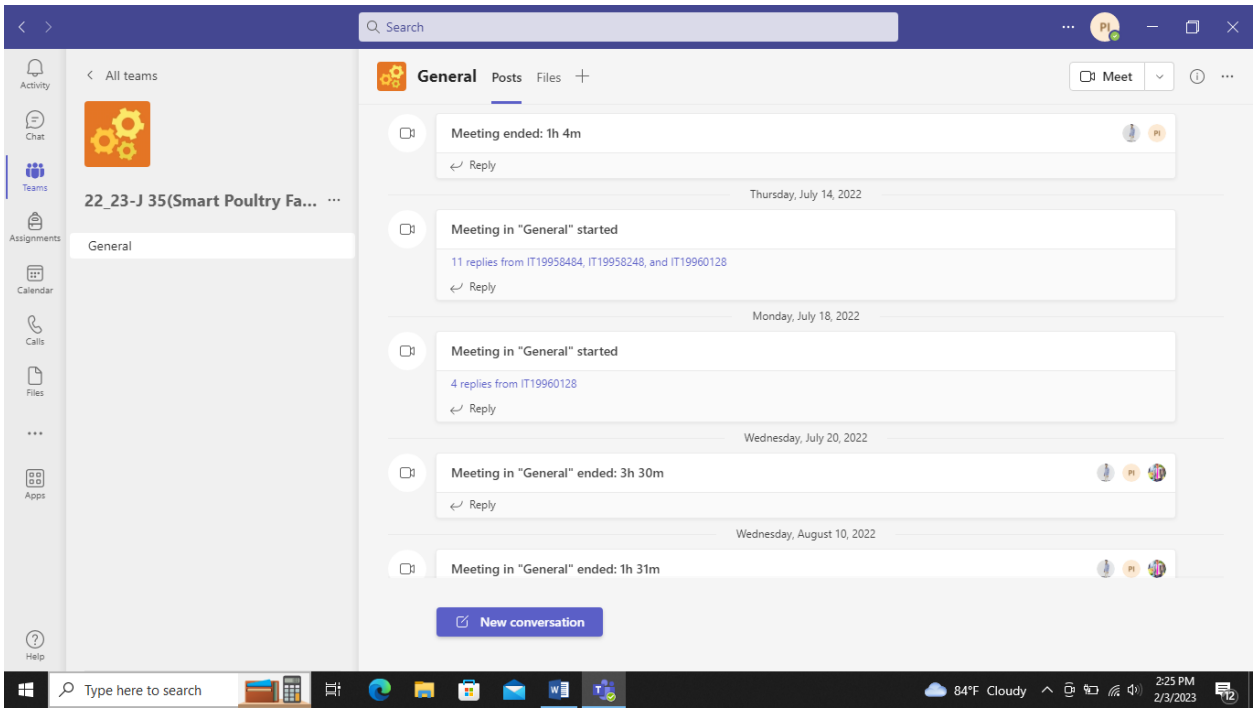
4. Supervisor Meeting Evidence

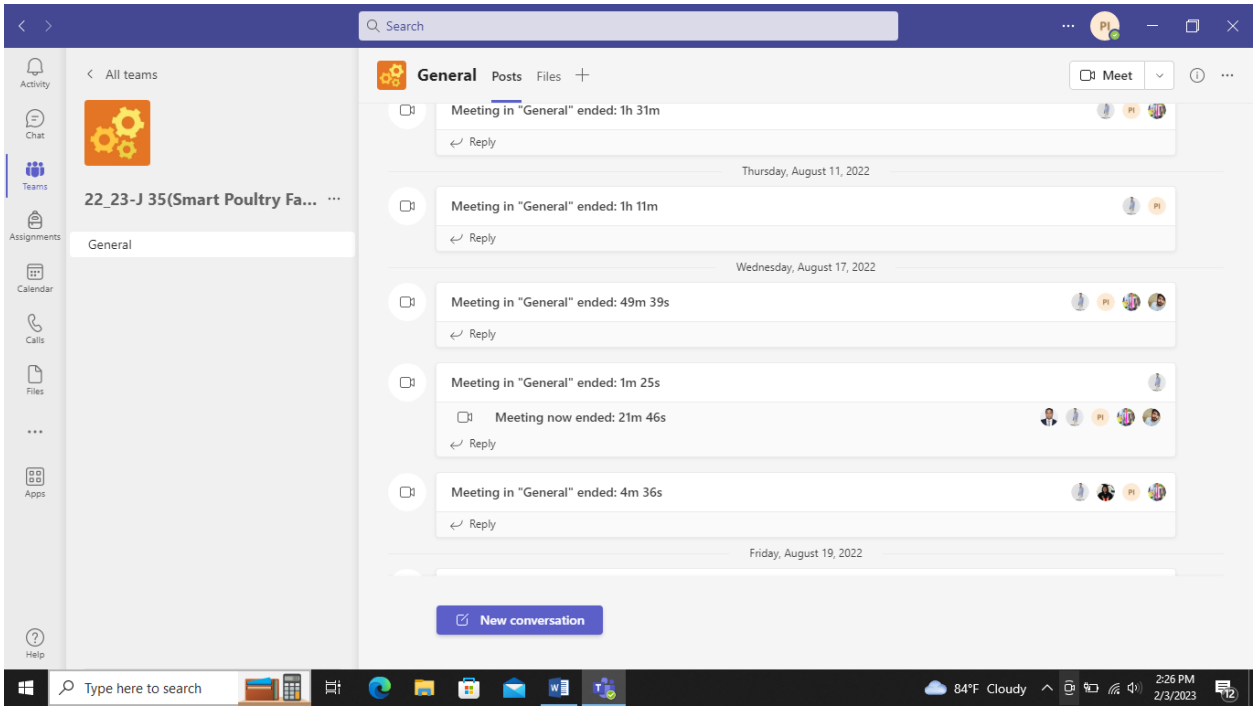
4.1 MS Teams chat

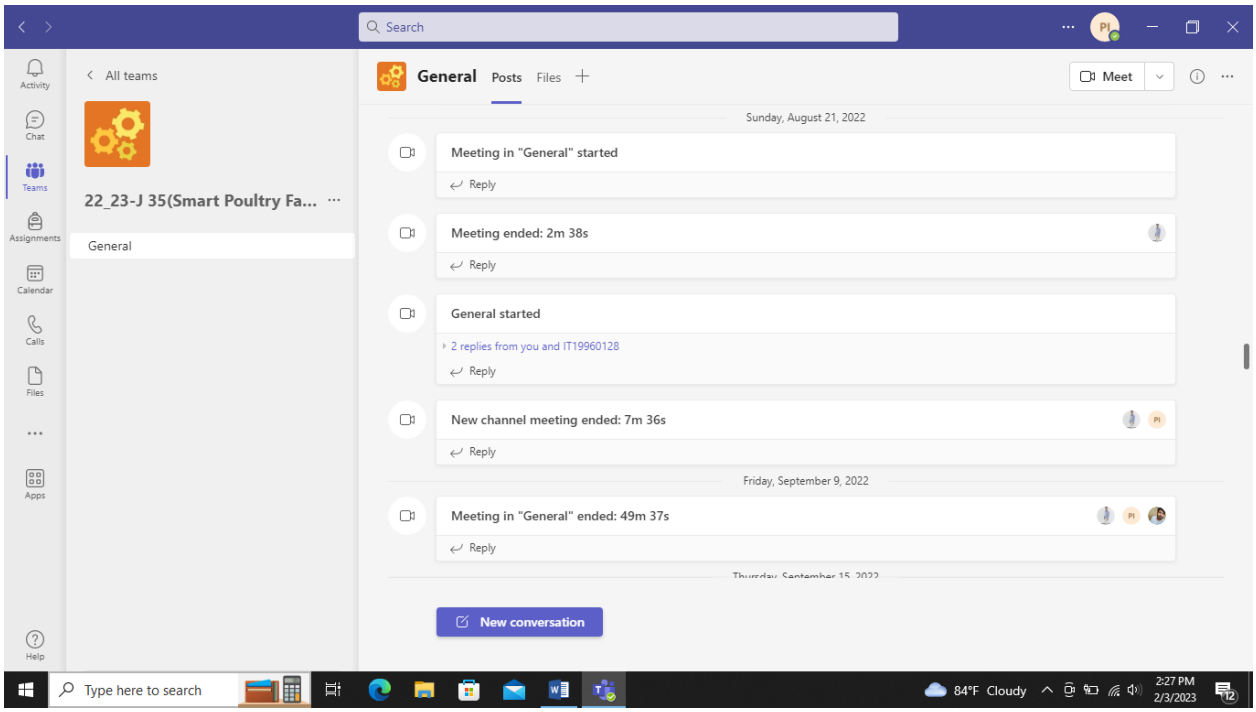


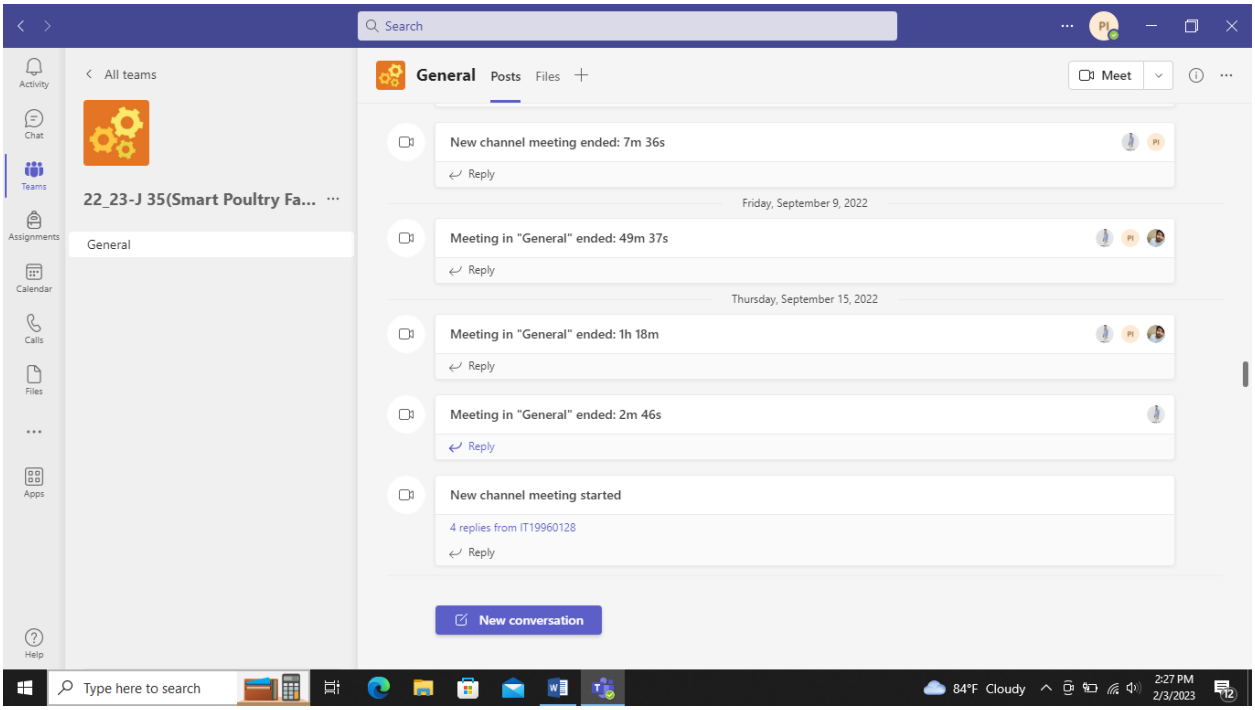


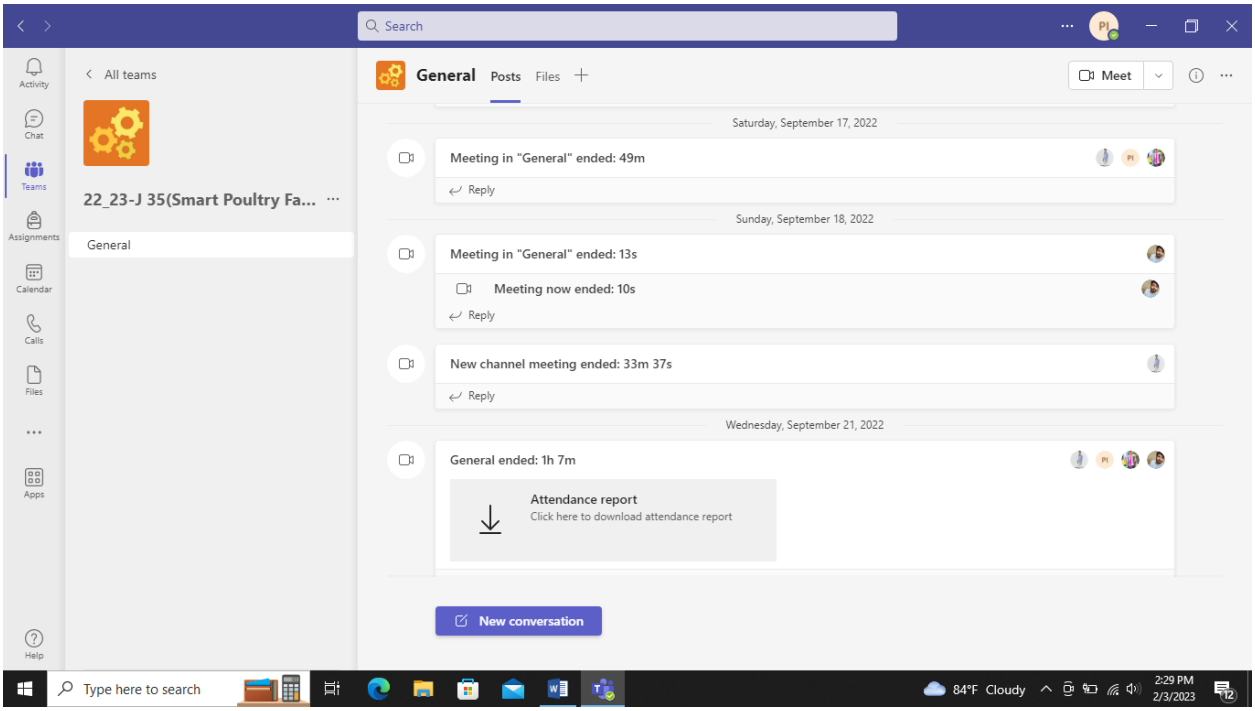

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
Meeting in "General" ended:
Reply
Friday, July 8, 2022
Meeting in "General" ended:
Reply
Saturday, July 9, 2022
Meeting in "General" ended:
Reply
Sunday, July 10, 2022
Meeting in "General" ended:
Reply
Wednesday, July 13, 2022
Meeting in "General" ended: 1m 42s
Reply
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:24 PM
2/3/2023

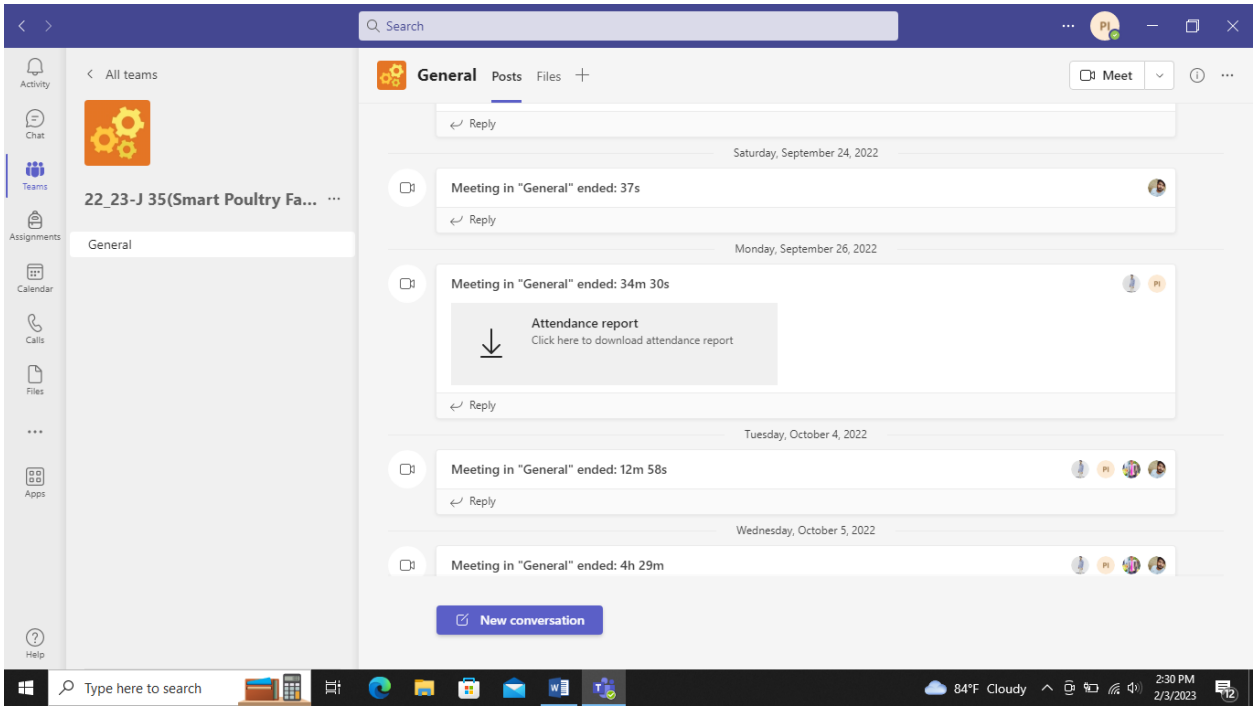

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
Meeting ended: 1h 4m
Reply
Thursday, July 14, 2022
Meeting in "General" started
11 replies from IT19958484, IT19958248, and IT19960128
Reply
Monday, July 18, 2022
Meeting in "General" started
4 replies from IT19960128
Reply
Wednesday, July 20, 2022
Meeting in "General" ended: 3h 30m
Reply
Wednesday, August 10, 2022
Meeting in "General" ended: 1h 31m
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:25 PM
2/3/2023

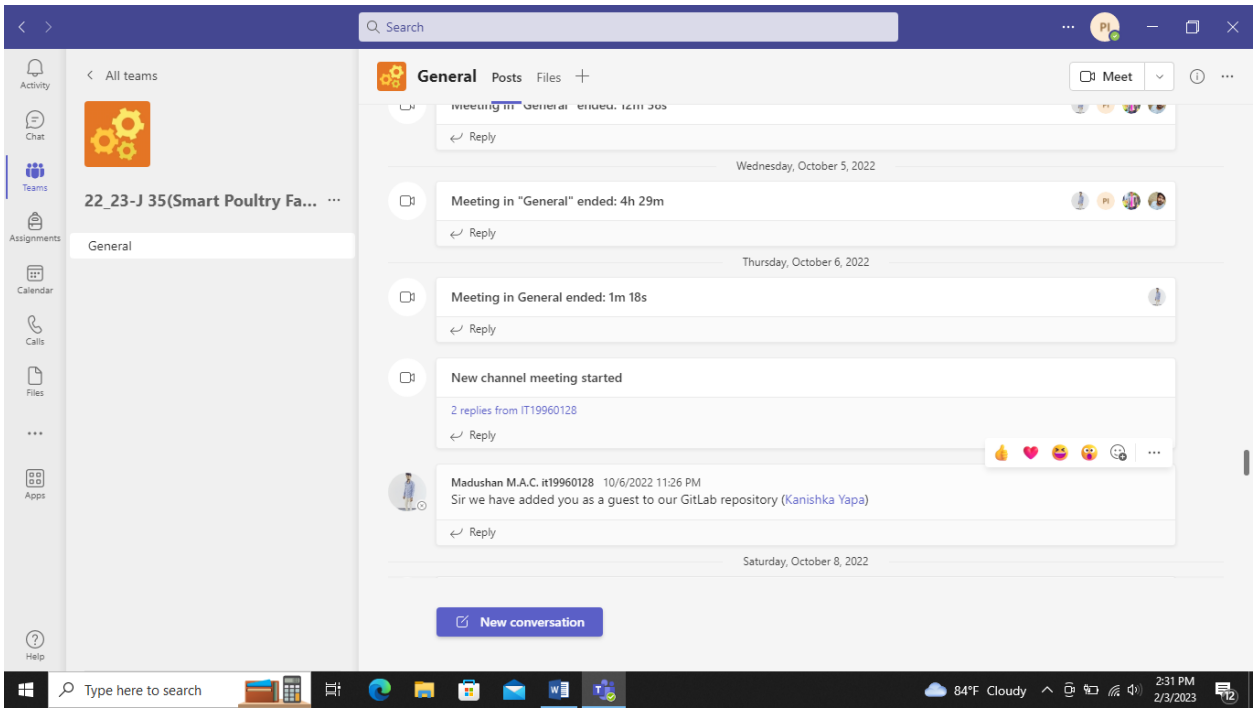

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Meeting in "General" ended: 1h 31m
Reply
Thursday, August 11, 2022
Meeting in "General" ended: 1h 11m
Reply
Wednesday, August 17, 2022
Meeting in "General" ended: 49m 39s
Reply
Meeting in "General" ended: 1m 25s
Meeting now ended: 21m 46s
Reply
Meeting in "General" ended: 4m 36s
Reply
Friday, August 19, 2022
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:26 PM
2/3/2023

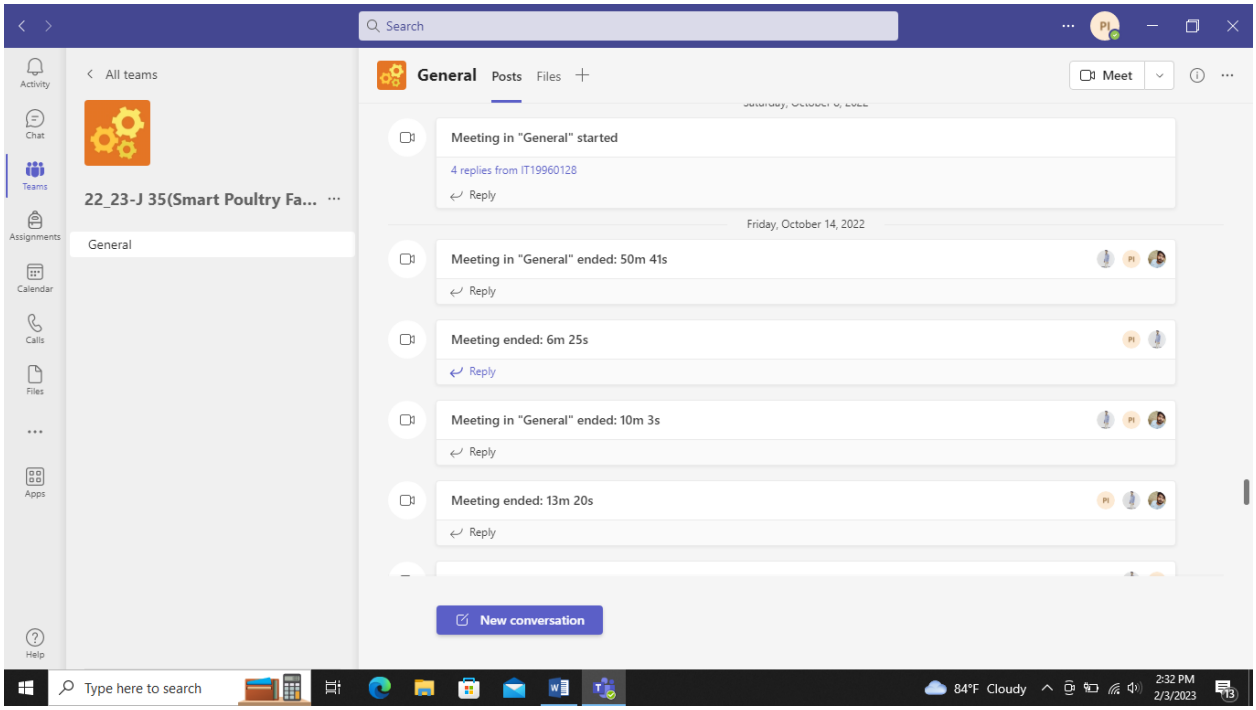

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Sunday, August 21, 2022
Meeting in "General" started
Reply
Meeting ended: 2m 38s
Reply
General started
2 replies from you and IT19960128
Reply
New channel meeting ended: 7m 36s
Reply
Friday, September 9, 2022
Meeting in "General" ended: 49m 37s
Reply
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:27 PM
2/3/2023

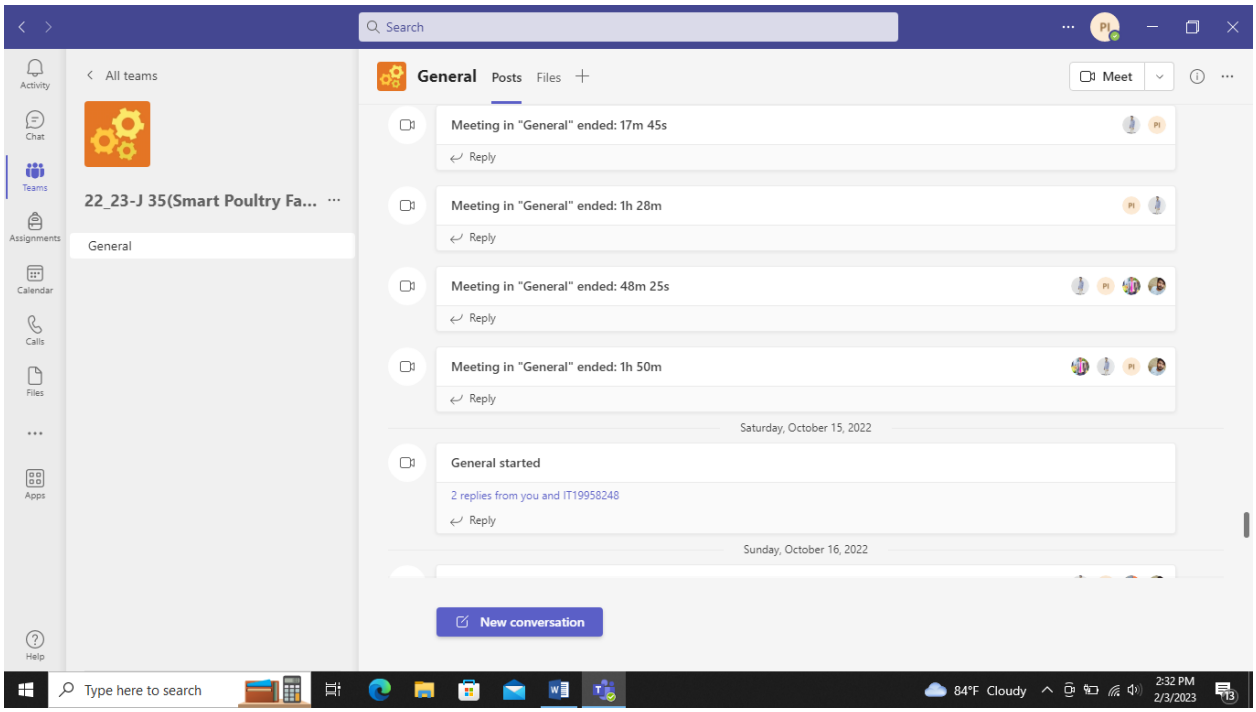

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
New channel meeting ended: 7m 36s
Reply
Friday, September 9, 2022
Meeting in "General" ended: 49m 37s
Reply
Thursday, September 15, 2022
Meeting in "General" ended: 1h 18m
Reply
Meeting in "General" ended: 2m 46s
Reply
New channel meeting started
4 replies from IT19960128
Reply
New conversation
Type here to search
84°F Cloudy
2:27 PM
2/3/2023

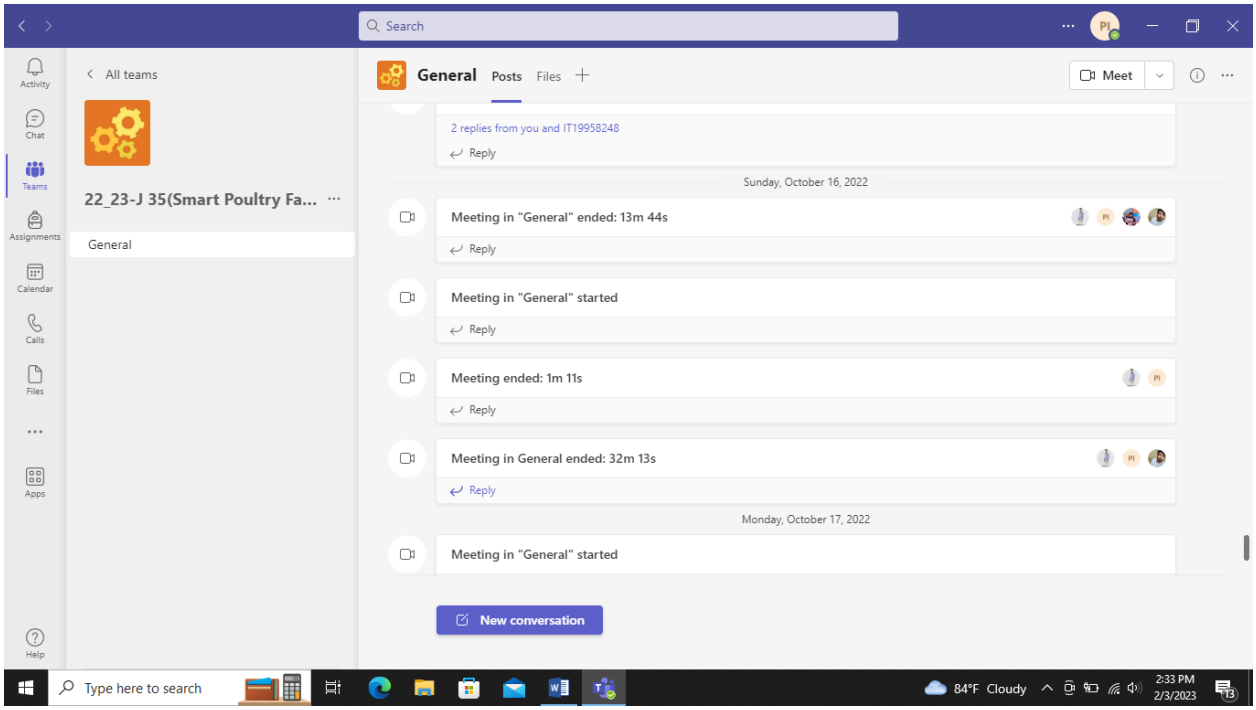

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
Saturday, September 17, 2022
Meeting in "General" ended: 49m
Reply
Sunday, September 18, 2022
Meeting in "General" ended: 13s
Meeting now ended: 10s
Reply
New channel meeting ended: 33m 37s
Reply
Wednesday, September 21, 2022
General ended: 1h 7m
Attendance report
Click here to download attendance report
New conversation
Type here to search
84°F Cloudy
2:29 PM
2/3/2023

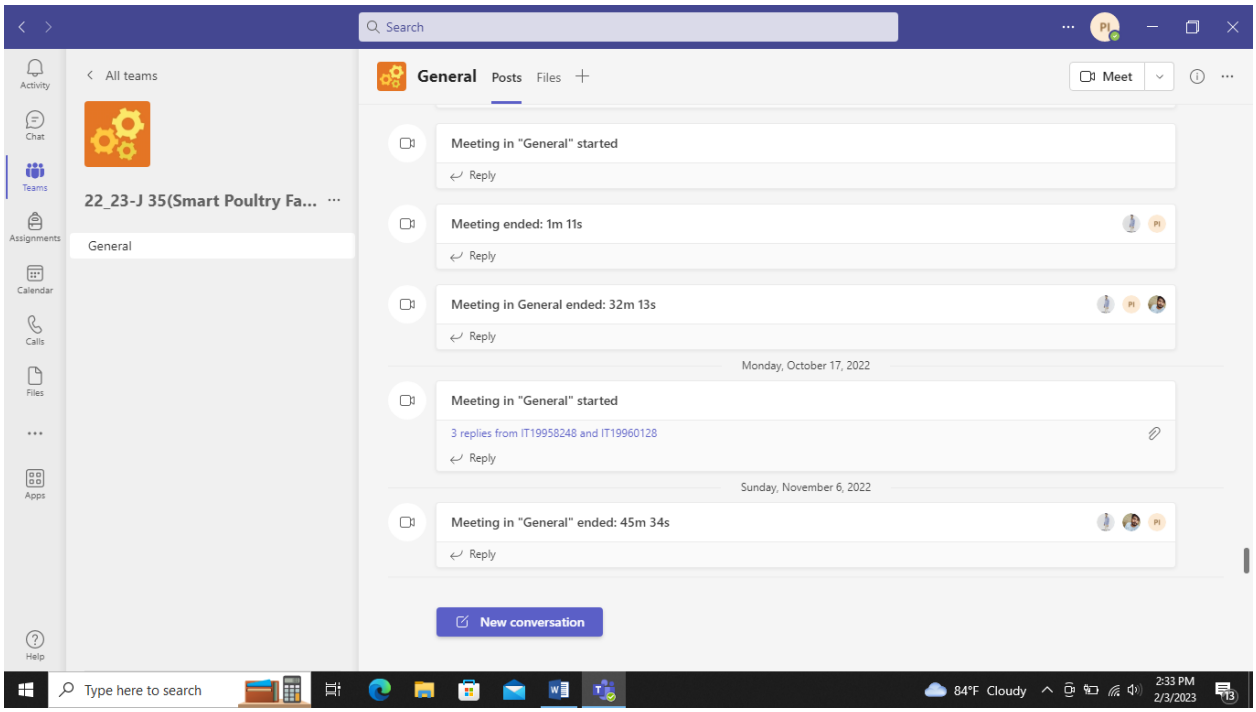

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Reply
Saturday, September 24, 2022
Meeting in "General" ended: 37s
Monday, September 26, 2022
Meeting in "General" ended: 34m 30s
Attendance report
Click here to download attendance report
Tuesday, October 4, 2022
Meeting in "General" ended: 12m 58s
Wednesday, October 5, 2022
Meeting in "General" ended: 4h 29m
New conversation
Type here to search
84°F Cloudy
2:30 PM
2/3/2023

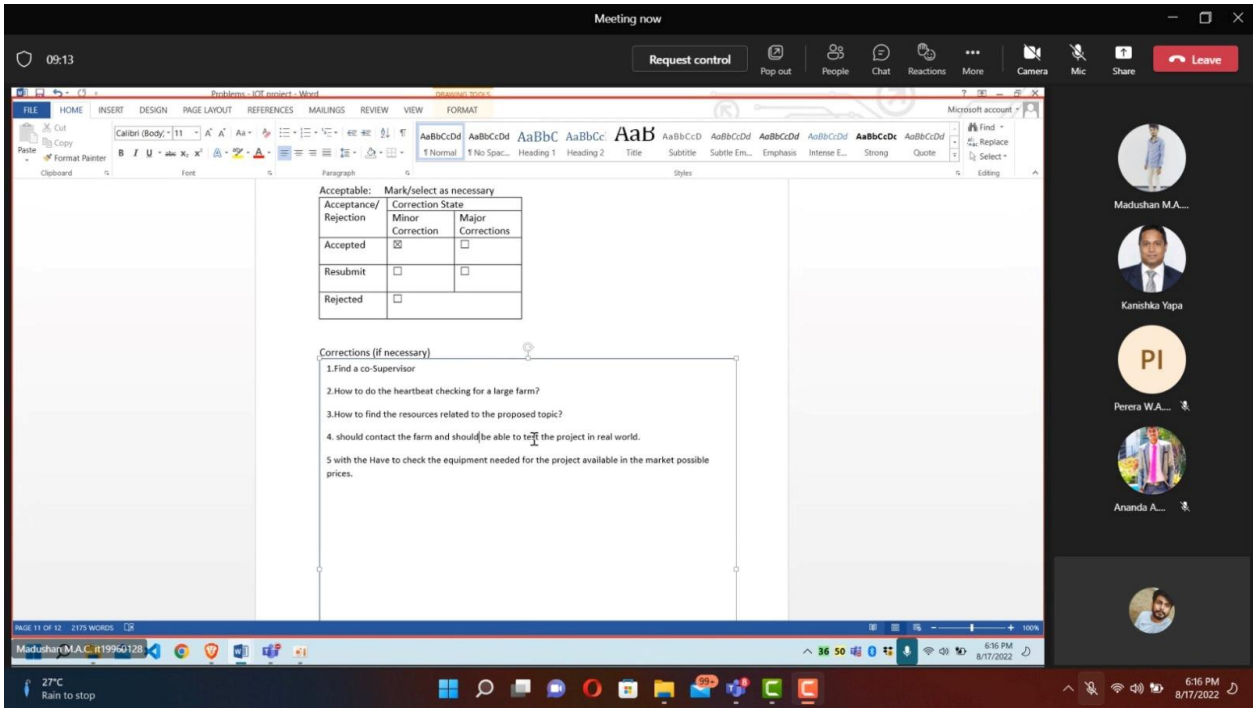

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Reply
Wednesday, October 5, 2022
Meeting in "General" ended: 4h 29m
Thursday, October 6, 2022
Meeting in General ended: 1m 18s
New channel meeting started
2 replies from IT19960128
Madushan M.A.C. it19960128 10/6/2022 11:26 PM
Sir we have added you as a guest to our GitLab repository (Kanishka Yapa)
Saturday, October 8, 2022
New conversation
Type here to search
84°F Cloudy
2:31 PM
2/3/2023

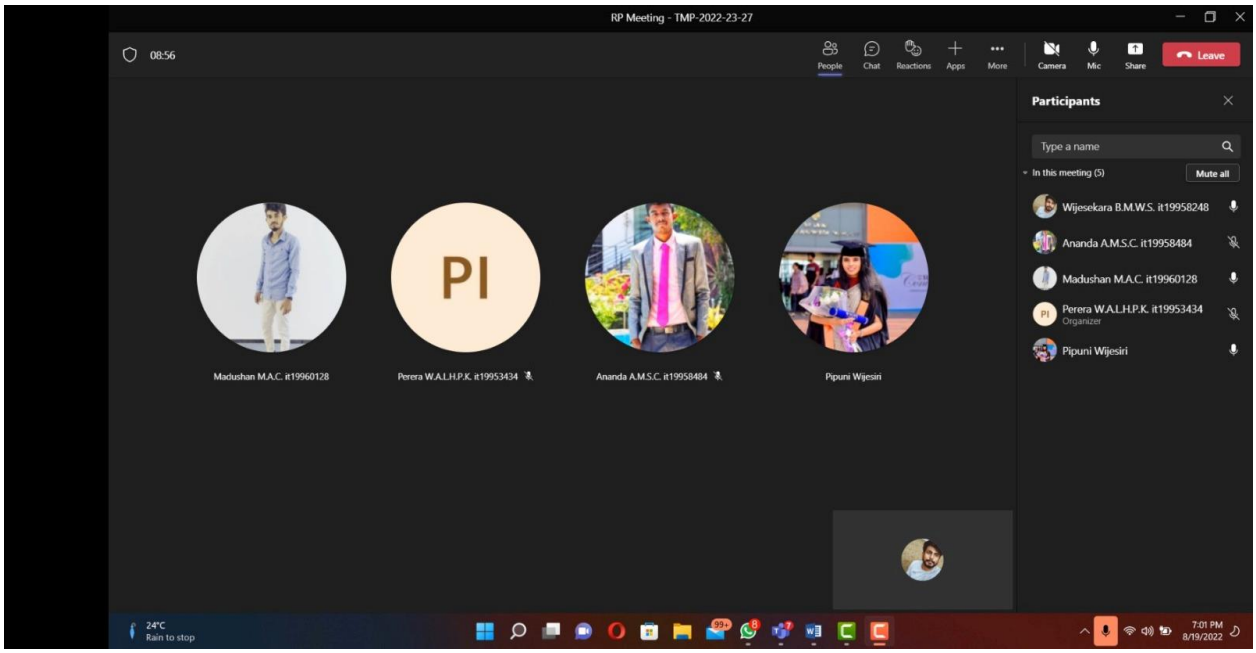

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Meeting in "General" started
4 replies from IT19960128
Reply
Friday, October 14, 2022
Meeting in "General" ended: 50m 41s
Meeting ended: 6m 25s
Meeting in "General" ended: 10m 3s
Meeting ended: 13m 20s
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:32 PM
2/3/2023

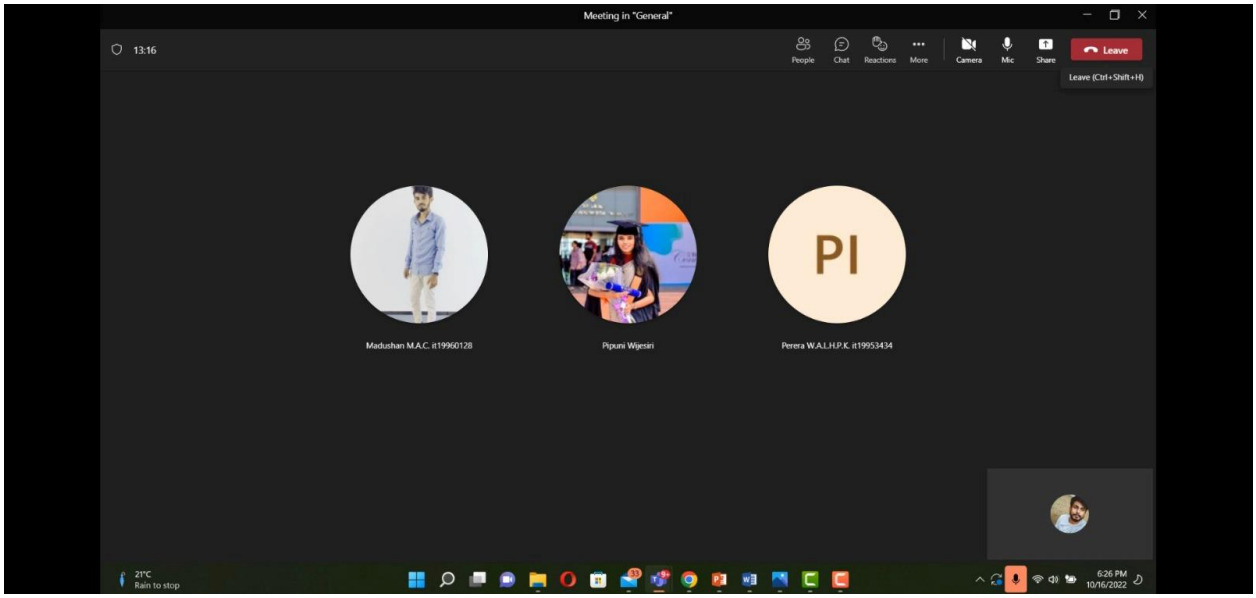

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
Posts
Files
Meet
Meeting in "General" ended: 17m 45s
Meeting in "General" ended: 1h 28m
Meeting in "General" ended: 48m 25s
Meeting in "General" ended: 1h 50m
Saturday, October 15, 2022
General started
2 replies from you and IT19958248
Sunday, October 16, 2022
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:32 PM
2/3/2023

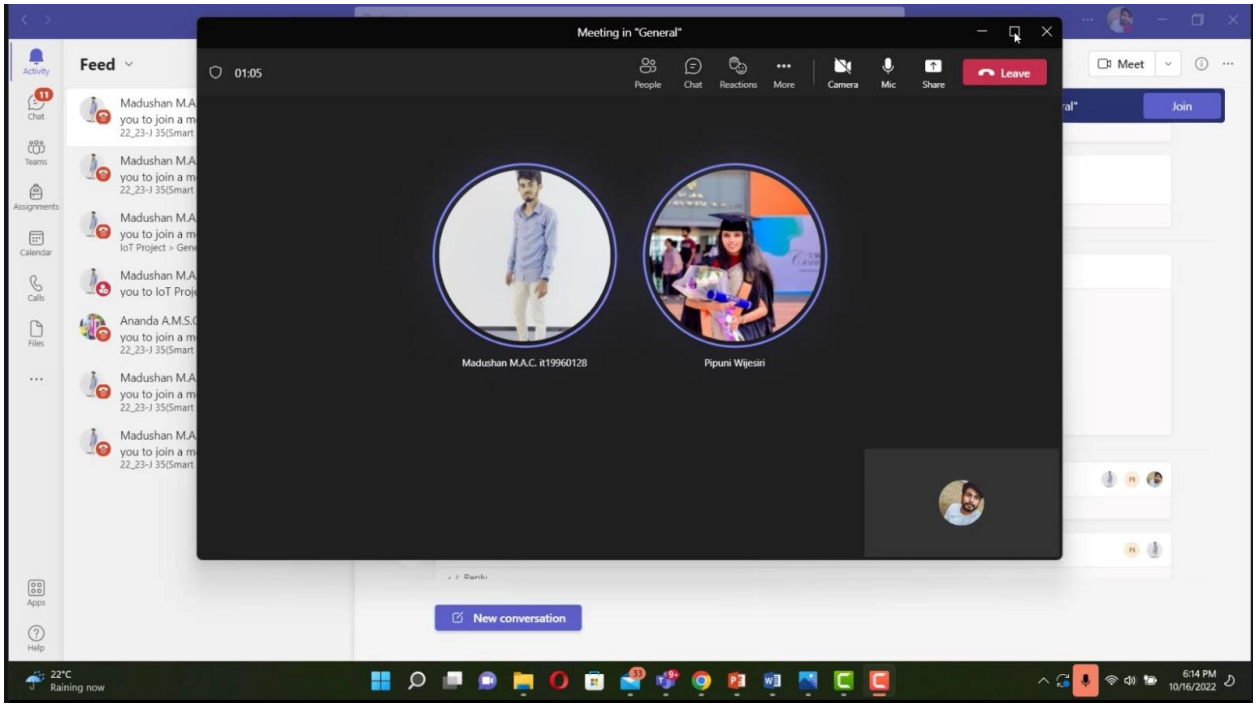

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
2 replies from you and IT19958248
Reply
Sunday, October 16, 2022
Meeting in "General" ended: 13m 44s
Reply
Meeting in "General" started
Reply
Meeting ended: 1m 11s
Reply
Meeting in General ended: 32m 13s
Reply
Monday, October 17, 2022
Meeting in "General" started
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:33 PM
2/3/2023

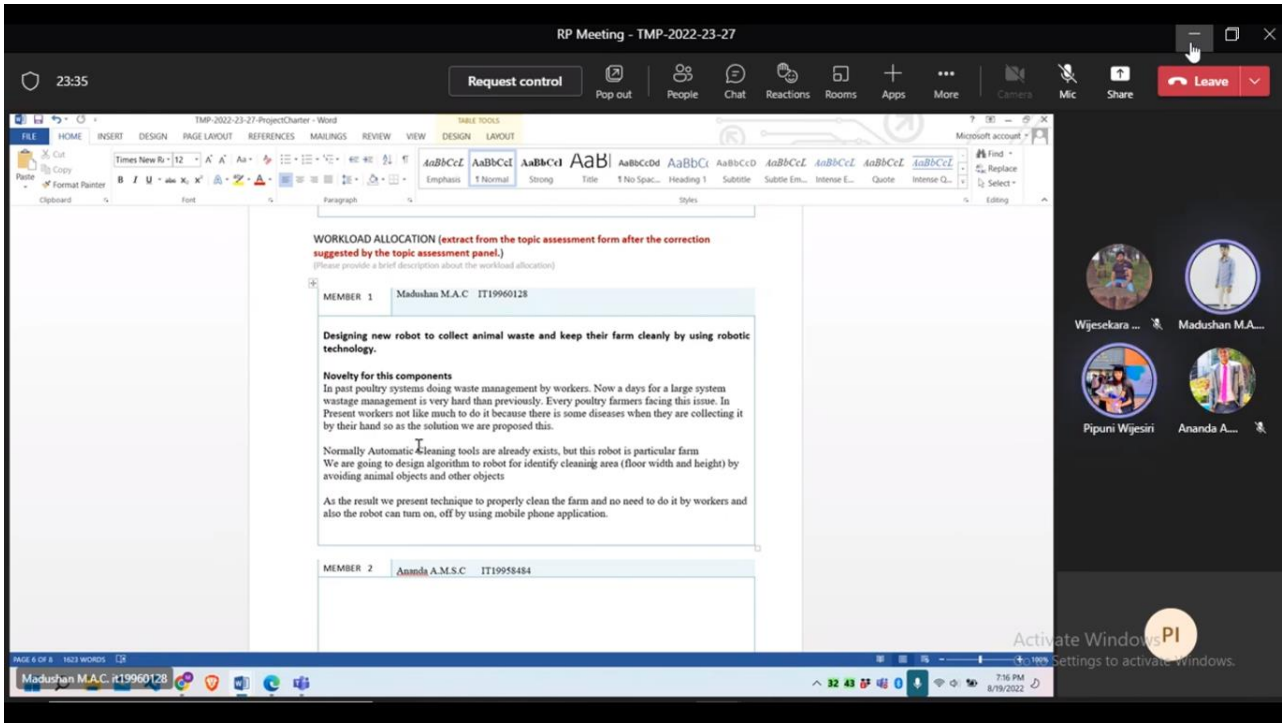

Search
All teams
22_23-J 35(Smart Poultry Fa...
General
General
Posts
Files
Meet
Meeting in "General" started
Reply
Meeting ended: 1m 11s
Reply
Meeting in General ended: 32m 13s
Reply
Monday, October 17, 2022
Meeting in "General" started
3 replies from IT19958248 and IT19960128
Reply
Sunday, November 6, 2022
Meeting in "General" ended: 45m 34s
Reply
New conversation
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
Apps
Help
Type here to search
84°F Cloudy
2:33 PM
2/3/2023

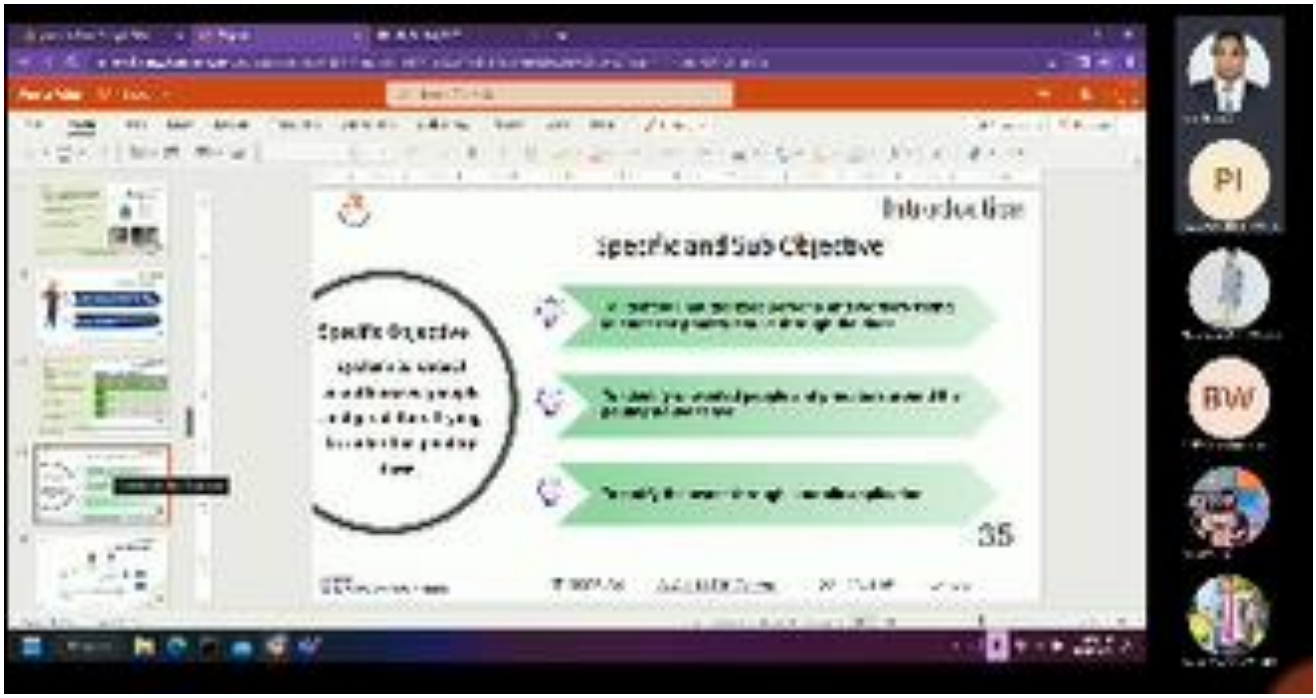

Meeting now
09:13
Request control
Pop out
People
Chat
Reactions
More
Camera
Mic
Share
Leave
Madushan M.A....
Kanishka Yapa
PI
Perera W.A....
Ananda A....
Acceptable: Mark/select as necessary
Acceptance/ Rejection
Correction State
Minor Correction
Major Corrections
Accepted
Resubmit
Rejected
Corrections (if necessary)
1.Find a co-Supervisor
2.How to do the heartbeat checking for a large farm?
3.How to find the resources related to the proposed topic?
4. should contact the farm and should be able to test the project in real world.
5 with the Have to check the equipment needed for the project available in the market possible prices.
Madushan M.A.C. it19960128
27°C
Rain to stop
6:16 PM
8/17/2022

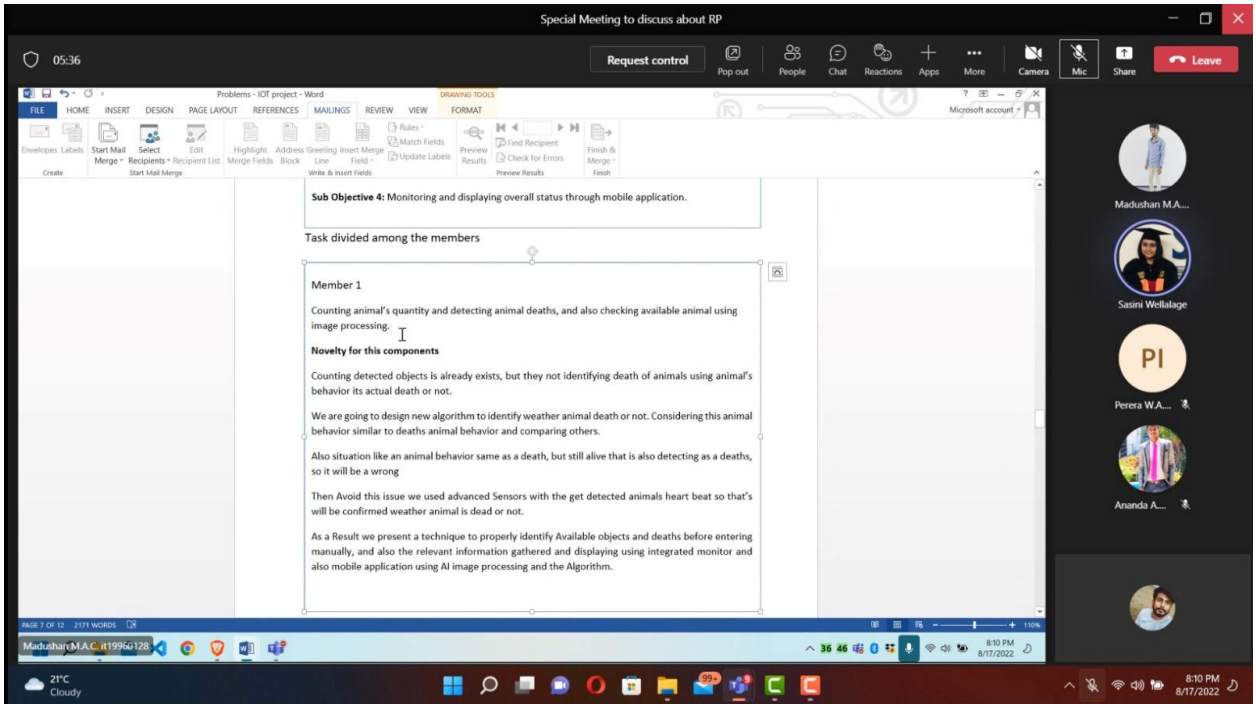

RP Meeting - TMP-2022-23-27
08:56
People
Chat
Reactions
Apps
More
Camera
Mic
Share
Leave
Participants
Type a name
In this meeting (5)
Mute all
Wijesekara B.M.W.S. it19958248
Ananda A.M.S.C. it19958484
Madushan M.A.C. it19960128
Perera W.A.L.H.P.K. it19953434
Organizer
Pipuni Wijesiri
PI
Madushan M.A.C. it19960128
Perera W.A.L.H.P.K. it19953434
Ananda A.M.S.C. it19958484
Pipuni Wijesiri
24°C
Rain to stop
7:01 PM
8/19/2022

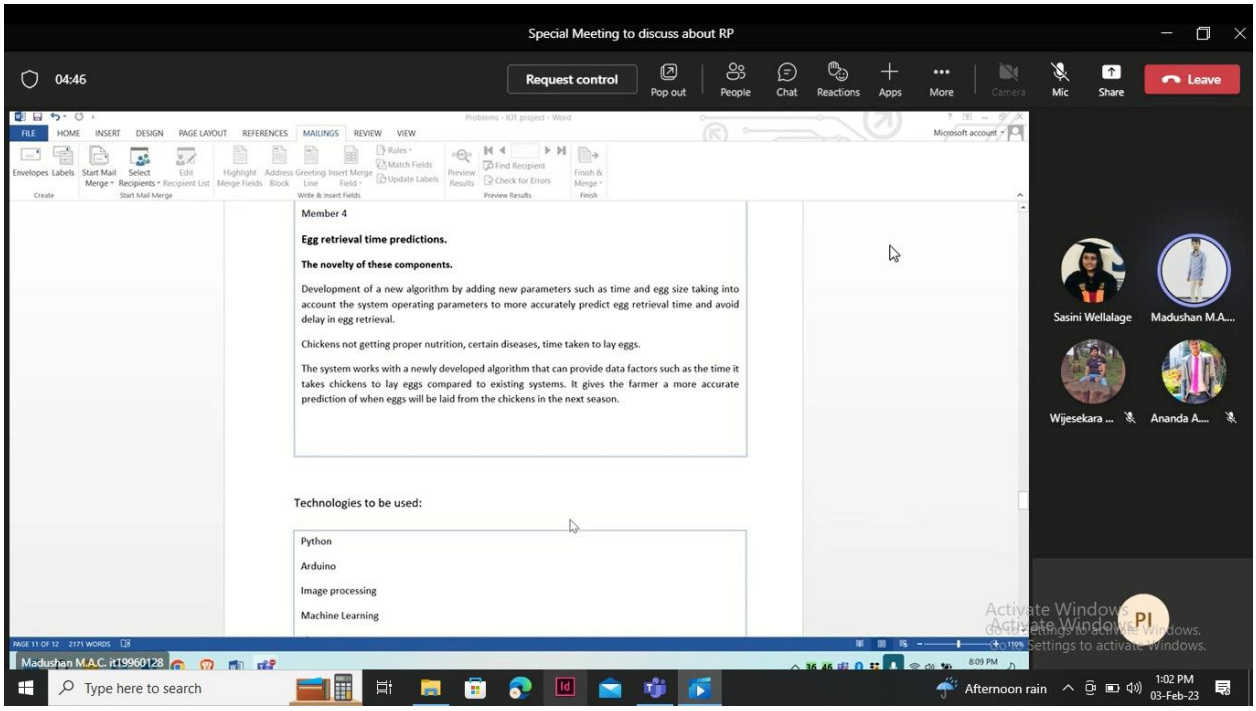

Meeting in "General"
13:16
People
Chat
Reactions
More
Camera
Mic
Share
Leave
Leave (Ctrl+Shift+H)
Madushan M.A.C. it19960128
Pipuni Wijesiri
PI
Perera W.A.L.H.P.K. it19953434
21°C
Rain to stop
6:26 PM
10/16/2022


Meeting in "General"
01:05
People
Chat
Reactions
More
Camera
Mic
Share
Leave
Feed
Meet
Join
Madushan M.A.C. it19960128
Pipuni Wijesiri
New conversation
22°C
Raining now
6:14 PM
10/16/2022

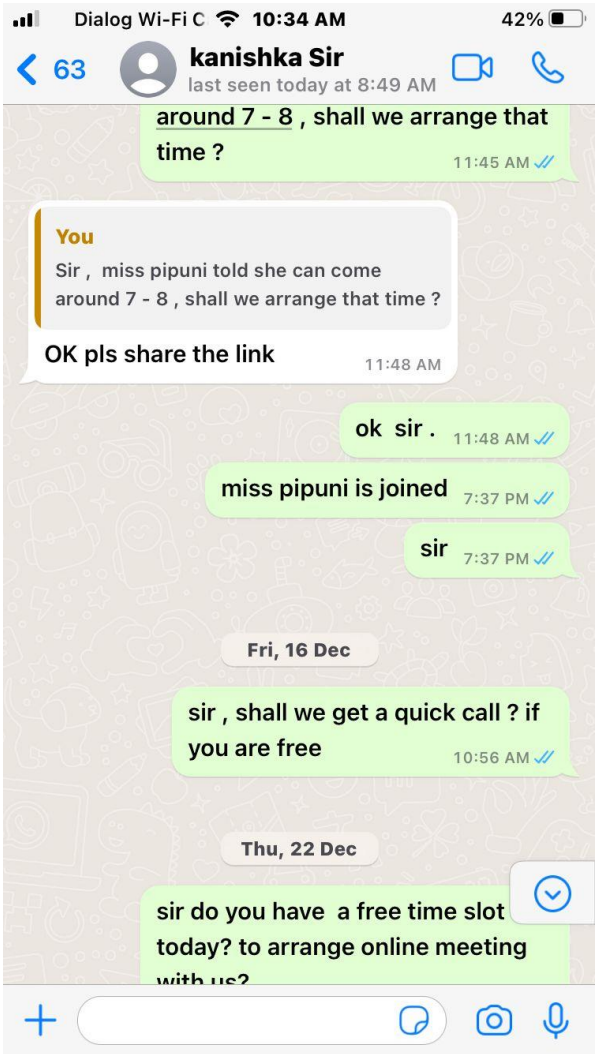

RP Meeting - TMP-2022-23-27
23:35
Request control
Pop out
People
Chat
Reactions
Rooms
Apps
More
Mic
Share
Leave
WORKLOAD ALLOCATION (extract from the topic assessment form after the correction suggested by the topic assessment panel.)
(Please provide a brief description about the workload allocation)
MEMBER 1
Madushan M.A.C IT19960128
Designing new robot to collect animal waste and keep their farm cleanly by using robotic technology.
Novelty for this components
In past poultry systems doing waste management by workers. Now a days for a large system wastage management is very hard than previously. Every poultry farmers facing this issue. In Present workers not like much to do it because there is some diseases when they are collecting it by their hand so as the solution we are proposed this.
Normally Automatic cleaning tools are already exists, but this robot is particular farm
We are going to design algorithm to robot for identify cleaning area (floor width and height) by avoiding animal objects and other objects
As the result we present technique to properly clean the farm and no need to do it by workers and also the robot can turn on, off by using mobile phone application.
MEMBER 2
Ananda A.M.S.C IT19958484
Wijesekara ...
Madushan M.A....
Pipuni Wijesiri
Ananda A....
PI
Activate Windows
Go to Settings to activate Windows.
Madushan M.A.C. it19960128

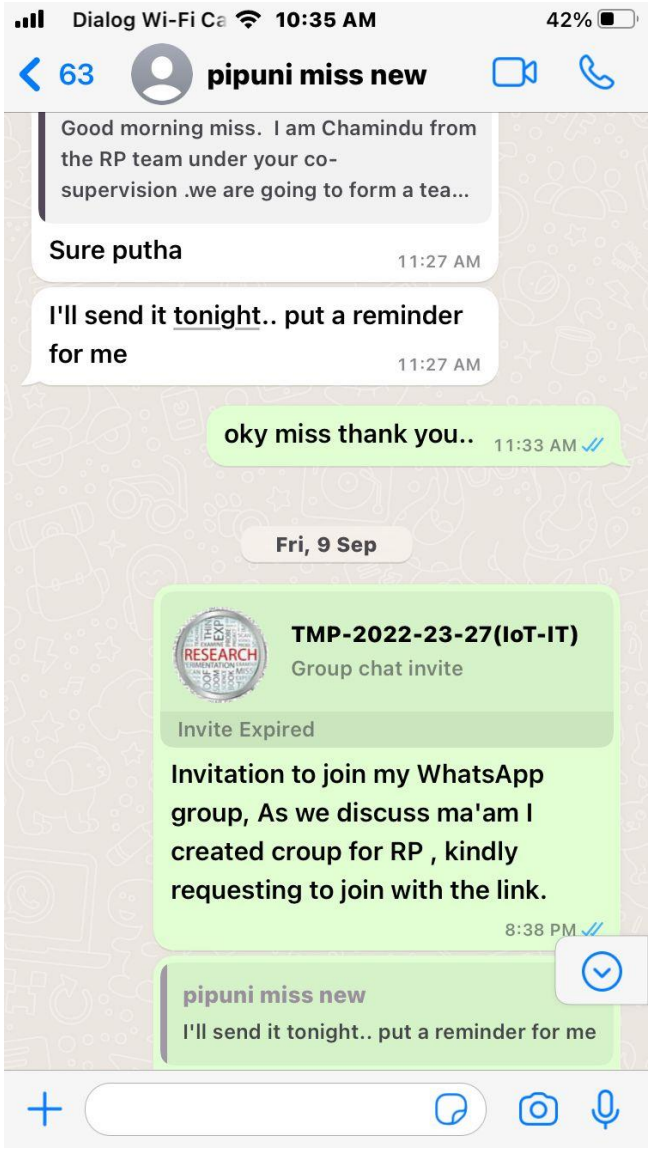

Introduction
Specific and Sub Objective
35
PI
RW


Special Meeting to discuss about RP
05:36
Request control
Pop out
People
Chat
Reactions
Apps
More
Camera
Mic
Share
Leave
Sub Objective 4: Monitoring and displaying overall status through mobile application.
Task divided among the members
Member 1
Counting animal's quantity and detecting animal deaths, and also checking available animal using image processing.
Novelty for this components
Counting detected objects is already exists, but they not identifying death of animals using animal's behavior its actual death or not.
We are going to design new algorithm to identify weather animal death or not. Considering this animal behavior similar to deaths animal behavior and comparing others.
Also situation like an animal behavior same as a death, but still alive that is also detecting as a deaths, so it will be a wrong
Then Avoid this issue we used advanced Sensors with the get detected animals heart beat so that's will be confirmed weather animal is dead or not.
As a Result we present a technique to properly identify Available objects and deaths before entering manually, and also the relevant information gathered and displaying using integrated monitor and also mobile application using AI image processing and the Algorithm.
Madushan M.A....
Sasini Wellalage
PI
Perera W.A....
Ananda A....
21°C
Cloudy
8:10 PM
8/17/2022

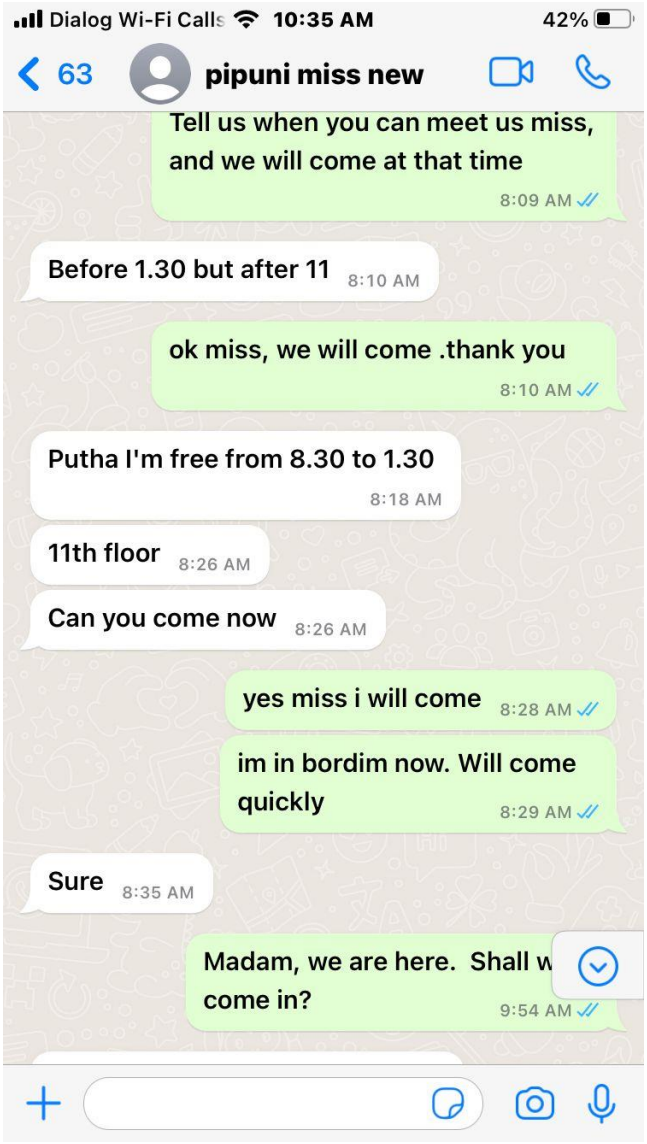

Special Meeting to discuss about RP
04:46
Request control
Pop out
People
Chat
Reactions
Apps
More
Camera
Mic
Share
Leave
Member 4
Egg retrieval time predictions.
The novelty of these components.
Development of a new algorithm by adding new parameters such as time and egg size taking into account the system operating parameters to more accurately predict egg retrieval time and avoid delay in egg retrieval.
Chickens not getting proper nutrition, certain diseases, time taken to lay eggs.
The system works with a newly developed algorithm that can provide data factors such as the time it takes chickens to lay eggs compared to existing systems. It gives the farmer a more accurate prediction of when eggs will be laid from the chickens in the next season.
Technologies to be used:
Python
Arduino
Image processing
Machine Learning
Sasini Wellalage
Madushan M.A....
Wijesekara ...
Ananda A....
PI
Activate Windows
Go to Settings to activate Windows.
Type here to search
Afternoon rain
1:02 PM
03-Feb-23

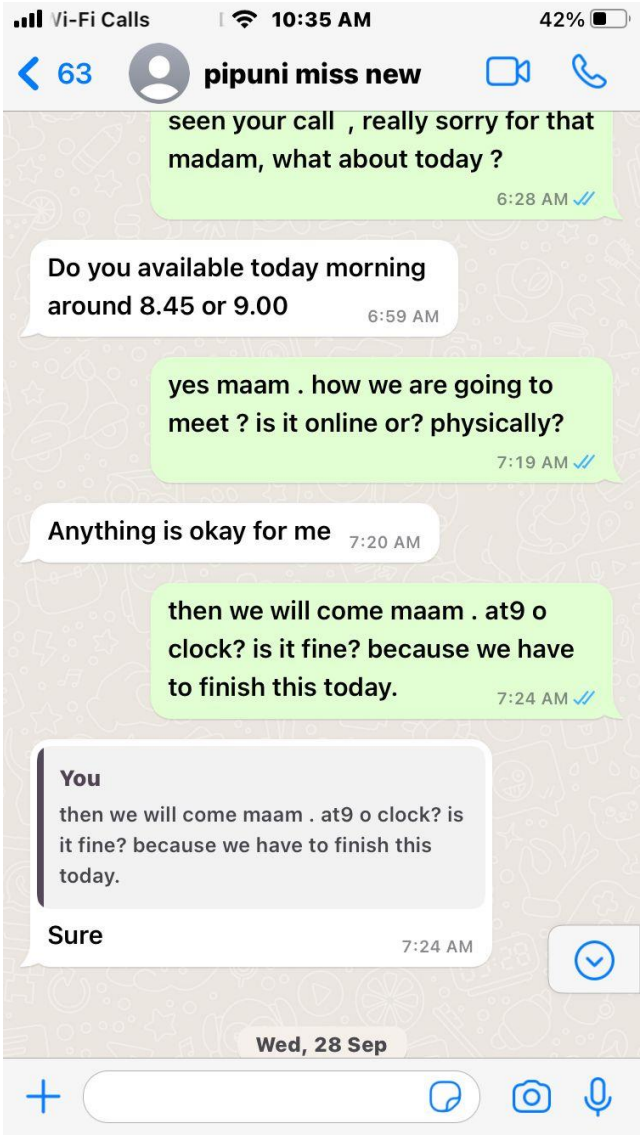
4.2 WhatsApp Chat




Dialog Wi-Fi Ca 10:35 AM 42%
63
pipuni miss new
Good morning miss. I am Chamindu from the RP team under your co-supervision .we are going to form a tea...
Sure putha 11:27 AM
I'll send it tonight.. put a reminder for me 11:27 AM
oky miss thank you.. 11:33 AM
Fri, 9 Sep
TMP-2022-23-27(IoT-IT)
Group chat invite
Invite Expired
Invitation to join my WhatsApp group, As we discuss ma'am I created croup for RP , kindly requesting to join with the link.
8:38 PM
pipuni miss new
I'll send it tonight.. put a reminder for me

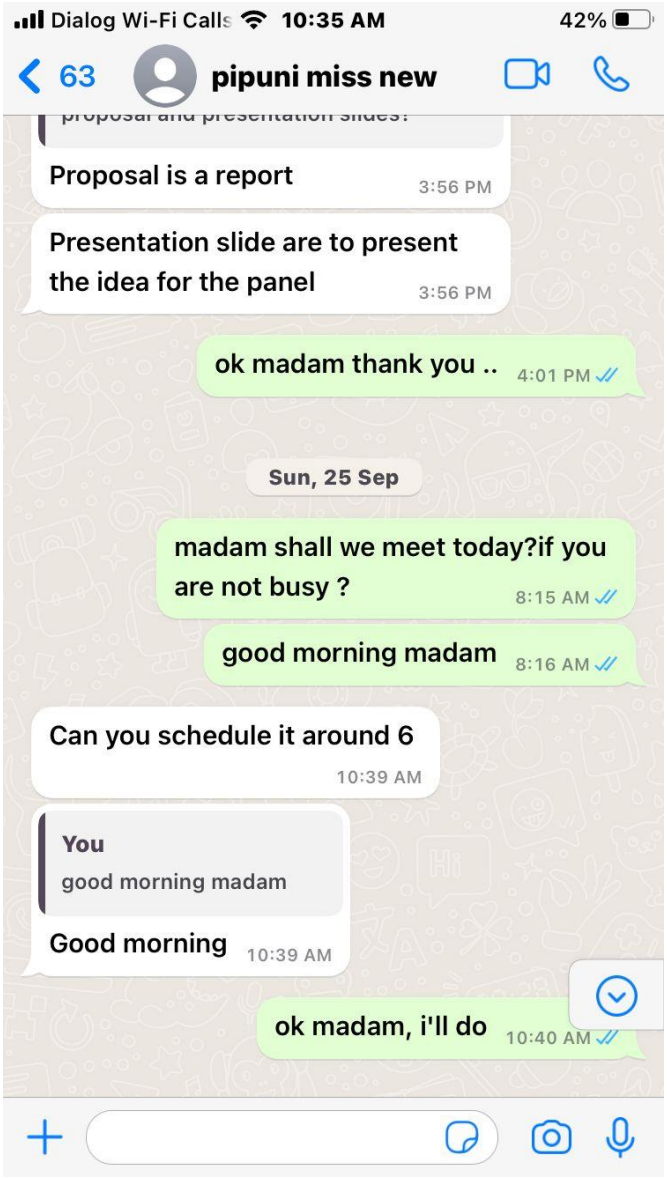

Dialog Wi-Fi Cal 10:35 AM 42%
63
pipuni miss new
You
good morning miss we are We are in big trouble, and we need your help . we cannot continue with these component...
Shall we take a meeting and discuss it 8:03 AM
If you come and visit us.. that's also okay 8:04 AM
Cause both us are coming to work these days.. me and sir 8:04 AM
yes we can come , that's cool, can we meet today ? 8:04 AM
Yes putha but what time can you come 8:05 AM
Cause I have some work to do 8:05 AM
pipuni miss new
Yes putha but what time can you come

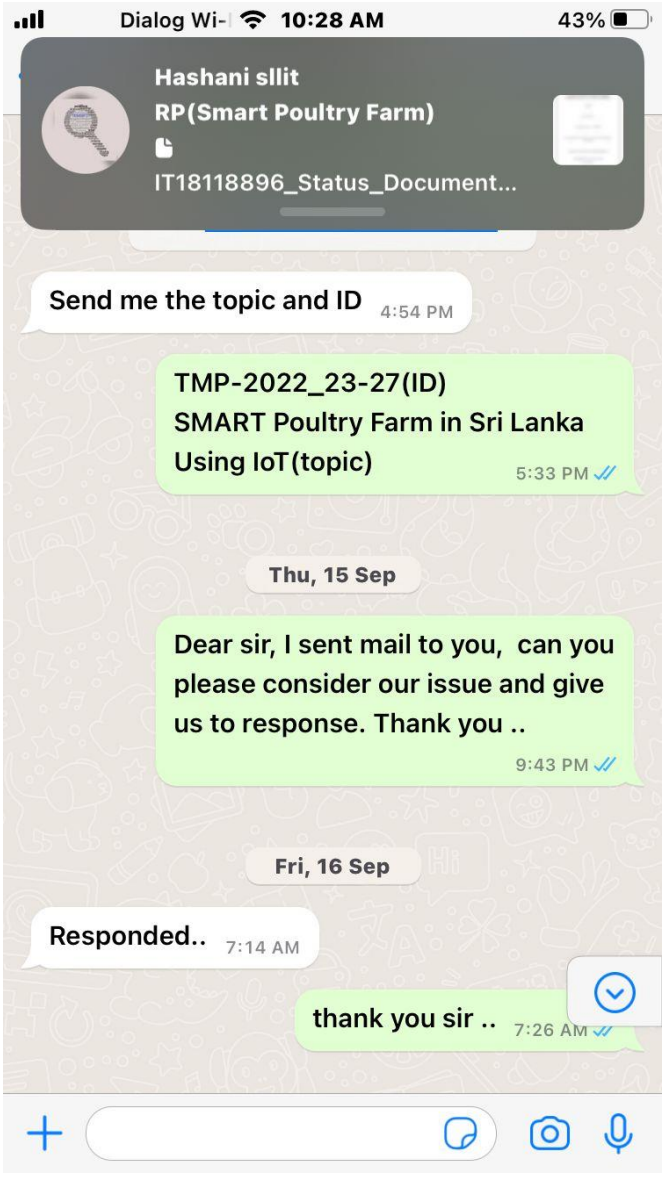

Dialog Wi-Fi Calls
10:35 AM
42%
63
pipuni miss new
Tell us when you can meet us miss, and we will come at that time
8:09 AM
Before 1.30 but after 11
8:10 AM
ok miss, we will come .thank you
8:10 AM
Putha I'm free from 8.30 to 1.30
8:18 AM
11th floor
8:26 AM
Can you come now
8:26 AM
yes miss i will come
8:28 AM
im in bordim now. Will come quickly
8:29 AM
Sure
8:35 AM
Madam, we are here. Shall w
come in?
9:54 AM


Vi-Fi Calls
10:35 AM
42%
63
pipuni miss new
seen your call , really sorry for that madam, what about today ?
6:28 AM
Do you available today morning around 8.45 or 9.00
6:59 AM
yes maam . how we are going to meet ? is it online or? physically?
7:19 AM
Anything is okay for me
7:20 AM
then we will come maam . at9 o clock? is it fine? because we have to finish this today.
7:24 AM
You
then we will come maam . at9 o clock? is it fine? because we have to finish this today.
Sure
7:24 AM
Wed, 28 Sep


Calls Dialog 10:36 AM 41%
63
pipuni miss new
email
7:39 AM
Wait i can't remember the details
7:40 AM
I will search it and give it to you
7:40 AM
oky ma'am but today is deadline .
If you found text me . Thank you .
7:44 AM
Pipuniwijesiri@gmail.com
7:46 AM
Use this email to search
7:46 AM
oky ma'am i'll. Thank you
7:47 AM

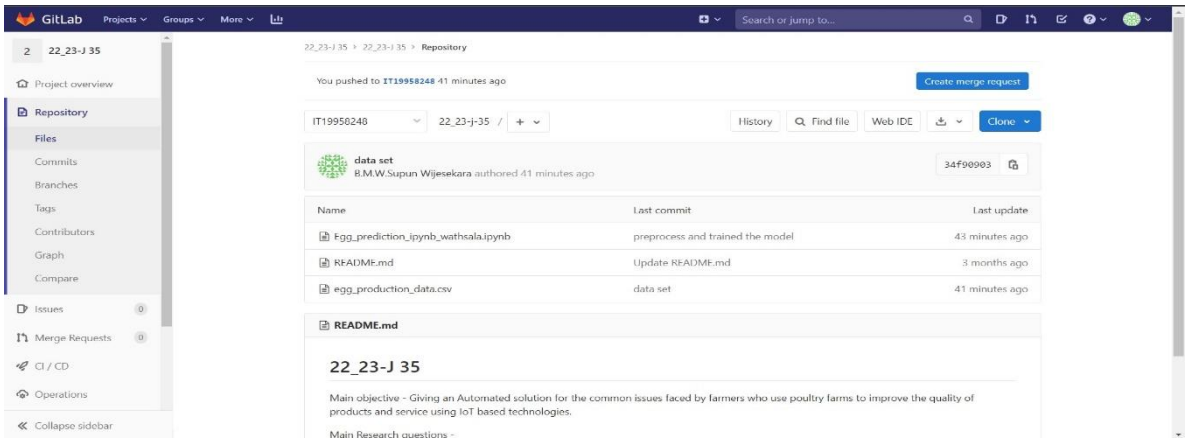

Dialog Wi-Fi Calls 10:37 AM 41%
63
pipuni miss new
Okay
2:38 PM
Mon, 10 Oct
good morning madam
7:51 AM
Will have a meeting today
11:08 AM
shall we take it tonight madam ?
11:09 AM
without solve , cannot prepare proposal madam, 14th we have to submit it ,
11:11 AM
Come and meet me after 1 but before 2
11:18 AM
Cause I'm taking pp2 presentations
11:19 AM
ok ma'am I'll there in this tim
11:26 AM


Dialog Wi-Fi Calls 10:35 AM 42%
63
pipuni miss new
Proposal is a report 3:56 PM
Presentation slide are to present the idea for the panel 3:56 PM
ok madam thank you .. 4:01 PM
Sun, 25 Sep
madam shall we meet today?if you are not busy ? 8:15 AM
good morning madam 8:16 AM
Can you schedule it around 6 10:39 AM
You
good morning madam
Good morning 10:39 AM
ok madam, i'll do 10:40 AM

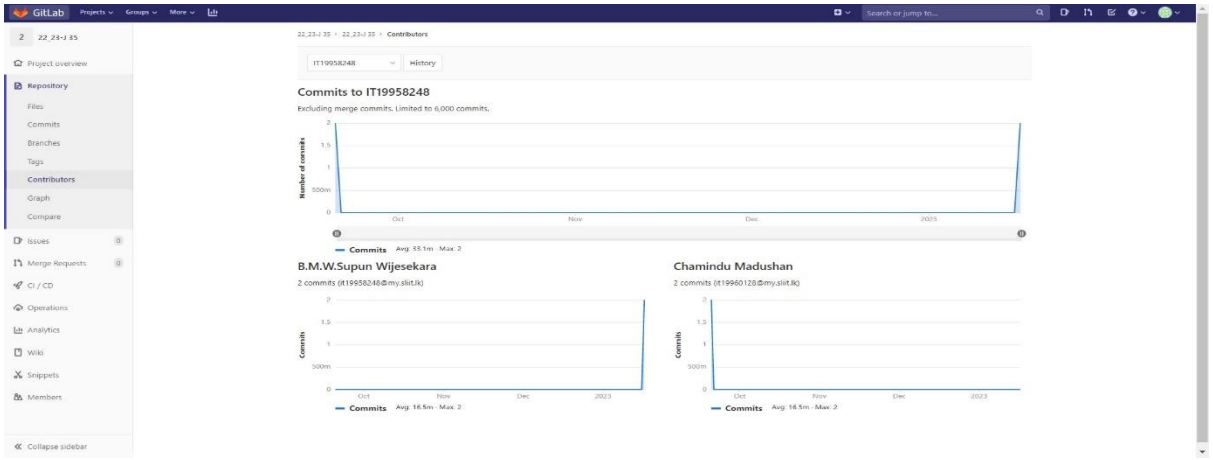

Dialog Wi- 10:28 AM 43%
Hashani sllit
RP(Smart Poultry Farm)
IT18118896_Status_Document...
Send me the topic and ID 4:54 PM
TMP-2022_23-27(ID)
SMART Poultry Farm in Sri Lanka
Using IoT(topic) 5:33 PM
Thu, 15 Sep
Dear sir, I sent mail to you, can you please consider our issue and give us to response. Thank you .. 9:43 PM
Fri, 16 Sep
Responded.. 7:14 AM
thank you sir .. 7:26 AM

5. Individual Project Logs

5.1 Commits



5.2 Contributions



5.3 Progress