

The Future of Crime Prevention: Police Case Analysis using Machine Learning

(Police Accident Case Analysis)

Project ID:
2023-224

Status Document 1
Dharsan.R - IT20003982

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1. Microsoft Teams Details

1.1 Team Members

A screenshot of the Microsoft Teams interface. On the left is a sidebar with icons for Activity, Chat, Teams, Calendar, Calls, Files, and Apps. The main area shows a team channel named '2023-224 The future of crime pr...'. The 'Members' tab is selected, displaying a table with columns for Name, Title, Location, Tags, and Role. There is one entry under 'Owners' (Dharsan.R) and three entries under 'Members and guests' (Traveena C., Krishanthini M., Anubama L.). A blue 'Add member' button is visible at the top right of the table.

1.2 Team Meetings with Supervisor

A screenshot of an Adobe Acrobat Reader window. The title bar says 'TAF-TMP-23-224.pdf - Adobe Acrobat Reader (64-bit)'. The main content area displays a table with four rows of text. To the right of the table is a vertical sidebar with four circular icons, each containing a letter and a name: KI (Krishanthini M.), TI (Traveena C.), AL (Anubama L.), and DI (Dharsan.R.). Below the sidebar is a small circular portrait of a woman. The bottom right corner of the screen shows a system tray with the date and time (9:33 AM 3/7/2023).

Search

RP - Charter - Discussion with supervisor Chat Files Attendance Meeting Notes 4 more + Join 4

3/7 8:38 AM Meeting ended: 15s

Attendance

3/7 8:41 AM Meeting started

Krishanthini M. it19980928 was invited to the meeting.

Anubama Logarathinam was invited to the meeting.

3/7 9:01 AM Recording has started

3/7 9:04 AM Recording has stopped. Saving recording...

Recording
Dharsan.R it20003982
3m 25s

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

Hansika Mahaadikara was invited to the meeting.

3/7 9:13 AM Recording has started

3/7 9:42 AM Recording has stopped. Saving recording...

Anubama Logarathinam left the chat.

Type a new message

...

Search

RP - Police 2023 Chat Files +

12/21/2022 3:52 PM Recording has stopped. Saving recording...

Recording
Dharsan.R it20003982
31m 25s

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

Hansika Mahaadikara 12/23/2022 11:03 AM What's the project title?

Friday, December 23, 2022

Dharsan.R it20003982 12/23/2022 11:04 AM A Detective Analysis System for Police Stations with Minor Facilities

Dharsan.R it20003982 12/23/2022 11:04 AM A Detective Analysis System for Police Stations with Minor Facilities

If we need to do any amendments, please let us know madam.

Dharsan.R it20003982 added Traveena C. it20001452 to the chat.

Dharsan.R it20003982 changed the group name to RP - Police 2023.

2/6 8:24 AM Call ended 1m 3s

Type a new message

...

The screenshot shows the Microsoft Teams Chat interface. On the left, there's a sidebar with activity, teams, assignments, calendar, calls, files, and apps. The main area shows a pinned message from 'Dharsan.R it20003982 (You)' and a summary of the 'PP1 - Discussion' meeting.

PP1 - Discussion

Saturday, May 20, 2023 10:02:42 AM

Summary

4 Attended 10:02 AM - 10:35 AM 32m 33s Meeting duration 16m 44s Average attendance time

Participants

| Name | First join | Last leave | In-meeting duration | Role |
|-----------------------------------------------------------|------------|------------|---------------------|-----------|
| Dharsan.R it20003982 it20003982@my.sliit.lk | 10:11 AM | 10:35 AM | 23m 29s | Organizer |
| Anubama Logarithinam anubama.logarithinam@itelsoft.com | 10:17 AM | 10:35 AM | 17m 26s | Presenter |
| Krishanthini M. it19980928 it19980928@my.sliit.lk | 10:19 AM | 10:35 AM | 15m 37s | Presenter |
| Hansika Mahaadikara hansika.m@sliit.lk | 10:24 AM | 10:35 AM | 10m 24s | Presenter |

2. Teams Calls with Research Team

The screenshot shows an Excel spreadsheet titled 'Research Groups at FoC'. The spreadsheet contains data about various research groups and their members. To the right of the spreadsheet, there are four large circular icons with initials: KI, AI, DI, and TI, each associated with a name and ID.

Research Groups at FoC - Saved

Sheet1

| | A | B | C | D | E | F | G | H |
|----|--------------------------------|----------------------|---|----------------------------------------|-------------------------------------------------|-------------------------------------|---|---|
| 26 | Malawarachchi (ML) | | | Nunwan Kodagoda (GLE) | | Dhammika H De Silva (MC) | | |
| 27 | Perera (ML, RL, EA) | | | Namalie Walampayil (IP) | Anjali Gamage (ICTO, ELE, HCI) | Anuradha Jayakody (HPC, PC) | | |
| 28 | Weerasirivardhane (ML) | | | Jayantha Amararachchi (KM, DS, BD) | Dhammika H De Silva (AT, ICTO, HCI) | Dharshana Kasthuriathna (SE) | | |
| 29 | Kalapuge (ML, AI) | | | Chathurangika Kalanharachchi (BIA, KM) | Anuradha Jayakody (CS, IS, CN, SDN, SA, CC, CG) | Devanshi Senegoda (AVR) | | |
| 30 | Weerathunga (ML, AI) | | | Geethanjali Wimalaratne (KM, DS) | Karthiga Rajendran (ELE, ICTD, HCI) | Dilanka Neiyandith (SS) | | |
| 31 | Kodagoda (AI, ML) | | | Anuradha Jayakody (BIA, NLP, DS) | Nalaka Dissanayake | Lakmal Rupasinghe (HPC, PC, PL, MC) | | |
| 32 | Secondary Affiliation (s) - | mal Jayawardena (ML) | | Samitha Vidhanaarachchi (IP) | Sukanya Manoharan (HCI) | Jayantha Amararachchi (HPC, PC) | | |
| 33 | Iulesinghe (AI, ML) | | | Vindhya Kalapuge (NLP, DS) | Pradeepa Samarasinghe (HI) | Geethanjali Wimalaratne (SE, AR/VR) | | |
| 34 | Gamage (AI, ML, SS) | | | Ishara Weerathunga (NLP) | Dinuka R. Wijendra (ICTD, ELE) | Chethana Liyunge (AI/ML) | | |
| 35 | De Silva (AI, ML) | | | | Aruna Ishara Gamage (ELE / HCI) | Desuni Navindra (SE) | | |
| 36 | ha Jaykody (AI, ML) | | | | Sathika Hettiarachchi (ICTD) | Yashas Mallavarachchi (SE) | | |
| 37 | ja Sumathipala (ML) | | | | Jagath Wickramarathne (HI) | Thushithjantha Thilakarathna (SE) | | |
| 38 | pe Bandara (AI, ML) | | | | Sarduni Perera (HCI) | Buddhima Attanayaka (RE, BPM) | | |
| 39 | Manathunga (AI, ML) | | | | Vijani Piyawardana (HCI, ELE, HI) | | | |
| 40 | R. Wijendra (AI, ML) | | | | Vindhya Rankothige (ICTD) | | | |
| 41 | samaratunge (AI, ML) | | | | Kavinda Yapa Abeywardena (ICTD, ELE) | | | |
| 42 | ijali Wimalaratne (ML) | | | | Lakmal Rupasinghe (ICTD, ELE, AT, HI, HCI) | | | |
| 43 | o Abeygunawardhana (AI) | | | | Shashika Lokuliyana (ICTD, AT) | | | |
| 44 | ha Thellijigoda (AI, ML) | | | | Devanshi Ganegoda (HCI) | | | |
| 45 | yellage (AI) | | | | | | | |
| 46 | k Weerasinghe (AI, ML) | | | | | | | |

Icons (Right):

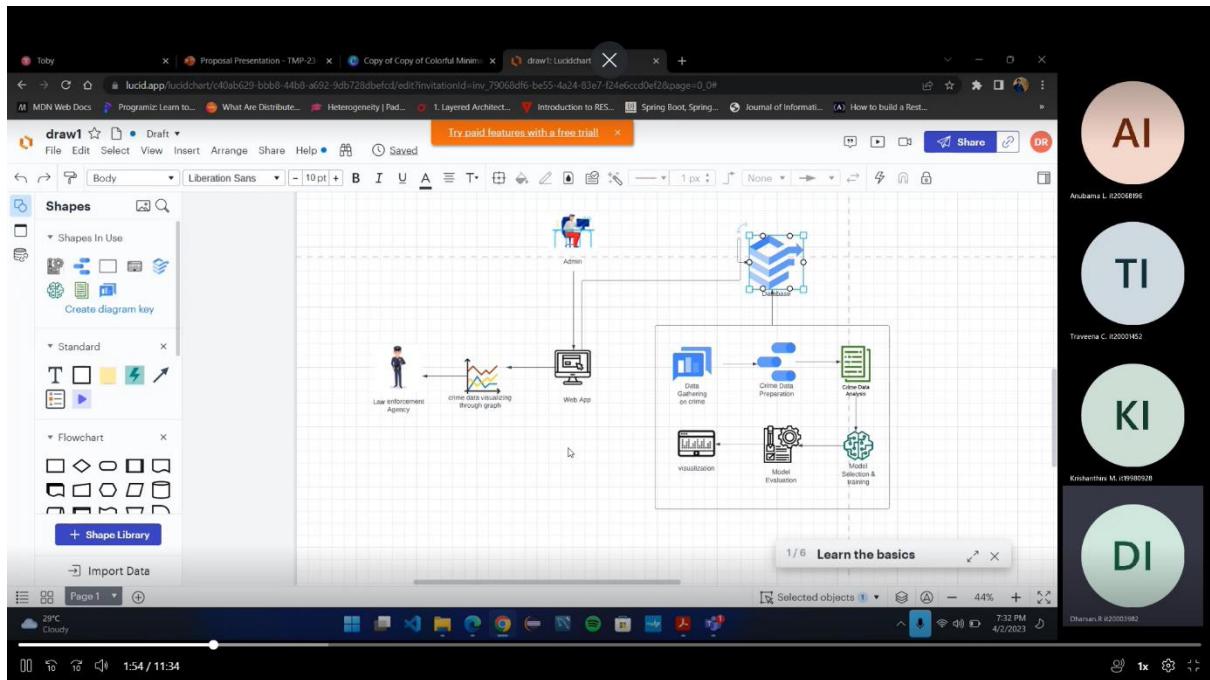
- KI: Krishanthini M. it19980928
- AI: Anubama Logarithinam
- DI: Dharsan.R it20003982
- TI: Traveena C. it20001452

This screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main window displays the "General" channel. A message from "Dharsan.R it20003982" at 1/3 6:04 PM is marked as deleted. A message from "Traveena C. h20001452" at 1/3 6:05 PM links to a Coursera course page. Another message from "Traveena C. h20001452" at 1/3 6:39 PM discusses a meeting that ended 1h 7m ago, with an attendance report available for download. A recording of the meeting has stopped, and the recording is set to expire. A blue button at the bottom says "New conversation".

This screenshot shows the Microsoft Teams interface for the same team. The left sidebar is identical. The main window displays the "General" channel. A message from "AI" at 4/2 9:06 PM discusses clustering crimes against women and crime forecasting prediction. A reply from "AI" at 4/2 9:07 PM continues this thread. A message from "Anubama L. it20068196" at 4/2 9:11 PM also discusses the same topic. A scheduled task titled "Meeting started" is listed for Monday, April 3, 2023. A scheduled task titled "RP-Proposal Final Report started" is listed for Tuesday, April 18, 2023. A blue button at the bottom says "New conversation".

Screenshot of a Microsoft Teams General channel. The channel header shows 'General' and has tabs for Posts, Files, Group Task, Individual Tasks, and a plus sign. A search bar at the top right contains the placeholder 'Search'. On the left, a sidebar lists 'All teams' and various team-related icons: Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. Below the sidebar, a pinned message from '2023-224 The future of crime pr...' is visible. The main content area displays a pinned image of a police officer and a pinned recording of a meeting. The recording interface shows it was recorded by 'Traveena C.' on April 2, 2023, at 11:15 PM, lasting 2h 2m. It includes a link to the recording and a note about its expiration date. Below the recording, several messages from users 'Traveena C.', 'Anubama L.', and 'AI' are listed. At the bottom, there is a blue 'New conversation' button.

Screenshot of a Microsoft Teams General channel. The channel header shows 'General' and has tabs for Posts, Files, Group Task, Individual Tasks, and a plus sign. A search bar at the top right contains the placeholder 'Search'. On the left, a sidebar lists 'All teams' and various team-related icons: Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. Below the sidebar, a pinned message from '2023-224 The future of crime pr...' is visible. The main content area displays a pinned attendance report titled 'Attendance report' with a download icon. Below the report, a message from 'Dharsan.R' is shown, followed by a note that the meeting ended 5h 45m ago. A timestamp 'Tuesday, April 18, 2023' is visible. At the bottom, a pinned message from 'RP-Proposal Final Report started' is displayed, showing activity from users 'Dharsan.R', 'Krishanthini M.', 'Traveena C.', and 'AI'. There is also a note about the proposal being started. A blue 'New conversation' button is located at the bottom.



The screenshot shows a Microsoft Teams conversation in the "General" channel of a team named "2023-224 The future of crime pr...".

Discussion Thread:

- A message from "Dharsan.R #20003982" at 1:47 PM is visible.
- A reply from "Dharsan.R #20003982" at 1:47 PM is shown, containing a link to a recorded meeting.

Meeting Recordings:

- A recorded meeting titled "Meeting" is shown, recorded by "Dharsan.R #20003982" at 1h 34m.
- A second recorded meeting titled "Meeting started" is shown, recorded by "Dharsan.R #20003982" at 14m 49s.

The Teams interface includes a sidebar with activity, chat, teams, assignments, calendar, calls, files, and apps. The bottom status bar shows weather (29°C, mostly cloudy) and system time (6:25 PM, 5/21/2023).

Screenshot of Microsoft Teams interface showing a meeting summary for "RP - Ethical report form".

Meeting Summary:

- Attendees:** 4
- Start and end time:** 8:40 PM - 9:16 PM
- Meeting duration:** 36m 45s
- Average attendance time:** 33m 8s

Participants:

| Name | First join | Last leave | In-meeting duration | Role |
|----------------------------|------------|------------|---------------------|-----------|
| Dharsan.R.it20003982 | 8:40 PM | 9:16 PM | 36m 5s | Organizer |
| Krishanthini M. it19980928 | 8:40 PM | 9:16 PM | 34m 3s | Presenter |
| Anubama Logarithnam | 8:44 PM | 9:16 PM | 32m 38s | Presenter |
| Traveena C. it20001452 | 8:47 PM | 9:16 PM | 29m 46s | Presenter |

Screenshot of Figma prototype showing a "Prototype Discussion" window.

The prototype features three circular icons labeled KI, TI, and AI, representing participants. A message in the "Meeting chat" panel says: "Recording has started. Let people in the meeting know they're being recorded. Privacy policy".

On the right side of the Figma interface, there are four large circular profile pictures with initials: TI, DI, KI, and AI, corresponding to the participants listed in the prototype.

3. Microsoft Teams Planner

3.1 Planner Board Group Tasks

The screenshot shows the Microsoft Teams Planner interface for a group task titled "2023-224 The future of crime pr...". The "General" tab is selected. The "To do" section contains four tasks: "Progress Presentation 2" (due 07/28), "Research Paper" (due 06/20), "PP1 50%" (due 05/26), and "Proposal Report-Draft". The "Completed tasks" section shows three tasks: "Proposal-Presentation" (status: completed by Dharsan.R it20003982), "Completed by Dharsan.R it20003...", and "Proposal Report-Draft". The top navigation bar includes tabs for General, Posts, Files, Group Task, Individual Tasks, and a plus sign. The bottom navigation bar includes Group by Bucket, Filter, List, Board (selected), Charts, and Schedule.

Individual Task

The screenshot shows the Microsoft Teams Planner interface for individual tasks. The "Individual Tasks" tab is selected. It displays tasks assigned to three users: Dharsan.R it20003982, Anubama L. it20068196, and Krishanthini M. it19980928. Each user's tasks are grouped together. For example, Dharsan.R has tasks like "Accident Prediction" (due 07/28) and "Cause Prediction" (due 05/26). Anubama L. has tasks like "Final presentation & Viva" (due 11/03) and "Project website-individual" (due 11/06). Krishanthini M. has tasks like "Crime Rate Prediction" (due 05/26) and "Testing" (due 07/12). The interface includes a sidebar with various Microsoft Teams services like Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The top navigation bar includes tabs for General, Posts, Files, Group Task, Individual Tasks, and a plus sign. The bottom navigation bar includes Group by Assigned to, Filter, List, Board, Charts, and Schedule.

The screenshot shows a Microsoft Teams task board titled "General". The board has four columns: "To do", "Accident Prediction", "Crime Prediction", and "Machine learning".

- To do:**
 - + Add task
 - Full Code Implementation - PP2 (due 07/28)
 - Report (due 09/10)
 - Research Paper (due 06/20)
 - Project presentation -2 (due 07/28)
 - Final Reports (due 07/28)
- Accident Prediction:**
 - + Add task
 - Web Application - Individual Component 50% (due 05/26)
 - Accident Prediction: Model Training (due 05/26)
 - Cause Prediction (due 05/26)
 - Prevention Strategies (due 07/28)
- Crime Prediction:**
 - + Add task
 - Crime Rate Prediction (due 05/26)
 - Model Training -pp1 (due 05/24)
 - Testing (due 07/12)
 - Model training-pp1 (due 05/26)
- Machine learning:**
 - + Add
 - Implement (due 05/25)
 - Testing (due 07/28)
 - Learning (due 05/31)
 - Complete

3.2 Completed Tasks – Group Task

The screenshot shows a Microsoft Teams task board titled "General". The board has two columns: "To do" and "Add new bucket".

- To do:**
 - + Add task
 - Completed by Krishanthini M. it1... (status KI)
 - Research Paper (status KI)
 - Completed by Krishanthini M. it1... (status KI)
 - Proposal Presentation (status DI)
 - Completed by Dharsan.R it20003... (status DI)
 - Proposal Report-Draft (status DI)
 - Completed by Dharsan.R it20003... (status DI)
 - Topic Assessment Form (status DI)
 - Completed by Dharsan.R it20003... (status DI)
- Add new bucket:** (This section is currently empty)

Individual Task

The screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays a "General" channel with a "To do" list containing tasks like "Referring Research papers" and "Learning Algorithms", all marked as completed. To the right, there are four columns of "Individual Tasks": "Accident Prediction", "Crime Prediction", and "Machine learning" (partially visible), each with their own "Add task" buttons and lists of items. A vertical scrollbar indicates more content below.

3.3 Pending Tasks Group Task

The screenshot shows the Microsoft Teams interface for the same team "2023-224 The future of crime pr...". The left sidebar is identical. The main area displays a "General" channel with a "Group Task" tab selected. A table lists pending tasks: "New task", "PP1 50%", "Testing", "PP2 90%", and "Final Doc viva & Presentation". Each task has an "Assign" button, a priority dropdown, and a due date. The "Assigned to" column shows a grid of user icons, and the "Priority" and "Due" columns are visible. The "Bucket" column indicates they are all assigned to the "To do" bucket.

Individual Task

The screenshot shows the Microsoft Teams Planner interface. On the left, there's a sidebar with icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area has a header with tabs: General, Posts, Files, Group Task, Individual Tasks (which is selected), and a plus sign. Below the header is a toolbar with filters for Progress, Assign, Priority, and more. A search bar is at the top right. The main content area displays a table of tasks:

| Task title | Assigned to | Priority | Due | Bucket |
|-----------------------------------------------------|----------------------|----------|-------|---------------------|
| Progress Presentation 2 | T1, A1, K1, D1 | | 7/28 | To do |
| Testing 1 | Dharsan.R it20003982 | | 5/25 | Accident Prediction |
| Implementation - pp1 | Dharsan.R it20003982 | | 5/26 | To do |
| Research Paper | Dharsan.R it20003982 | | 6/20 | To do |
| Testing - PP1 | Dharsan.R it20003982 | | 7/25 | Crime Prediction |
| Finding Connections Between Accident - pp1 | Dharsan.R it20003982 | | 7/28 | Accident Prediction |
| Prevention Strategies - PP2 | Dharsan.R it20003982 | | 7/28 | Accident Prediction |
| Web Application - Individual Component - 100% - PP2 | Dharsan.R it20003982 | | 7/28 | Accident Prediction |
| Report | Dharsan.R it20003982 | | 9/10 | To do |
| Final Submission & Viva (Individual) | Dharsan.R it20003982 | | 10/26 | Accident Prediction |

3.4 Teams Planner Schedule

Group Task

The screenshot shows the Microsoft Teams Planner interface in a calendar view. The left sidebar is identical to the previous screenshot. The main area has a header with tabs: General, Posts, Files, Group Task (selected), Individual Tasks, and a plus sign. Below the header is a toolbar with Group by Bucket, Filter, and a list of tasks: Unscheduled tasks, To do, and Completed. The main content area is a calendar for May 2023, showing days from Sunday to Saturday. Tasks are represented as colored boxes: green for 'Visiting L...', blue for 'PP1 50%', and grey for others. The calendar shows the following tasks:

- May 11: Visiting L...
- May 16: +
- May 26: PP1 50%

The screenshot shows the Microsoft To Do app interface. On the left is a sidebar with icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area has a header with tabs: General, Posts, Files, Group Task (selected), Individual Tasks, and a plus sign. Below the header is a search bar and a 'Meet' button. The main content is a calendar for July 2023. The days of the week are labeled Sunday through Saturday. The dates from 25 to 30 July are visible, followed by 1 to 5 August. A task titled 'Testing' is scheduled for Friday, July 14. A progress bar at the bottom of the task indicates 'PP2 90%'. The right side of the screen shows sections for 'Unscheduled tasks' (with a '+ Add task' button) and 'To do' and 'Completed' lists.

This screenshot shows the Microsoft To Do app interface again, but for September 2023. The sidebar and header are identical to the previous screenshot. The main content is a calendar for September 2023. The days of the week are labeled Sunday through Saturday. The dates from 27 to 30 September are visible, followed by 1 to 7 October. A task titled 'Final Rep...' is scheduled for Monday, September 11. The right side of the screen shows sections for 'Unscheduled tasks' (with a '+ Add task' button), 'To do', and 'Completed' lists.

Individual Task

The screenshot shows the Microsoft Teams calendar interface for May 2023. The left sidebar includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays a monthly calendar with tasks. A task titled "Dataset ..." is listed for May 1st. Another task, "Status Do...", is scheduled for May 22nd. On May 25th, there are three tasks: "Testing 1", "Accident ...", and "Finding C...". A button "+4 more" indicates additional tasks for that day. The right sidebar shows sections for "Unscheduled tasks", "Unassigned" (with one item from Dharsan.R.it), and "Completed".

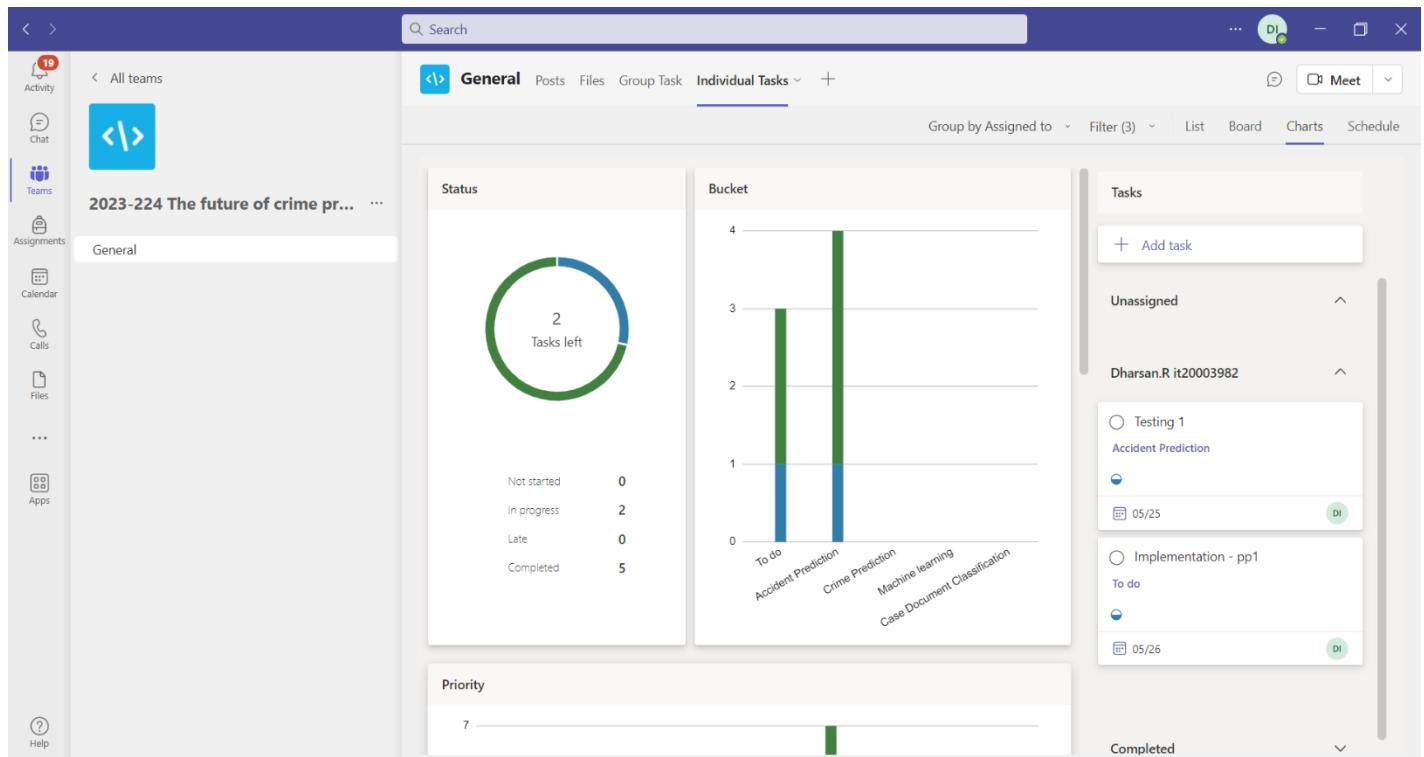
The screenshot shows the Microsoft Teams calendar interface for July 2023. The left sidebar is identical to the previous screenshot. The main area displays a monthly calendar with tasks. A task titled "Testing - PPT" is listed for July 25th. Another task, "Finding C...", is scheduled for July 28th. A button "+3 more" indicates additional tasks for that day. The right sidebar shows sections for "Unscheduled tasks", "Unassigned" (with one item from Dharsan.R.it), and "Completed".

This screenshot shows the Microsoft Teams Planner interface. On the left, there's a sidebar with various team management and communication tools like Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays a monthly calendar for June 2023. The calendar shows days from 28 to 30 of June, followed by days 1 through 31 of July. A specific task titled "Research ..." is listed for July 21st. To the right of the calendar, there's a sidebar for "Unscheduled tasks" which includes sections for "Add task", "Unassigned" (with one item from "Dharsan.R it20003982"), and "Completed".

3.5 Teams Planner Charts Group Task

This screenshot shows the Microsoft Teams Planner interface with a focus on the "Group Task" chart view. The left sidebar is identical to the previous screenshot. The main area features three charts: a donut chart showing "3 Tasks left", a bucket chart showing task status (Not started: 2, In progress: 1, Late: 0, Completed: 2), and a priority chart. To the right, there's a sidebar for "Tasks" which includes a "Add task" button and lists items for "Unassigned" (from "Dharsan.R it20003982" and "Anubama L. it20068196"), "PP2 90%" (due 07/28), "Final Doc viva & Presentation" (due 10/30), and "Testing".

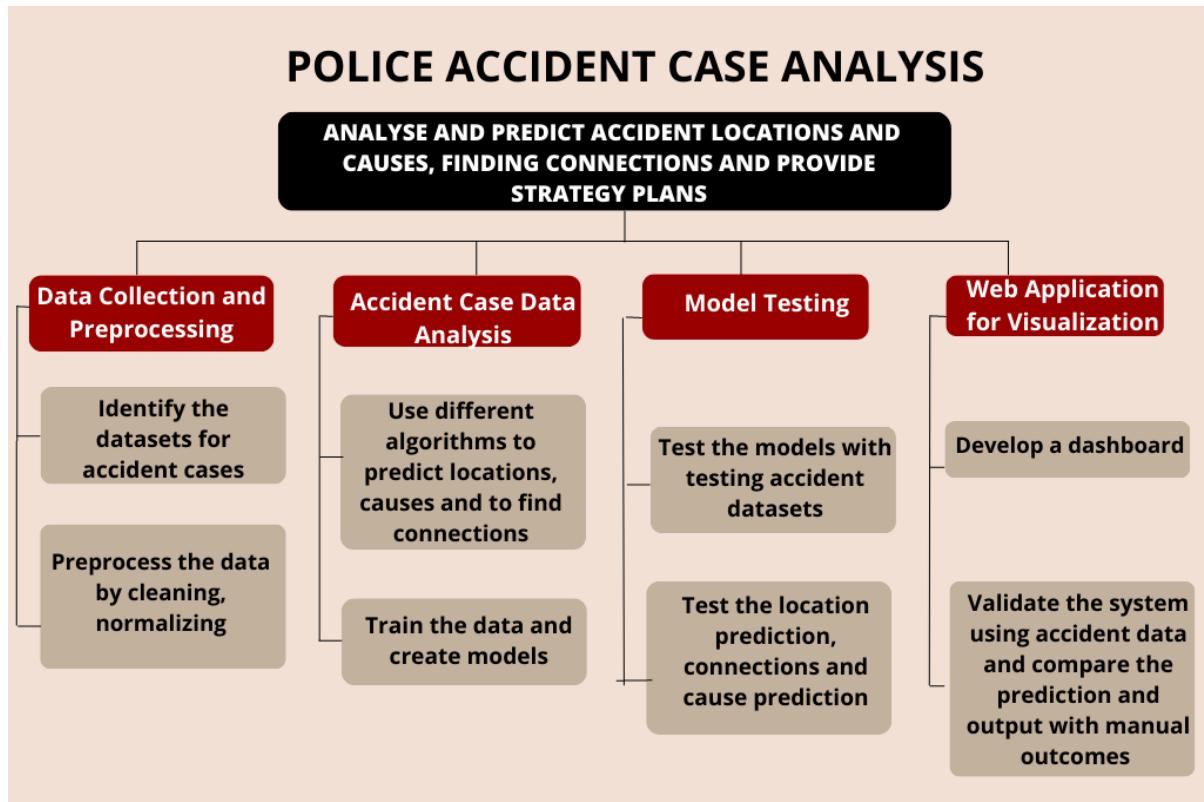
Individual Task



4. Gants Chart

| Tasks | 2022 | 2023 | | | | | | | | | | | |
|--------------------------------------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| | December | January | February | March | April | May | June | July | August | September | October | November | December |
| Topic Clarification | | | | | | | | | | | | | |
| Topic Assessment | | | | | | | | | | | | | |
| Project Charter | | | | | | | | | | | | | |
| Requirements Gathering | | | | | | | | | | | | | |
| Making of Project Proposal | | | | | | | | | | | | | |
| Project Presentation | | | | | | | | | | | | | |
| Proposal Report | | | | | | | | | | | | | |
| Progress Presentation-1 | | | | | | | | | | | | | |
| Research Paper | | | | | | | | | | | | | |
| Final Report | | | | | | | | | | | | | |
| Progress Presentation-2 | | | | | | | | | | | | | |
| Testing and Fixing issues | | | | | | | | | | | | | |
| Website Assessment and Research Book | | | | | | | | | | | | | |
| Final Report (Soft bound) | | | | | | | | | | | | | |
| Status Document Submission | | | | | | | | | | | | | |
| Final Presentation and Viva | | | | | | | | | | | | | |
| Final Report Submission | | | | | | | | | | | | | |

5. Work Break down Chart



6. WhatsApp Research Project Group

The screenshot shows a WhatsApp group chat titled "POLICE - Research - 2023". The group has 6 participants. A message from "Hansika Mahaadikaara Madam Sliit" at 10:49 am yesterday asks for guidance on a presentation. The group info panel is open, showing the group name "RESEARCH PROJECT (POLICE)" with two people icon and a gear icon.

POLICE - Research - 2023

Anubama, Hansika, Krish, Sanjeevi, Travee, You

we wanted to kindly request a small discussion regarding our upcoming Progress Presentation 1, scheduled for the 26th from 3pm to 4pm. I would greatly appreciate your guidance and input to ensure a successful presentation.

If it's convenient for you, could we please schedule a brief Teams call to discuss the presentation? We are open to your availability, so please let us know a date and time that works best for you madam.

10:49 am ✓✓

YESTERDAY

Hansika Mahaadikaara Madam Sliit
10am today 5:15 am

Okay madam 9:00 am ✓✓

Hansika Mahaadikaara Madam Sliit
10.20 hav a lecture till 10 9:19 am

Hansika Mahaadikaara Madam Sliit

Type a message

Group info

RESEARCH PROJECT (POLICE)

POLICE - Research - 2023

Group · 6 participants

TMP-23-224

Group created by you, on 22/12/2022 at 10:42 am

Media, links and docs 18 >

Media, links and docs

Group info

The screenshot shows the WhatsApp group chat "POLICE - Research - 2023" with the group info panel open. It lists five members: You (Group Admin), Anubama (Group Admin), Hansika Mahaadikaara Ma... (Group Admin), Krish (Group Admin), and Sanjeevi Chandrasiri Mada... (Group Admin). The member "Travee" is partially visible. The "Exit group" option is also present in the group info panel.

POLICE - Research - 2023

Anubama, Hansika, Krish, Sanjeevi, Travee, You

we wanted to kindly request a small discussion regarding our upcoming Progress Presentation 1, scheduled for the 26th from 3pm to 4pm. I would greatly appreciate your guidance and input to ensure a successful presentation.

If it's convenient for you, could we please schedule a brief Teams call to discuss the presentation? We are open to your availability, so please let us know a date and time that works best for you madam.

10:49 am ✓✓

YESTERDAY

Hansika Mahaadikaara Madam Sliit
10am today 5:15 am

Okay madam 9:00 am ✓✓

Hansika Mahaadikaara Madam Sliit
10.20 hav a lecture till 10 9:19 am

Hansika Mahaadikaara Madam Sliit

Type a message

Group info

Add participant

Invite to group via link

You Group Admin
Noise creates illusions, Silence brings truth!...

Anubama Group Admin
Heart made of glass ' mind of stone 😊

Hansika Mahaadikaara Ma... Group Admin
Hansika Mahaadikaara

Krish Group Admin

Sanjeevi Chandrasiri Mada... Group Admin
Urgent calls only

Travee 🎃Pumpkin 🍁தம் ... Group Admin

...

Exit group

7. Gitlab Commits

The image consists of three vertically stacked screenshots of the GitLab web interface, specifically for Project ID 2023-224.

Screenshot 1: Members Page

This screenshot shows the 'Members' section of the project settings. It lists existing members and groups. The table includes columns for Member, Role, Access until, and Expired (indicated by a red icon). The members listed are:

- Anubama Logaratnam (@Anubama_L_IT20068196) - Developer, access given 6 days ago, expires in over 2 years.
- Dharsan.R_IT20003982 (@it20003982DharsanR) - It's you!, Developer, access given 6 days ago, expires 2025-12-30.
- Hansika Mahadikara (@hansika.m) - Guest, access given 1 day ago, expires in about 2 years.
- Krishanthini.M (@Krishanthini.M_IT19980928) - Developer, access given 6 days ago, expires in over 2 years.
- Sanjeevi Sashikala Chandrasiri (@sanjeevichan) - Guest, access given 1 day ago, expires in about 2 years.
- traveena chandrasegar (@it20001452) - Developer, access given 6 days ago, expires in over 2 years.

Screenshot 2: Project Overview

This screenshot shows the 'Project overview' page. Key statistics are displayed: 2 Commits, 5 Branches, 0 Tags, and 102 KB Files. The project ID is 2023-224 and the template ID is TMP-23-224. The commit history for 'README.md' is shown, authored by Dharsan.R_IT20003982 6 minutes ago. The commit hash is a61a35be.

Screenshot 3: Project Overview (Continued)

This screenshot continues the project overview, focusing on research questions and objectives. It includes sections for 'Individual Research Question', 'IT20003982', 'IT19980928', 'IT20001452', and 'IT20068196'. It also lists 'Individual Objectives' such as developing a machine learning system for crime analysis and improving law enforcement efficiency.

THE FUTURE OF CRIME PREVENTION: POLICE CASE ANALYSIS USING MACHINE LEARNING.

(Criminal Case Analysis: Analyzing and grouping commonalities among criminal cases and predicting the future crimes in terms of the nature of the crime.)

Project Id:

2023-224

Status Document - 1

Krishanthini.M- IT19980928

Supervisor - Ms. Hansika Mahaadikara

Co-Supervisor -Ms. Sanjeevi Chandrasiri

BSc (Hons) in Information Technology Specializing in Software
Engineering

Department of Computer Science & Software Engineering

Sri Lankan Institute of Information Technology

Sri Lanka

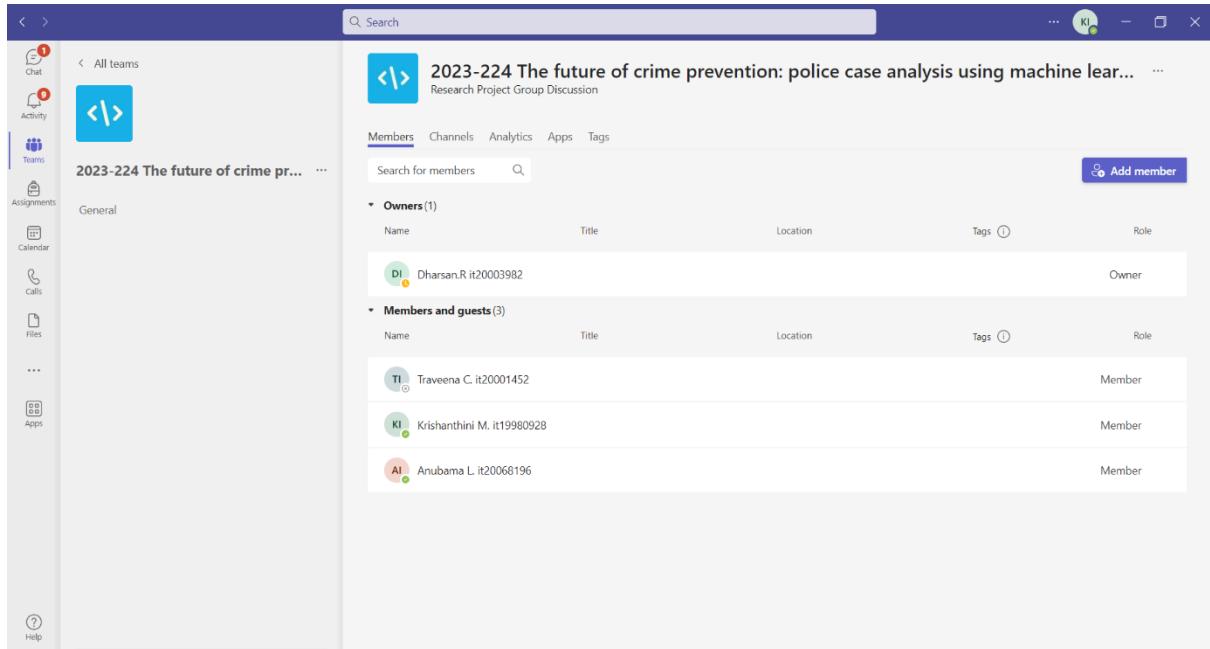
May 2023

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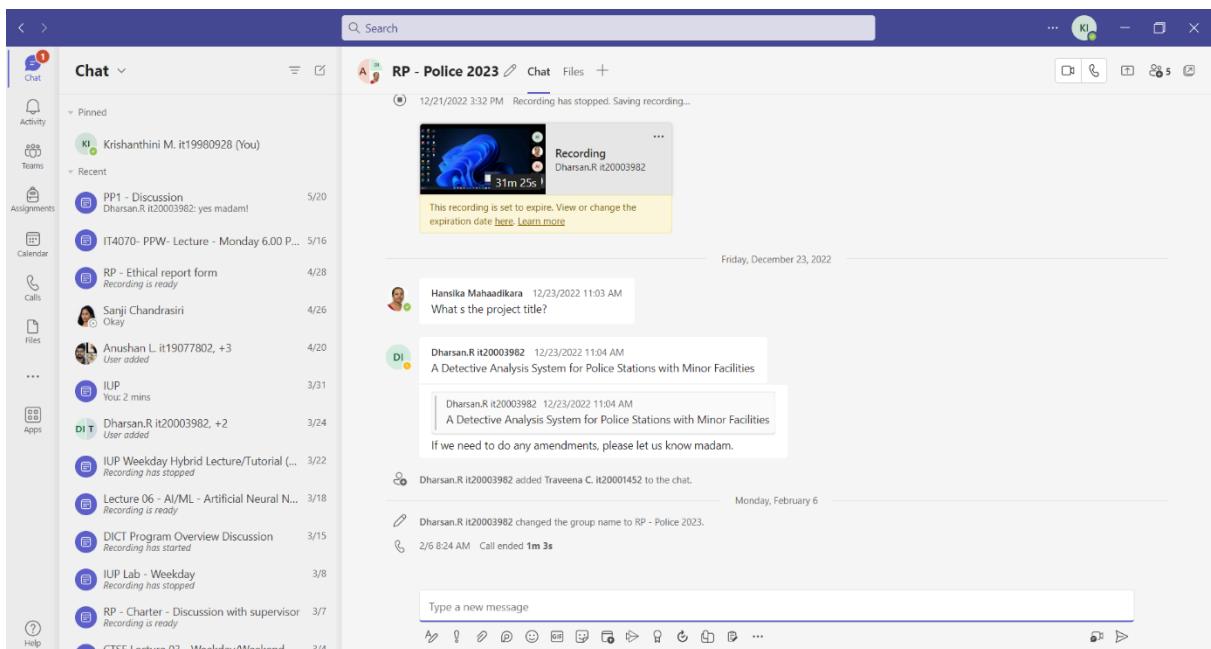
1. Microsoft Teams Details

1.1 Team Members



The screenshot shows the Microsoft Teams interface for the team "2023-224 The future of crime prevention: police case analysis using machine learn...". The left sidebar includes icons for Chat, Activity, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays the team's name and a brief description: "Research Project Group Discussion". Below this, tabs for Members, Channels, Analytics, Apps, and Tags are visible. A search bar for members is present. The "Members" section shows one owner, Dharsan.R, and three members/guests: Traveena C., Krishanthini M., and Anubama L. Each member entry includes their profile picture, name, title, location, tags, and role.

1.2 Team Meetings with Supervisor



The screenshot shows the Microsoft Teams Chat interface. The left sidebar lists pinned and recent conversations. One pinned conversation is with "Krishanthini M. it19980928 (You)". A recent conversation with "Dharsan.R it20003982" is shown, with the supervisor adding Traveena C. to the chat. The supervisor also changed the group name to "RP - Police 2023". A recording message from the supervisor is displayed, stating "Recording has stopped. Saving recording..." and "This recording is set to expire. View or change the expiration date [here](#). Learn more". The right side of the screen shows a list of recent calls, with one from "Hansika Mahadikara" dated Friday, December 23, 2022, and another from "Dharsan.R it20003982" dated Monday, February 6.

The screenshot shows the Microsoft Teams Chat interface. The left sidebar includes sections for Activity, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area is titled "RP - Charter - Discussion ...". It displays a pinned message from "Krishanthini M. it19980928 (You)" and a recent message from "Dharsan.R it20003982: yes madam!". Below these are several other messages related to recordings and meetings. Two recording thumbnails are visible: one for a 3m 25s recording by Darsan.R and another for a 28m 58s recording by Darsan.R. A message at the bottom indicates a meeting ended at 1h 3m 52s.

The screenshot shows a PDF document titled "TAE TMP-23-224.pdf" open in Adobe Acrobat Reader. The document contains a single large text block. To the right of the document, there are four circular profile icons with initials and names: KI (Krishanthini M. it19980928), TI (Traversia C. it2000452), AL (Anubama Logaritham), and DI (Dharsan.R it20003982). The desktop taskbar at the bottom shows various application icons and the date/time as 9:33 AM on 3/7/2023.

Excel - TAF evaluation(1-166) (1).xlsx - Saved

File Home Insert Draw Formulas Data Review View Automate Help Table Design

You don't have permission to download or print this file.

Read-only This workbook was opened in read-only mode

D116 Project ID Project Topic (please copy it from the TAF)

| | | |
|-----|------------|-------------------------------------------------------------------------|
| 115 | TMP-23-224 | Police Investigation Analysis and Future Prediction |
| 116 | TMP-23-225 | LittleGenie - E Learning Platform for Grade 1 & Grade 2 School Children |

Sheet1

Workbook Statistics

Give Feedback to Microsoft 9:15 AM 3/7/2023

KI Krishanthini M. it19980928

TI Traveena C. it20001452

AL Anubama Logarithinam

DI Dharsan.R.it20003982

Hansika Mahaadikara

Chat

Pinned

Dharsan.R.it20003982 (You)

Recent

PP1 - Discussion Chat Files Attendance Meeting Notes 4 more ... Join Download

Saturday, May 20, 2023 10:02:42 AM

Summary

4 Attended 10:02 AM - 10:35 AM 32m 33s 16m 44s

Start and end time Meeting duration Average attendance time

Participants

| Name | First join | Last leave | In-meeting duration | Role |
|-----------------------------------------------------------|------------|------------|---------------------|-----------|
| DI Dharsan.R.it20003982 it20003982@my.sliit.lk | 10:11 AM | 10:35 AM | 23m 29s | Organizer |
| AL Anubama Logarithinam anubama.logarithinam@telasoft.com | 10:17 AM | 10:35 AM | 17m 26s | Presenter |
| KI Krishanthini M. it19980928 it19980928@my.sliit.lk | 10:19 AM | 10:35 AM | 15m 37s | Presenter |
| Hansika Mahaadikara hansika.m@sliit.lk | 10:24 AM | 10:35 AM | 10m 24s | Presenter |
| TI Traveena C. it20001452 it20001452@my.sliit.lk | 10:24 AM | 10:35 AM | 10m 24s | Presenter |

Activity

Chat

Teams

Calendar

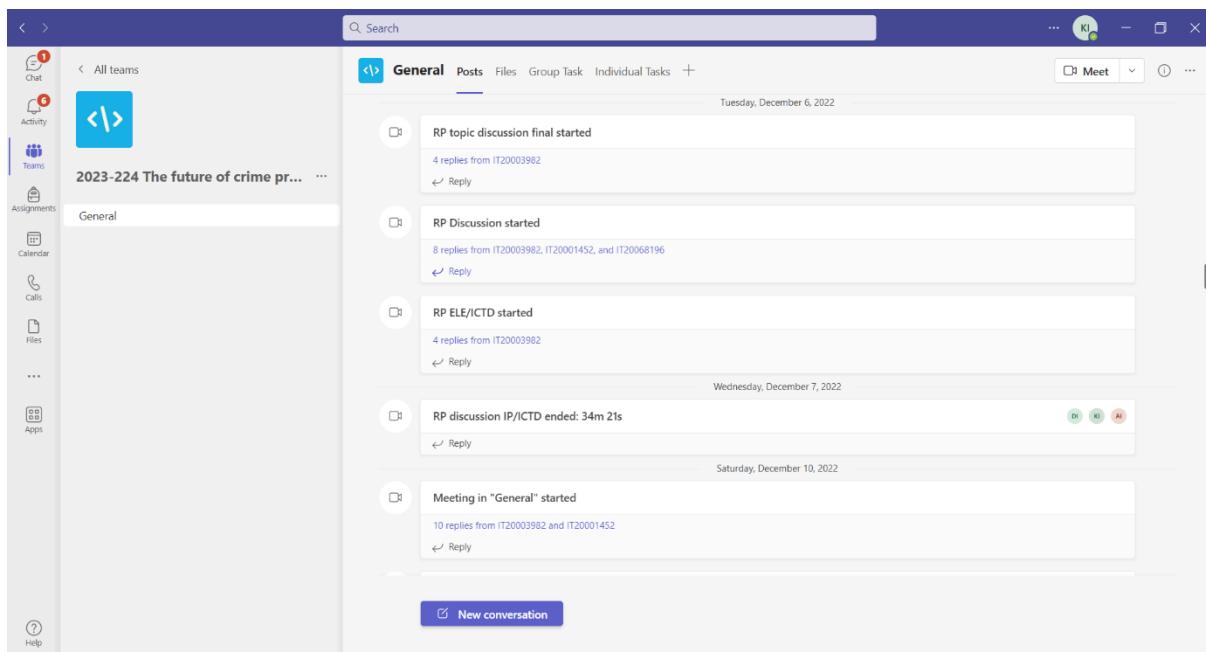
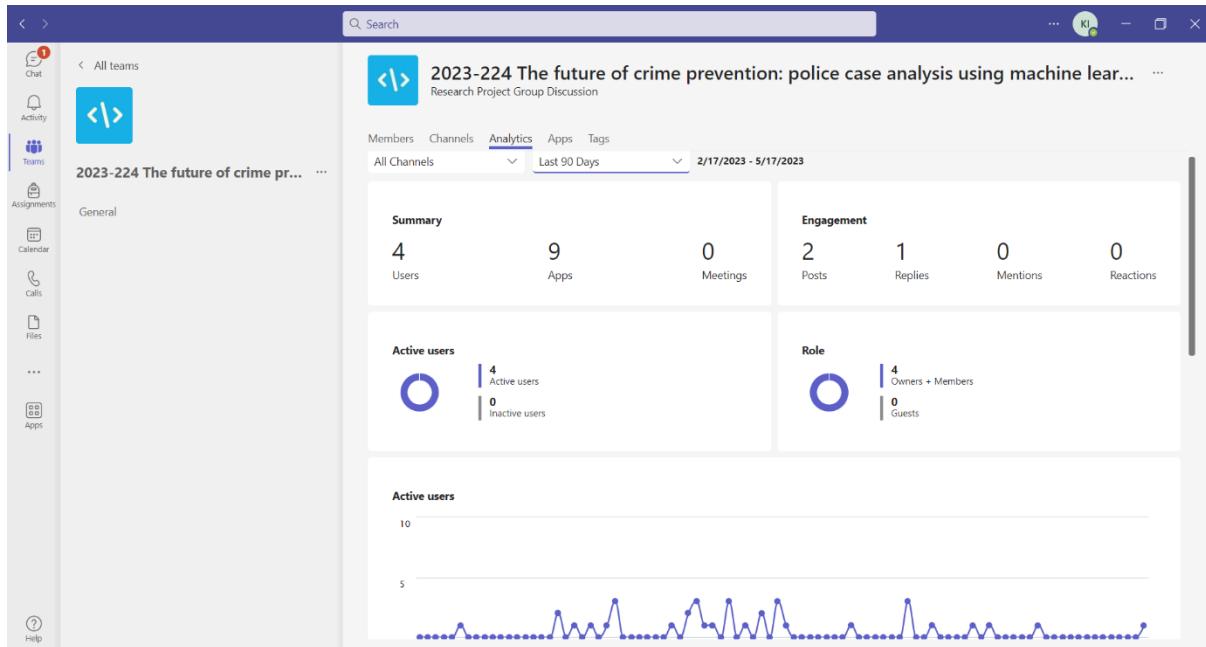
Calls

Files

... Apps

Help

2. Teams calls with Research Team



This screenshot shows the Microsoft Teams interface for the 'General' channel of a team named '2023-224 The future of crime pr...'. The left sidebar includes links for Chat, Activity, Teams, Assignments, Calendar, Calls, Files, and Apps. The right pane displays a timeline of messages:

- Wednesday, January 4, 2023: RP - (3) started. 6 replies from you, IT20001452, and IT20003982. Reply
- Friday, January 6, 2023: Meeting ended: 5m 30s. Reply
- Tuesday, January 24, 2023: RP Discussion - components started. 6 replies from IT20003982 and IT20001452. Reply
- Sunday, January 29, 2023: Meeting in "General" ended: 37s. Reply
- New channel meeting ended: 15s. Reply
- New channel meeting ended: 35m 26s. Reply

A 'New conversation' button is located at the bottom.

This screenshot shows the Microsoft Teams interface for the 'General' channel of the same team. The left sidebar is identical. The right pane displays a timeline of messages:

- Monday, January 30, 2023: New channel meeting ended: 35m 26s. Reply
- Meeting in "General" started. 12 replies from IT20003982 and IT20001452. Reply
- Thursday, February 2, 2023: Meeting in "General" started. 4 replies from IT20003982. Reply
- Tuesday, February 7, 2023: Meeting started. 5 replies from IT20003982. Reply
- Wednesday, February 8, 2023: Meeting in "General" started. 4 replies from IT20003982. Reply

A 'New conversation' button is located at the bottom.

This screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes links for Chat, Activity, Teams, Calendar, Calls, Files, and Apps. The main area displays the "General" channel. A search bar at the top right contains the placeholder "Search". The "General" tab is selected. Below it, a list of conversations is shown:

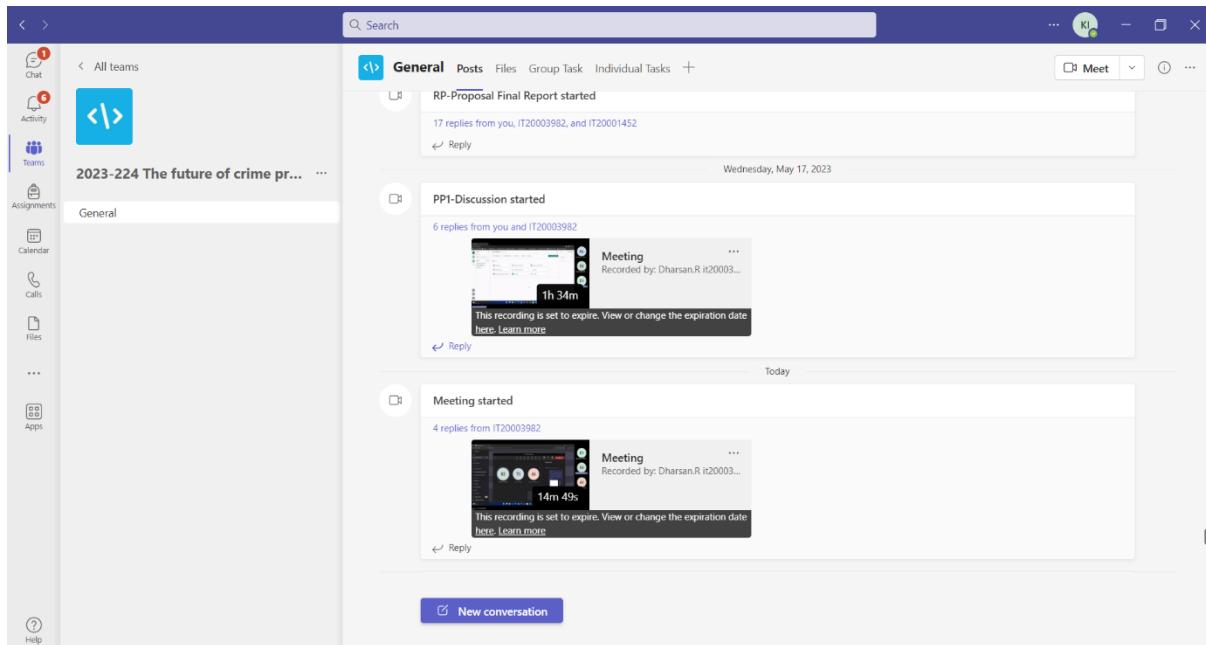
- Meeting started** (Wednesday, February 8, 2023)
5 replies from IT20003982
Reply
- Meeting in "General" started** (Wednesday, February 8, 2023)
4 replies from IT20003982
Reply
- Meeting started** (Monday, March 6, 2023)
2 replies from IT20003982
Reply
- RP-Charter started** (Friday, March 10, 2023)
4 replies from IT20003982
Reply
- Meeting in "General" started** (Friday, March 10, 2023)
4 replies from IT20003982
Reply

A blue button at the bottom center says "New conversation".

This screenshot shows the Microsoft Teams interface for the same team. The left sidebar and general layout are identical to the first screenshot. The "General" channel is active, displaying the following conversations:

- General started** (Friday, March 24, 2023)
4 replies from IT20003982 and IT20001452
Reply
- RP-Proposal Presentation Discussion started** (Monday, March 27, 2023)
2 replies from IT20003982
Reply
- Presentation slide edit ended: 2h 22m** (Sunday, April 2, 2023)
Anubama L IT20068196 4/2 9:06 PM
Clustering crimes against women and crime forecasting prediction to take preventive steps by providing the forecast of the violences and locations
Anubama L IT20068196 4/2 9:07 PM
nn
Reply
- Anubama L IT20068196 4/2 9:11 PM** (Sunday, April 2, 2023)
Clustering crimes against women and crime forecasting prediction to take preventive steps

A blue button at the bottom center says "New conversation".



3. MS Teams Planner

3.1 Planner Board

- Group Tasks

A screenshot of the Microsoft Teams Planner interface. The top navigation bar includes General, Posts, Files, Group Task (which is selected), and Individual Tasks. Below the navigation are buttons for Group by Bucket, Filter, List, Board (which is selected), Charts, and Schedule. The main area shows a 'To do' section with a 'Add task' button and two items: 'Testing' (due 07/13) and 'PP1 50%' (due 05/26). Below this is a 'Completed tasks' section showing three items: 'Design' (completed by Krishanthini M. it1...), 'Completed by Anubama L. it200...', and another 'Design' item (completed by Anubama L. it200...).

- Individual Tasks

The screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes links for Chat, Activity, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area has tabs for General, Posts, Files, Group Task, Individual Tasks (selected), and a plus sign. Below these are buttons for Group by Bucket, Filter, List, Board, Charts, and Schedule. The "Individual Tasks" section is divided into four columns: "To do", "Crime Prediction", "Machine learning", and "Completed tasks".

| To do | Crime Prediction | Machine learning | Completed tasks |
|------------------------------------------------------|--------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| + Add task Project presentation -2 07/28 KJ | + Add task Model Training -pp1 05/24 KJ | + Add task Model training-pp1 05/26 AI | Implementation 05/25 KJ |
| Final Reports 09/10 KJ | Prevention -crime 07/31 AI | Testing 07/28 AI | Testing 07/26 AI |
| Research paper 06/20 KJ | Crime Prediction 07/31 AI | Learning ML algorithms 05/31 AI | Completed tasks 3 Referring to Research Papers Completed by Krishanthini M. it1... Learning Algorithms |
| Status Document - individual 05/22 KJ | Testing 07/25 DI | | |
| Final presentation & Viva 11/03 AI | | | |
| Project website-individual 05/22 KJ | | | |

3.2 Completed Tasks

- Group Tasks

The screenshot shows the Microsoft Teams interface for the same team "2023-224 The future of crime pr...". The left sidebar and tabs are identical to the previous screenshot. The "Group Task" tab is selected. The "Completed tasks" section shows a list of tasks with completion status and assigned members.

| Completed tasks |
|-----------------------------------------------|
| Design Completed by Krishanthini M. it1... |
| Design Completed by Anubama L. it200... |
| Topic evaluation |

- Individual Tasks

The screenshot shows the Microsoft Teams interface with the "Individual Tasks" tab selected. The main area is divided into four vertical columns:

- To do:** Contains tasks like "Research paper" (due 06/20), "Status Document - individual" (due 05/24), and "Progress Presentation 2" (due 07/28).
- Crime Prediction:** Contains tasks like "Crime Rate Prediction" (due 05/26) and "Model Training - pp1" (due 05/24).
- Machine learning:** Contains tasks like "Implementation" (due 05/25) and "Testing" (due 07/12).
- Accident Pre:** Contains tasks like "Referring to research papers" and "Learning Algorithms".

Below these columns, there are sections for "Completed tasks" (2 items) and "Completed tasks" (1 item). The completed tasks include "Proposal-Reports" and "Data-gathering".

3.3 Pending Tasks

- Group Tasks

The screenshot shows the Microsoft Teams interface with the "Group Task" tab selected. A message at the top says: "Your status is set to do not disturb. You'll only get notifications for urgent messages and from your priority contacts. Change settings." Below this, there is a table of pending tasks:

| Task title | Assigned to | Priority | Due | Bucket |
|-------------------------------|-------------|----------|-------|--------|
| New task | ○ | ● | 10/30 | To do |
| Final Doc viva & Presentation | ○ | ● | 7/13 | To do |
| Testing | ○ | ● | 5/26 | To do |
| PP1 50% | ○ | ● | | To do |

- Individual Tasks

The screenshot shows the Microsoft Teams Planner interface. On the left is a sidebar with icons for Chat, Activity, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area has a header with a search bar and a message about do-not-disturb settings. Below the header, there are tabs for General, Posts, Files, Group Task, Individual Tasks (which is selected), and a plus sign. Under the Individual Tasks tab, there's a table with columns for Task title, Assigned to, Priority, Due, and Bucket. The table lists several tasks:

| Task title | Assigned to | Priority | Due | Bucket |
|------------------------------|---------------------------|----------|------------------|--------|
| Project presentation -2 | Krishanthini M. it1998... | 7/28 | To do | |
| Final Reports | Krishanthini M. it1998... | 9/10 | To do | |
| Research paper | Krishanthini M. it1998... | 6/20 | To do | |
| Status Document - individual | Krishanthini M. it1998... | 5/22 | To do | |
| Progress Presentation 2 | T. N. K. C. | 7/28 | To do | |
| Crime Rate Prediction | Krishanthini M. it1998... | 5/26 | Crime Prediction | |
| Testing | Krishanthini M. it1998... | 7/12 | Crime Prediction | |
| Model Training -pp1 | Krishanthini M. it1998... | 5/24 | Crime Prediction | |
| Implementation | Krishanthini M. it1998... | 5/25 | Machine learning | |

3.4 Teams Planner Schedule

- Group Tasks

The screenshot shows the Microsoft Teams Planner interface in a calendar view. The left sidebar is identical to the previous screenshot. The main area has a header with a search bar and a message about do-not-disturb settings. Below the header, there are tabs for General, Posts, Files, Group Task (which is selected), Individual Tasks, and a plus sign. The Group Task tab shows a monthly calendar for December 2022. The days of the week are labeled Sunday through Saturday. Specific dates have green boxes labeled "Project Charter". To the right of the calendar, there are sections for "Unscheduled tasks" (with a "+ Add task" button) and "To do" and "Completed" lists.

This screenshot shows the Microsoft Teams Group Task calendar for January 2023. The calendar view is set to 'Month' mode. A recurring task, 'Project Charter', is listed every day from January 1st to January 31st. The tasks are represented by green bars with a circular icon containing a checkmark. The sidebar on the left shows the 'General' tab selected, and the right sidebar shows sections for 'To do' and 'Completed' tasks.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|-----------------|--------|---------|-----------|----------|--------|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Project Charter | | | | | | +2 more |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Project Charter | | | | | | |
| 15 | + 16 | 17 | 18 | 19 | 20 | 21 |
| Project Charter | | | | | | +3 more |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Project Charter | | | | | | |
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| Project C... | | | | | | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | | | | +2 more |

This screenshot shows the Microsoft Teams Group Task calendar for February 2023. The calendar view is set to 'Month' mode. A recurring task, 'Project Charter', is listed every day from February 1st to February 28th. The tasks are represented by green bars with a circular icon containing a checkmark. The sidebar on the left shows the 'General' tab selected, and the right sidebar shows sections for 'To do' and 'Completed' tasks.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------------|--------|---------|-----------|----------|--------|----------|
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| Project C... | | | | | | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | | | | +2 more |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | | | | | | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| Design | | | | | | |
| 26 | 27 | 28 | 1 | 2 | 3 | 4 |
| | | | | | | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Project C... | | | | | | |

This screenshot shows the Microsoft Teams calendar interface for March 2023. The calendar is displayed in Month view, with the month header "March 2023" at the top. The days of the week are labeled from Sunday to Saturday. Several tasks are visible as colored boxes:

- 10: Project C... (green)
- 24: proposal... (blue)

The sidebar on the left includes links for Chat, Activity, Teams, Calendar, Calls, Files, and Apps. The right sidebar shows sections for Unscheduled tasks, To do, and Completed.

This screenshot shows the Microsoft Teams calendar interface for May 2023. The calendar is displayed in Month view, with the month header "May 2023" at the top. The days of the week are labeled from Sunday to Saturday. A single task is visible as a green box:

- 11: Visiting ... (green)

The sidebar on the left includes links for Chat, Activity, Teams, Calendar, Calls, Files, and Apps. The right sidebar shows sections for Unscheduled tasks, To do, and Completed.

• Individual Tasks

This screenshot shows the Microsoft Teams interface with the 'Individual Tasks' tab selected. The calendar view displays tasks for the month of March 2023. Key tasks visible include:

- Referring...** (multiple instances)
- Proposal ...** (multiple instances)
- Crime Prediction**
- Machine learning**
- Accident Prediction**
- Completed** (with a task labeled **Proposal ...**)

The sidebar on the left shows various team and app icons.

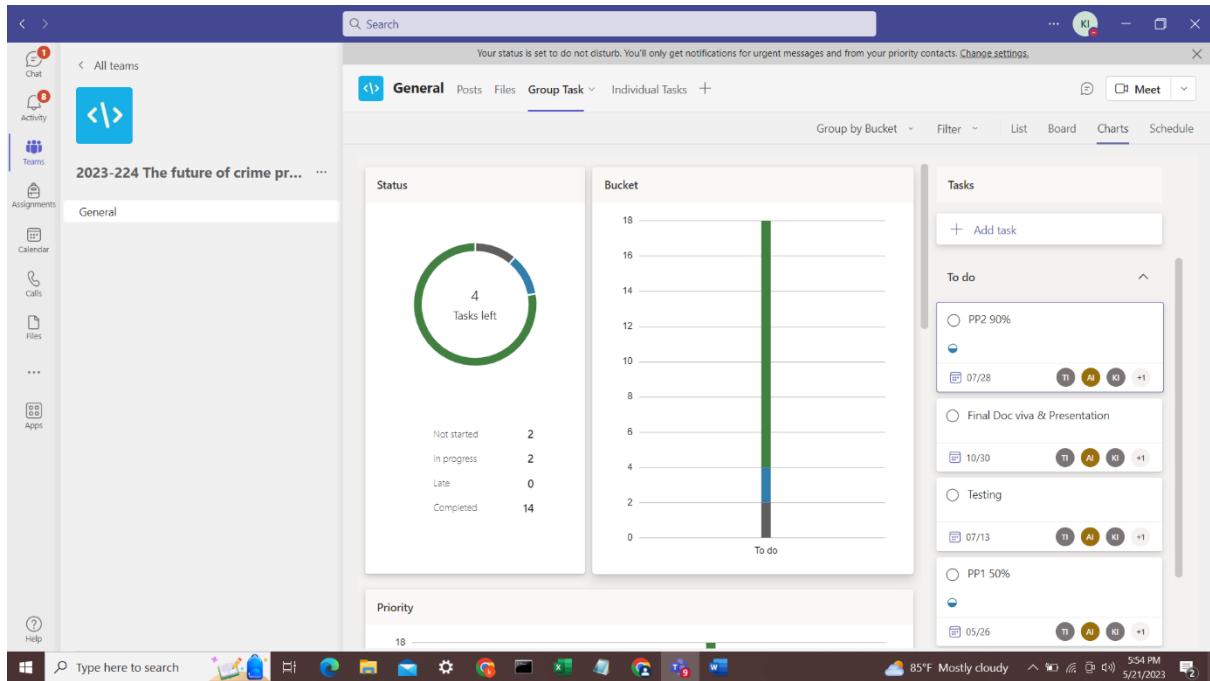
This screenshot shows the Microsoft Teams interface with the 'Individual Tasks' tab selected. The calendar view displays tasks for the month of May 2023. Key tasks visible include:

- Data gat...**
- Proposal ...**
- Learning ...**
- Status Do...**
- Model Tr...**
- Impleme...**
- Crime Ra...**
- Accident Prediction**
- Crime Prediction**
- Machine learning**
- Completed** (with a task labeled **Status Do...**)

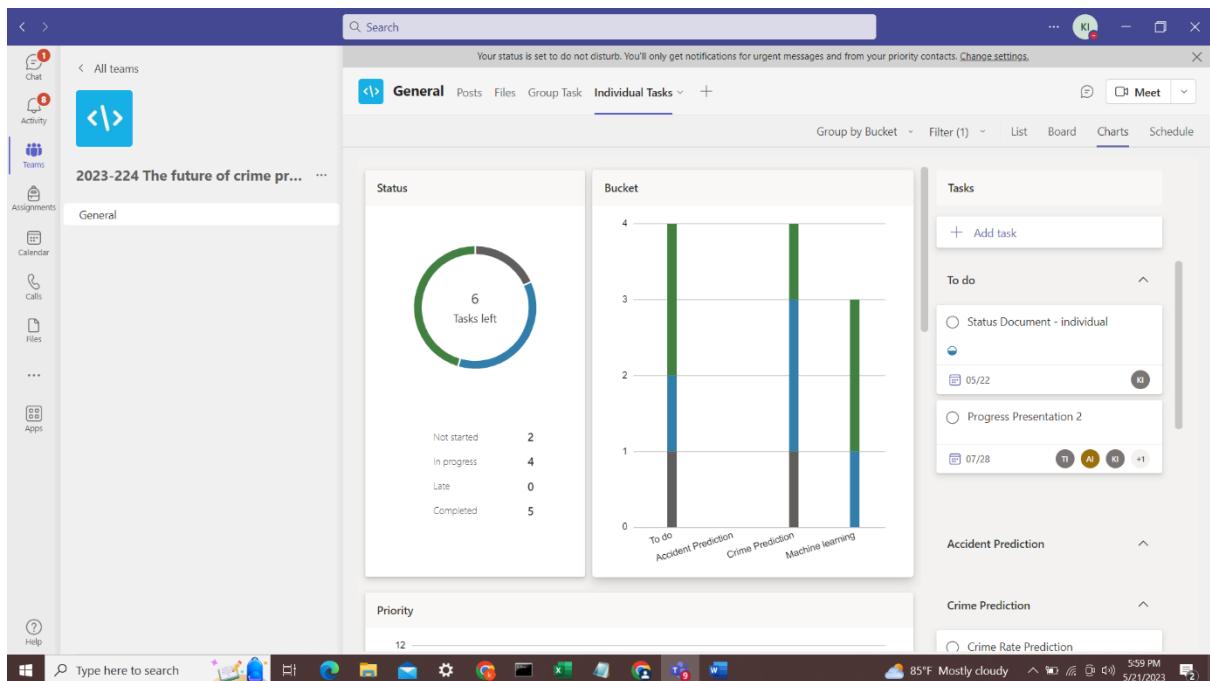
The sidebar on the left shows various team and app icons.

3.5 Teams Planner Charts

- Group Tasks



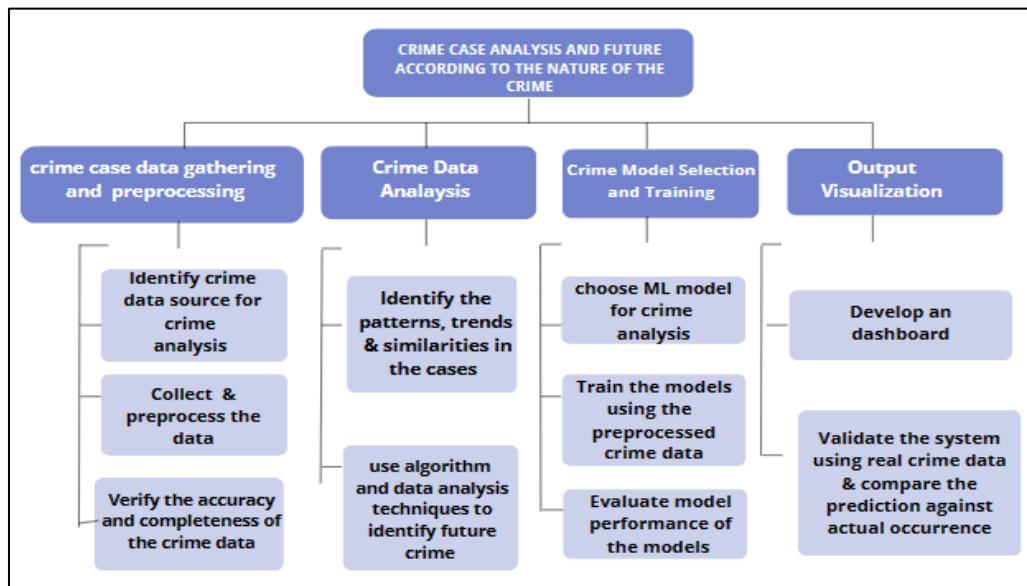
- Individual Tasks



4. Gantt Chart

| Tasks | 2022 | 2023 | | | | | | | | | | | |
|--------------------------------------|-----------|------------|----------|-------|-----------|--------|--------|--------|--------|------------|-------------|----------|------------|
| | December | January | February | March | April | May | June | July | August | September | October | November | December |
| Topic Clarification | Yellow | Yellow | Yellow | | | | | | | | | | |
| Topic Assessment | Dark Blue | Dark Blue | | | | | | | | | | | |
| Project Charter | | Orange | Orange | | | | | | | | | | Light Gray |
| Requirements Gathering | | | Green | | | | | | | | | | |
| Making of Project Proposal | | | Green | | | | | | | | | | |
| Project Presentation | | | | Cyan | | | | | | | | | |
| Proposal Report | | | Red | Red | | | | | | | | | |
| Progress Presentation-1 | | | | | Dark Blue | | | | | | | | |
| Research Paper | | | | | | Yellow | Yellow | Yellow | | | | | |
| Final Report | | | | | | | | | Purple | Purple | | | |
| Progress Presentation-2 | | Dark Blue | | | | | | | Cyan | Cyan | | | |
| Testing and Fixing issues | | | | | | Orange | Orange | Orange | Orange | Orange | | | |
| Website Assessment and Research Book | | Dark Green | | | | | | | | Dark Green | | | |
| Final Report (Soft bound) | | | | | | | | | | | Light Green | | |
| Status Document Submission | | | | | | | | | | | | Gray | |
| Final Presentation and Viva | | | | | | | | | | | | Red | |
| Final Report Submission | | | | | | | | | | | | Blue | Blue |

5. Work Breakdown Structure



Gitlab

The screenshot shows the 'Project members' page for project '2023-224'. The sidebar on the left lists various project management sections: Project overview, Repository, Issues (0), Merge Requests (0), CI / CD, Operations, Analytics, Wiki, Snippets, and Members (selected). The main content area displays a table of project members:

| Members of 2023-224 | Find existing members by name | Sort by | Name, ascending |
|-----------------------------------------------------|-------------------------------|---------|-----------------|
| Anubama Logaratnam @Anubama.L_IT20068196 | | | Developer |
| Dharsan.R_IT20003982 @it20003982DharsanR - 2023-224 | | | Owner |
| Hansika Mahaadikara @hansika.m | | | Guest |
| Krishanthini.M @Krishanthini.M_IT19980928 It's you | | | Developer |
| Sanjeevi Sashikala Chandrasiri @sanjeevichan | | | Guest |
| traveena chandrasegar @it20001452 | | | Developer |

Each member row includes their profile picture, name, access details, and a 'Leave' button if they are a developer or owner.

THE FUTURE OF CRIME PREVENTION: POLICE CASE ANALYSIS USING MACHINE LEARNING

(Analyze and Classify Similar Case Documents
and Predict Category)

Project ID:

2023-224

Status Document – 1

IT20001452 - Traveena Chandrasegar

Supervisor – Ms. Hansika Mahaadikara

Co-Supervisor - Ms. Sanjeevi Chandrasiri

BSc (Hons) - Information Technology Specializing in
Software Engineering

Department of Computer Science and Software Engineering (CSSE)
Sri Lanka Institute of Information
Technology Sri Lanka

May 2023

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1. Microsoft Teams Details

1.1 Team Members

The screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime prevention: police case analysis using machine learn...". The left sidebar shows various team channels: General, Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays the team members:

| Name | Title | Location | Tags | Role |
|----------------------------|-------|----------|------|--------|
| Dharsan.R. it20003982 | | | | Owner |
| Traveena C. it20001452 | | | | Member |
| Krishanthini M. it19980928 | | | | Member |
| Anubama L. it20068196 | | | | Member |

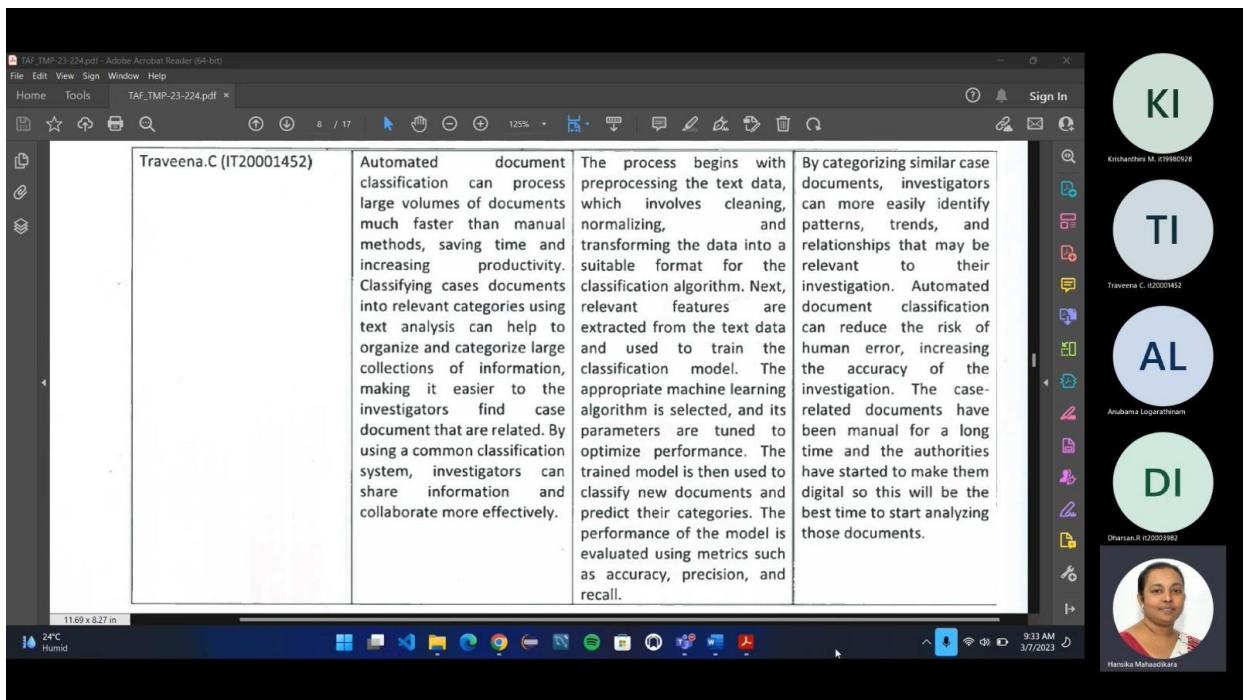
1.2 Team Meetings with Supervisor

The screenshot shows the Microsoft Teams interface for a meeting titled "PP1 - Discussion". The left sidebar shows various team channels: Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays the meeting summary:

| Start and end time | Meeting duration | Average attendance time |
|---------------------|------------------|-------------------------|
| 10:02 AM - 10:35 AM | 32m 33s | 16m 44s |

Participants:

| Name | First join | Last leave | In-meeting duration | Role |
|-----------------------------------------------------------|------------|------------|---------------------|-----------|
| Dharsan.R. it20003982 it20003982@myslit.lk | 10:11 AM | 10:35 AM | 23m 29s | Organizer |
| Anubama Logarathinam anubama.logarathinam@telasoft.com | 10:17 AM | 10:35 AM | 17m 26s | Presenter |
| Krishanthini M. it19980928 it19980928@myslit.lk | 10:19 AM | 10:35 AM | 15m 37s | Presenter |
| Hansika Mahaadikara hansika.m@slit.lk | 10:24 AM | 10:35 AM | 10m 24s | Presenter |
| Traveena C. it20001452 it20001452@myslit.lk | 10:24 AM | 10:35 AM | 10m 24s | Presenter |



RP - Charter - Discussion with superv... Chat Files Meeting Notes Recordings & Transcri... 2 more + Join 4

3/7 9:01 AM Recording has started

3/7 9:04 AM Recording has stopped. Saving recording...

Recording
Dharsan.R it20003982
3m 25s

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

Hansika Mahaadikara was invited to the meeting.

3/7 9:13 AM Recording has started

3/7 9:42 AM Recording has stopped. Saving recording...

Anubama Logarathinam left the chat.

3/7 9:42 AM Meeting ended: 1h 3m 52s

Recording
Dharsan.R it20003982
28m 58s

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

Type a new message

Activate Windows
Go to Settings to activate Windows.

Chat

RP - Police 2023

Recording is ready.

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

Friday, December 23, 2022

Hansika Mahaadikara 12/23/2022 11:03 AM What's the project title?

Dharsan.R it20003982 12/23/2022 11:04 AM A Detective Analysis System for Police Stations with Minor Facilities

If we need to do any amendments, please let us know madam.

Dharsan.R it20003982 added Traveena C. it20001452 to the chat.

Monday, February 6

Dharsan.R it20003982 changed the group name to RP - Police 2023.

2/6 8:24 AM Call ended 1m 3s

Type a new message

29°C Mostly cloudy 6:04 PM 5/21/2023

TAF evaluation(1-166) (1).xlsx

Excel TAF evaluation(1-166) (1) - Saved > Search (Alt + Q)

File Home Insert Draw Formulas Data Review View Automate Help Table Design Comments Catch up Viewing Share

You don't have permission to download or print this file.

Read-only This workbook was opened in read-only mode.

Machine Learning Models needs to be researched and identified through a good research review.

| Project ID | Project Topic (please copy it from the TAF) |
|------------|------------------------------------------------------------------------------------|
| 115 | TMP-23-224 Police Investigation Analysis and Future Prediction |
| 116 | TMP-23-225 LittleGenie - E Learning Platform for Grade 1 & Grade 2 School Children |

Sheet1

Workbook Statistics

24°C Humid 9:15 AM 3/7/2023

KI
Krishanthini M. it19980928

TI
Traveena C. it20001452

AL
Anubama Logaritham

DI
Dharsan.R it20003982

Hansika Mahaadikara

2. Teams calls with Research Team

The screenshot shows a Microsoft Teams interface. On the left is the sidebar with icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area shows a channel named "General" with the title "2023-224 The future of crime pr...". A message from "Meeting" (Recorded by: Dharsan.R it20003...) states: "This recording is set to expire. View or change the expiration date here. Learn more". Below it, messages from "Dharsan.R it20003982" at 1:47 PM and 1:59 PM both say: "I added a tab at the top of this channel. Check it out!". There are also "Group Task" and "Individual Tasks" cards. At the bottom is a "New conversation" button.

The screenshot shows an Excel spreadsheet titled "Research Groups at FoC - Saved". The table lists members under various groups:

| | A | C | D | E | F | G | H |
|----|--------------------------------|------------------------------------------|------------------------------------------|--------------------------------------------|-------------------------------------|-------------------------------------|---|
| 20 | Malawarachchi (ML) | Shagarie Unathurukajip | Nunwan Kodagoda (ELE) | Shashika Lokuliyana (CS,IS,CN,SDN,CC) | Dhammika H De Silva (MC) | Lakmal Rupasinghe (HPC, PC, PL, MC) | |
| 21 | a Perera(ML, RL, AI) | Namalie Walgampaya(PL) | Anjali Gamage (ICTD, ELE, HCI) | Anuradha Jayakody (CS,IS,CN,SDN,CC) | Anuradha Jayakody (HPC, PC) | Jayantha Amararachchi (HPC, PC) | |
| 22 | Weerasinwardhan(ML) | Jayantha Amararachchi(KM,DS,BD) | Chathurangika Kahandawarachchi (BIA, KM) | Geethanjali Wimalaratne (H) | Dharshana Kasthurathna (SE) | Devanshi Ganegoda (A/VR) | |
| 23 | o Kalapage (ML, AI) | Chathurangika Kahandawarachchi (BIA, KM) | Geethanjali Wimalaratne(KM,DS) | I Jayantha Amararachchi (H) | Abnisha Nayanajith (SE) | Olkanka Nayanajith (SE) | |
| 24 | Neeratunga (ML, AI) | Geethanjali Wimalaratne(KM,DS) | Anuradha Jayakody (BIA,NLP,DS) | Karthiga Rajendran(IEL, ICTD, HCI) | Lakmal Rupasinghe (HPC, PC, PL, MC) | Lakmal Rupasinghe (HPC, PC, PL, MC) | |
| 25 | Kodagoda (AI, ML) | Anuradha Jayakody (BIA,NLP,DS) | Sanitha Vidhanarachchi (IP) | Nalaka Dissanayake | Jayantha Amararachchi (HPC, PC) | Jayantha Amararachchi (HPC, PC) | |
| 26 | nal Jayawardena (ML) | Sanitha Vidhanarachchi (IP) | Vindhya Kalupuge (NLP, DS) | Sukanya Marocharan (HC) | Geethanjali Wimalaratne (SE,AR/VR) | Geethanjali Wimalaratne (SE,AR/VR) | |
| 27 | ulasinghe (AI, ML) | Vindhya Kalupuge (NLP, DS) | Ishara Weerathunga (NLP) | Pradeepa Samarasinghe (H) | Devethana Liyanage (AI/MI) | Devethana Liyanage (AI/MI) | |
| 28 | Gamage (AI, ML, SS) | Ishara Weerathunga (NLP) | De Silva (AI, ML) | Disruka R. Wijendra (ICTD,ELE) | Dasuni Nawinne (SE) | Yashas Mallawarachchi (SE) | |
| 29 | | | De Silva (AI, ML) | Aruna Ishara Gamage (ELLE / HCI) | Thusithanjana Thillakarathna(SE) | Buddhima Attanayaka(RE,BPM) | |
| 30 | | | De Jaykody (AI,ML) | Sathika Hettiarachchi (ICTD) | | | |
| 31 | | | pa Bandara(AI,ML) | Jagath Wickramaratne (H) | | | |
| 32 | Secondary | | | Sanduni Perera(HCI) | | | |
| 33 | Affiliation (s) - | | | Vijani Piyawardana (HCO, ELE, H) | | | |
| 34 | | | | Windhya Rankothge (ICTD) | | | |
| 35 | | | | Kavinda Yapa Abeywardena (ICTD, ELE) | | | |
| 36 | You may include your | | | Lakmal Rupasinghe (ICTD, ELE, AT, HI, HCI) | | | |
| 37 | name under one or | | | Shashika Lokuliyana (ICTD,AI) | | | |
| 38 | more group. But, please | | | Devanshi Ganegoda (HCI) | | | |
| 39 | try to be realistic and | | | | | | |
| 40 | focus your research | | | | | | |
| 41 | area | | | | | | |

On the right side of the Excel window, there are four circular icons with initials: "KI", "AI", "DI", and "TI".

This screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area displays the "General" channel. At the top, there are tabs for General, Posts, Files, Group Task, Individual Tasks, and a plus sign. A search bar is at the top right. The channel feed shows several messages from an AI bot named "AI" and a user "Anubama L. it20068196". One message from AI discusses clustering crimes against women and crime forecasting prediction. Another message from AI discusses a meeting started on April 3, 2023. A third message from AI discusses an RP-Proposal Final Report started on May 17, 2023. A fourth message from AI discusses a PPI-Discussion started. A blue button at the bottom says "New conversation". On the right side, there is a watermark for "Activate Windows" with the text "Go to Settings to activate Windows".

This screenshot shows the Microsoft Teams interface for the same team, now viewing the "Analytics" tab. The left sidebar remains the same. The main area displays the "2023-224 The future of crime prevention: police case analysis using machine learn..." channel. The top navigation bar includes tabs for Members, Channels, Analytics, Apps, and Tags. Below the tabs, there are filters for "All Channels", "Last 7 Days", and a date range from "5/11/2023 - 5/17/2023". The "Analytics" section is divided into two main sections: "Summary" and "Engagement". The "Summary" section shows 4 Users, 9 Apps, 0 Meetings, 0 Posts, 0 Replies, 0 Mentions, and 0 Reactions. The "Engagement" section shows 1 Active users and 3 Inactive users. The "Role" section shows 4 Owners + Members and 0 Guests. Below these sections, there is a chart titled "Active users" with a value of 10. A watermark for "Activate Windows" with the text "Go to Settings to activate Windows" is visible on the right.

2023-224 The future of crime prevention: police case analysis using machine learn...

Members Channels Analytics Apps Tags

Search for members Add member

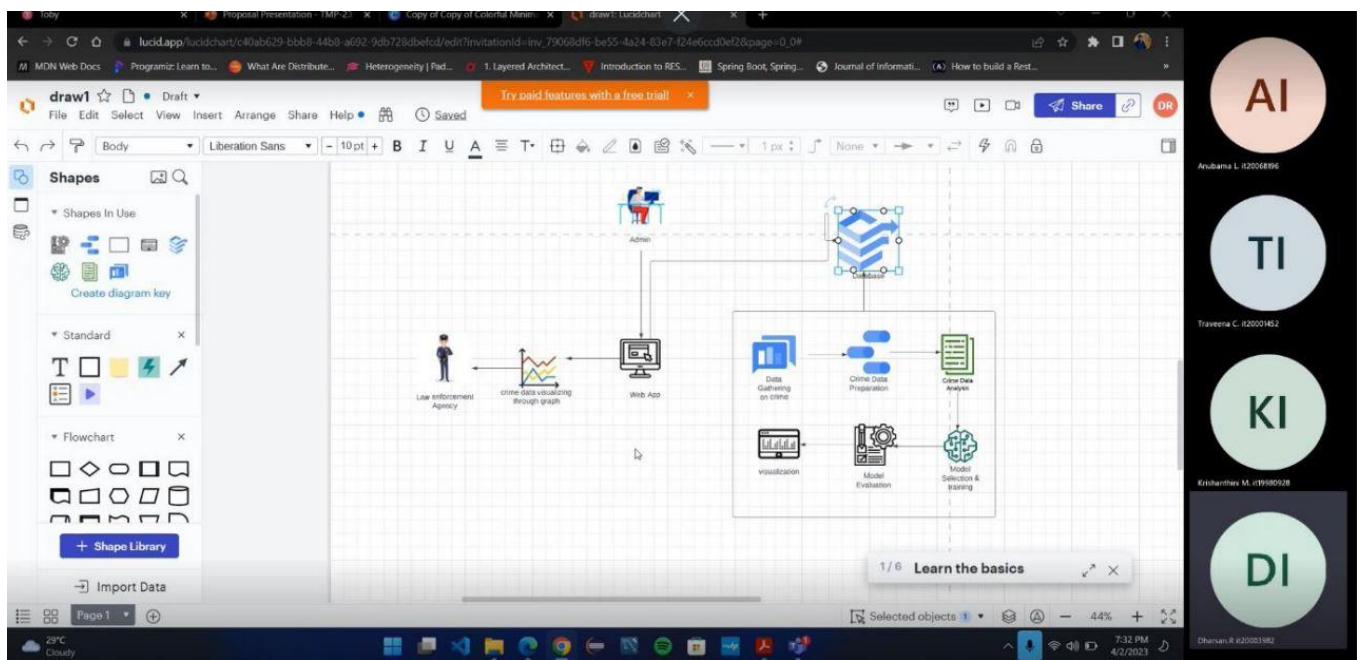
Owners (1)

| Name | Title | Location | Tags | Role |
|----------------------|-------|----------|------|-------|
| Dharsan.R it20003982 | | | | Owner |

Members and guests (3)

| Name | Title | Location | Tags | Role |
|----------------------------|-------|----------|------|--------|
| Traveena C. it20001452 | | | | Member |
| Krishanthini M. it19980928 | | | | Member |
| Anubama L. it20068196 | | | | Member |

Activate Windows
Go to Settings to activate Windows.



Search

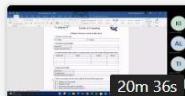
RP - Ethical report form Chat Files Meeting Notes Recordings & Transcri... 2 more +

Join People 4 More

Traveena C. it20001452 was invited to the meeting.

4/28 8:54 PM Recording has started

4/28 9:14 PM Recording has stopped. Saving recording...


Recording
Dharsan.R it20003982
This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

4/28 9:16 PM Meeting ended: 36m 46s

Anubama Logarathinam left the chat.

Today

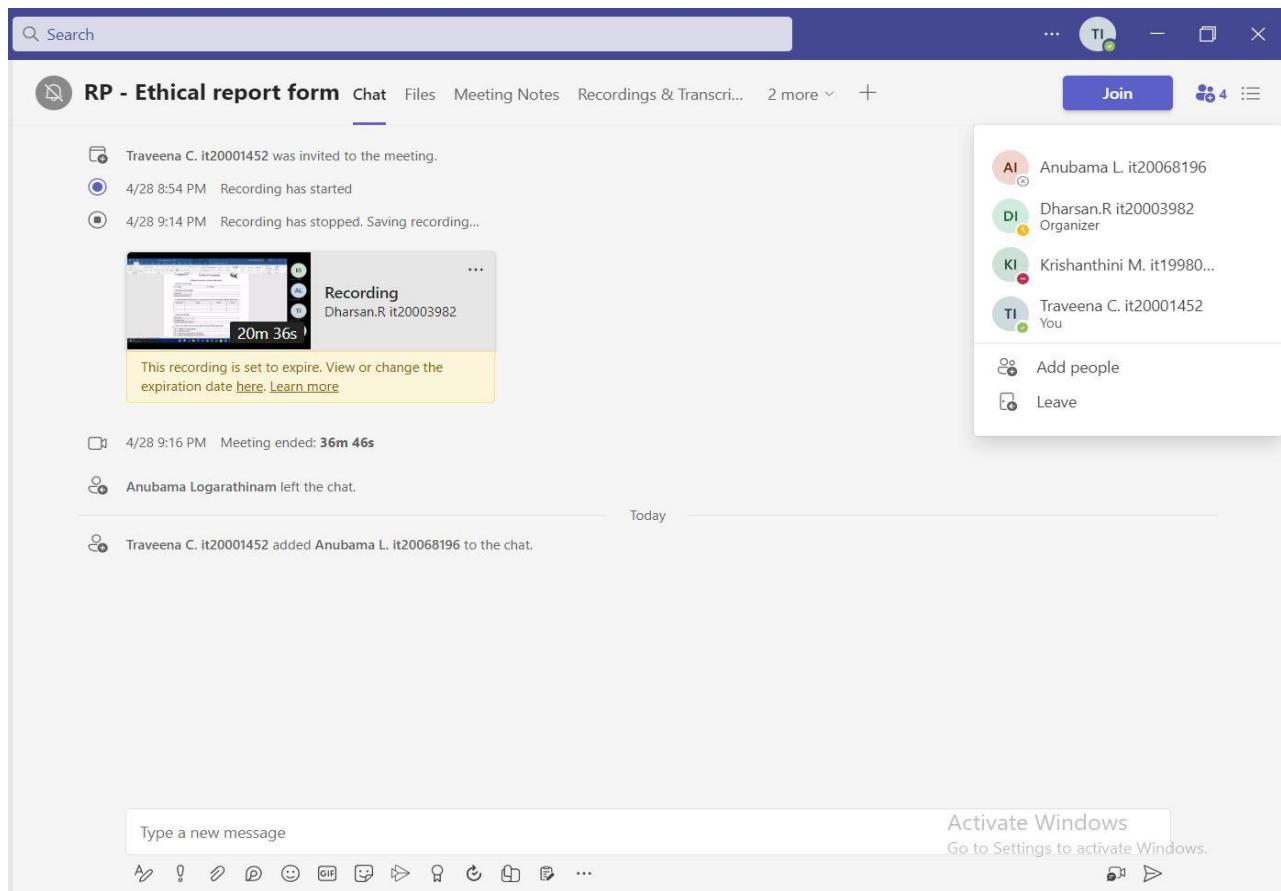
Traveena C. it20001452 added Anubama L. it20068196 to the chat.

Type a new message

Activate Windows
Go to Settings to activate Windows.

AI Anubama L. it20068196
DI Dharsan.R it20003982 Organizer
KI Krishanthini M. it19980928
TI Traveena C. it20001452 You

Add people Leave



Menu Home RP assessment schedule + Create

All tools Edit Convert S

Prototype Discussion

Chat People Raise Read View Rooms More Camera Mic Stop sharing Leave

Meeting chat

12:51 PM https://www.figma.com/file/U11IVBf6znD1msb2IXID8x/Untitled?type=design&node-id=1%3A3&rt=K1zC3Hqo7XkBl5B-1

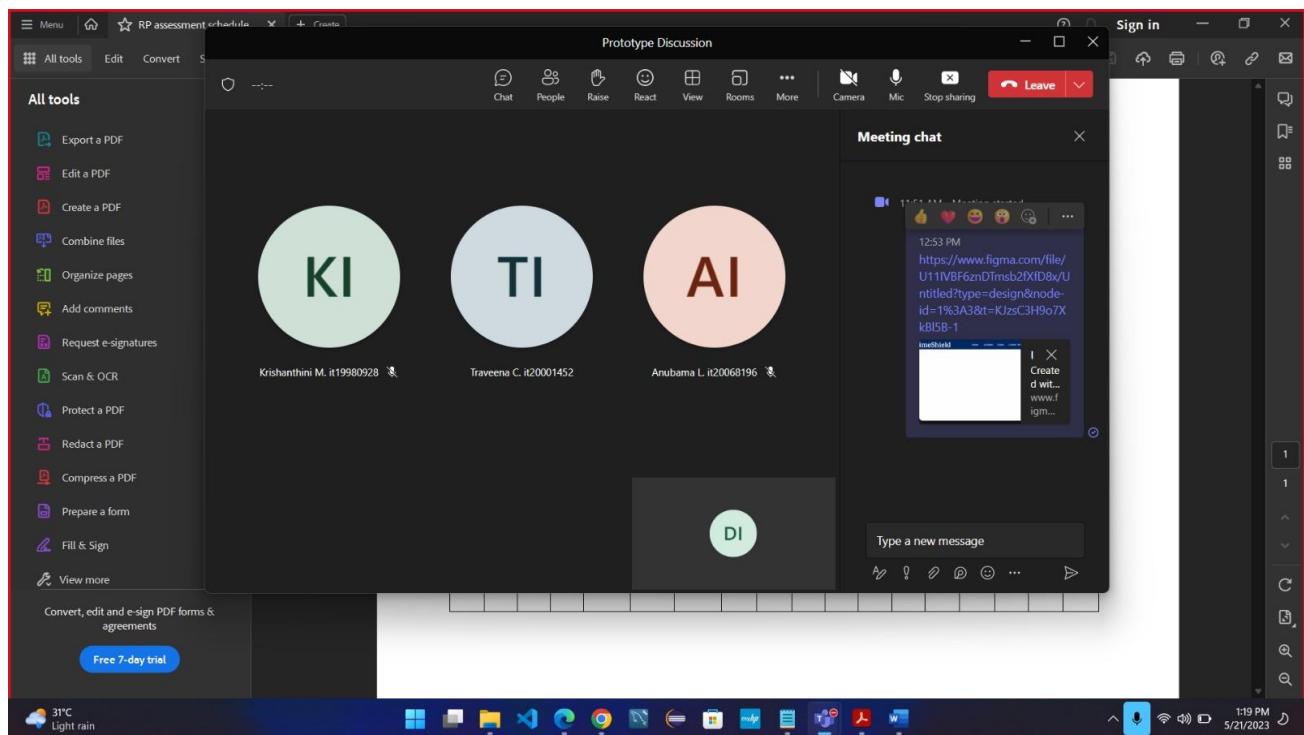
Create with... www.figma...

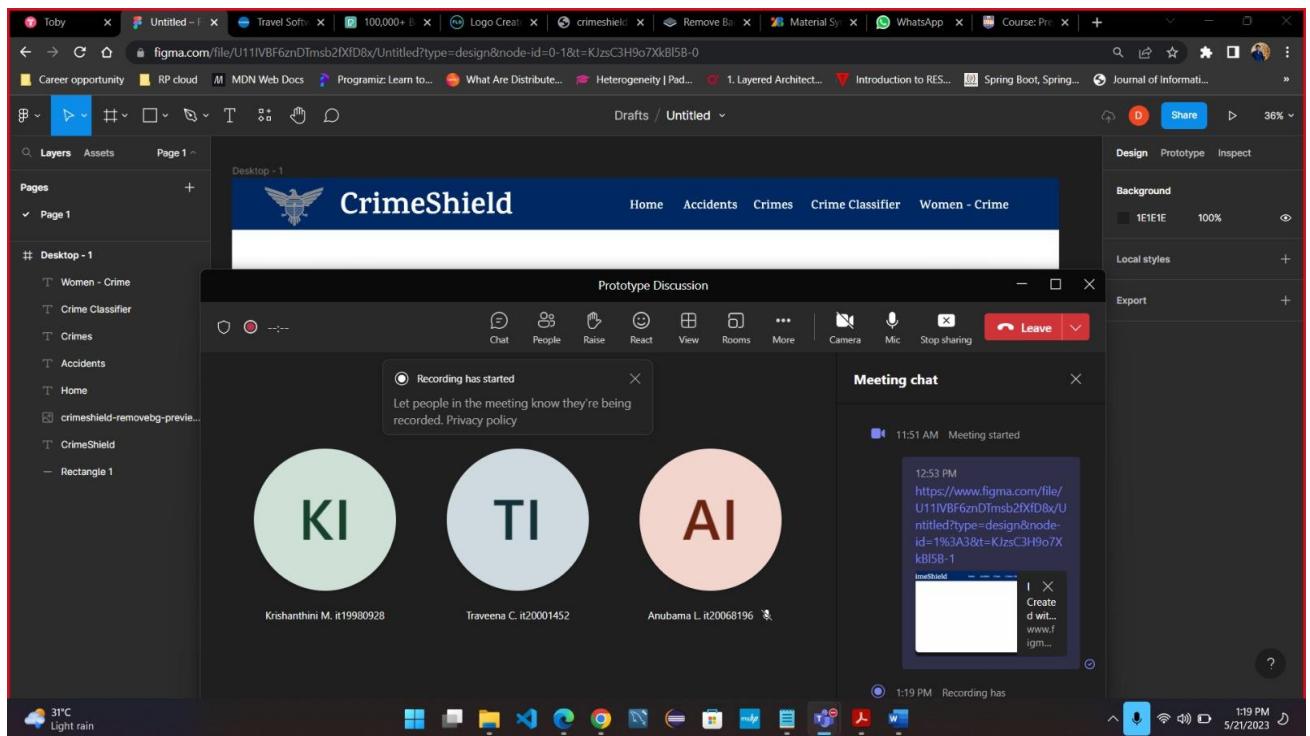
Type a new message

AI
KI
TI
Anubama L. it20068196
Traveena C. it20001452
Krishanthini M. it19980928
DI

31°C Light rain

1:19 PM 5/21/2023





3. Microsoft Teams Planner

3.1 Planner Board

Group Tasks

The screenshot shows the Microsoft Teams Planner interface. On the left, a sidebar lists activity, chat, Teams, assignments, calendar, calls, files, and apps. The main area displays a 'General' board for a team named '2023-224 The future of crime pr...'. The board has three columns: 'To do', 'Doing', and 'Done'. The 'To do' column contains tasks: 'PP2 90%' (due 07/28), 'Final Doc viva & Presentation' (due 10/30), 'Testing' (due 07/13), and 'PP1 50%' (due 05/26). Each task has a progress bar and a list of assigned team members (n, AI, KI). The 'Doing' column shows tasks in progress, and the 'Done' column shows completed tasks. At the bottom, it says 'Completed tasks 14'. A watermark for 'Activate Windows' is visible in the bottom right corner.

Individual Tasks

This screenshot shows a Microsoft Teams board titled "General" with the "Individual Tasks" tab selected. The tasks are grouped into four columns: "To do", "Case Document Classification", "Accident Prediction", and "Crime Predict".

- To do:**
 - + Add task
 - Final Presentation & Viva (due 11/03)
 - Project Website - Individual (due 11/06)
 - Implementation - PP1 (due 05/26)
 - Status Document - Individual (due 05/22)
 - Research Paper (due 06/20)
- Case Document Classification:**
 - Past Research Document Review (due 07/25)
 - Final Submission & Viva - Individual (due 10/26)
 - Application 50% Completion - Individual (due 05/26)
 - Application 100% Completion - Individual (due 07/28)
 - Model Testing 2 (due 07/25)
- Accident Prediction:**
 - Prevention Strategies - PP2 (due 07/28)
 - Final Submission & Viva (Individual) (due 10/26)
 - Testing 1 (due 05/25)
 - Web Application - Individual Component - 100% - PP2 (due 07/28)
 - Finding Connections Between Accident - pp1 (due 07/28)
- Crime Predict:**
 - Crime (due 05/26)
 - Model (due 05/24)
 - Testing (due 07/12)
 - Model (due 05/26)
 - Impler (due 05/26)

This screenshot shows a Microsoft Teams board titled "General" with the "Individual Tasks" tab selected. The tasks are grouped by assignee: Traveena C. it20001452, Anubama L. it20068196, and Dharsan.R it20003982.

- Traveena C. it20001452:**
 - + Add task
 - Past Research Document Review (Case Document Classification, due 07/25)
 - Final Submission & Viva - Individual (Case Document Classification, due 10/26)
 - Application 50% Completion - Individual (Case Document Classification, due 05/26)
 - Application 100% Completion - Individual (Case Document Classification, due 05/26)
- Anubama L. it20068196:**
 - + Add task
 - Final presentation & Viva (To do, due 11/03)
 - Project website-individual (To do, due 11/06)
 - Model training-pp1 (Crime Prediction, due 05/26)
 - Implementation-PP1 (Crime Prediction, due 05/26)
- Dharsan.R it20003982:**
 - + Add task
 - Final Submission & Viva (Individual) (Accident Prediction, due 10/26)
 - Testing 1 (Accident Prediction, due 05/25)
 - Web Application - Individual Component - 100% - PP2 (Accident Prediction, due 07/28)
 - Prevention Strategies - PP2 (Accident Prediction, due 07/28)

3.2 Completed Tasks

Group Tasks

The screenshot shows the Microsoft Teams interface for a group task named "2023-224 The future of crime pr...". The "General" tab is selected. On the left, there's a sidebar with various team management icons. The main area displays a "To do" list with the following items:

- + Add task
- ✓ Proposal-Report-Draft
- ✓ Completed by Traveena C. it2000...
- ✓ Proposal-Presentation
- ✓ Completed by Traveena C. it2000...
- ✓ Topic Assessment Form
- ✓ Completed by Traveena C. it2000...
- ✓ Topic-Evaluation
- ✓ Completed by Traveena C. it2000...
- ✓ Design
- ✓ Completed by Traveena C. it2000...
- ✓ Project Chater

At the bottom right, there's a message: "Activate Windows Go to Settings to activate Windows."

Individual Tasks

The screenshot shows the Microsoft Teams interface for individual tasks. The "Individual Tasks" tab is selected. The left sidebar includes icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The main area is divided into several columns:

- To do:** A list starting with "+ Add task" and showing a completed task from "05/26".
- Completed tasks (13):** A list including "Referring Research Papers" (Completed by Traveena C. it2000...), "Proposal-Report" (Completed by Traveena C. it2000...), "Proposal-Presentation" (Completed by Traveena C. it2000...), "Status document-individual" (Completed by Andromeda L. it2000...), and others.
- Case Document Classification:** A list with "Classification Model Training" (Completed by Traveena C. it2000...), "PDF Text Extraction" (Completed by Traveena C. it2000...), and "Dataset Gathering" (Completed by Traveena C. it2000...).
- Accident Prediction:** A list with "Prevention Strategies - PP2" (Completed by Traveena C. it2000...), "Classification Model Training" (Completed by Traveena C. it2000...), "Final Submission & Viva (Individual)" (Completed by Traveena C. it2000...), "Testing 1" (Completed by Traveena C. it2000...), and "Web Application - Individual Component - 100% - PP2" (Completed by Traveena C. it2000...).
- Crime Prediction:** A list with "Crime" (Completed by Traveena C. it2000...), "Model" (Completed by Traveena C. it2000...), "Testing" (Completed by Traveena C. it2000...), "Model" (Completed by Traveena C. it2000...), and "Implementation" (Completed by Traveena C. it2000...).

At the bottom right, there's a message: "Activate Windows Go to Settings to activate Windows."

3.3 Pending Tasks

Group Tasks

The screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar has icons for Activity, Chat, Assignments, Calendar, Calls, Files, and Apps. The main area shows a "General" channel with a "Group Task" tab selected. A table lists tasks:

| Task title | Assigned to | Priority | Due | Bucket |
|-------------------------------|----------------|----------|-------|--------|
| + Add a task | | | | |
| PP2 90% | T1, A1, K1, D1 | | 7/28 | To do |
| Final Doc viva & Presentation | T1, A1, K1, D1 | | 10/30 | To do |
| Testing | T1, A1, K1, D1 | | 7/13 | To do |
| PP1 50% | T1, A1, K1, D1 | | 5/26 | To do |

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."

Individual Tasks

The screenshot shows the Microsoft Teams interface for the same team "2023-224 The future of crime pr...". The left sidebar is identical. The main area shows a "General" channel with an "Individual Tasks" tab selected. A table lists tasks:

| Task title | Assigned to | Priority | Due | Bucket |
|------------------------------------------|------------------------|----------|-------|-------------------|
| Status Document - Individual | Traveena C. it20001452 | | 5/22 | To do |
| Classification Model Training | Traveena C. it20001452 | | 5/22 | Case Document ... |
| Model Testing 1 | Traveena C. it20001452 | | 5/22 | Case Document ... |
| PDF Text Extraction | Traveena C. it20001452 | | 5/22 | Case Document ... |
| Implementation - PP1 | Traveena C. it20001452 | | 5/26 | To do |
| Application 50% Completion - Individual | Traveena C. it20001452 | | 5/26 | Case Document ... |
| Research Paper | Traveena C. it20001452 | | 6/20 | To do |
| Model Testing 2 | Traveena C. it20001452 | | 7/25 | Case Document ... |
| Past Research Document Review | Traveena C. it20001452 | | 7/25 | Case Document ... |
| Full Code Implementation - PP2 | Traveena C. it20001452 | | 7/28 | To do |
| Application 100% Completion - Individual | Traveena C. it20001452 | | 7/28 | Case Document ... |
| Final Report - Individual | Traveena C. it20001452 | | 9/10 | To do |
| Report | Traveena C. it20001452 | | 9/10 | To do |
| Final Submission & Viva - Individual | Traveena C. it20001452 | | 10/26 | Case Document ... |
| Final Presentation & Viva | Traveena C. it20001452 | | | |
| Project Website - Individual | Traveena C. it20001452 | | | |

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows." Below the table, it says "11/3 To do" and "11/6 To do".

3.4 Teams Planner Schedule

Group Tasks

This screenshot shows the Microsoft Teams Planner interface for the month of May 2023. The calendar view is set to 'Group Task' mode. Key tasks visible include:

- May 11: A green task labeled "Visiting I...".
- May 26: A blue task labeled "PP1 50%".

The sidebar on the left includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, Apps, and Help. The right sidebar features sections for Unscheduled tasks, To do, and Completed, along with a "Add task" button and a note to "Activate Windows".

This screenshot shows the Microsoft Teams Planner interface for the month of June 2023. The calendar view is set to 'Group Task' mode. Key tasks visible include:

- June 20: A green task labeled "Research ...".

The sidebar on the left includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, Apps, and Help. The right sidebar features sections for Unscheduled tasks, To do, and Completed, along with a "Add task" button and a note to "Activate Windows".

This screenshot shows the Microsoft Teams calendar interface in the 'General' tab for the month of July 2023. The calendar is displayed in 'Month' view, showing days from Sunday to Saturday. A task titled 'Testing' is scheduled for Wednesday, July 12th. Another task, 'PP2 90%', is scheduled for Friday, July 28th. The sidebar on the left includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The right sidebar features sections for 'Unscheduled tasks', 'To do', and 'Completed' tasks, along with a 'Add task' button.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| 25 | 26 | 27 | 28 | 29 | 30 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |

This screenshot shows the Microsoft Teams calendar interface in the 'General' tab for the month of September 2023. The calendar is displayed in 'Month' view, showing days from Sunday to Saturday. A task titled 'Final Rep...' is scheduled for Tuesday, September 11th. The sidebar on the left includes links for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Apps. The right sidebar features sections for 'Unscheduled tasks', 'To do', and 'Completed' tasks, along with a 'Add task' button.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Individual Tasks

This screenshot shows the Microsoft Teams Individual Tasks view for May 2023. The calendar grid displays various tasks assigned to the user. The tasks are color-coded and include:

- May 1: Dataset ... (Green)
- May 4: Data gat... (Green)
- May 5: Proposal ... (Green)
- May 5: Proposal ... (Green)
- May 11: Learning ... (Green)
- May 22: Classifica... (Blue)
- May 22: +6 more (Blue)
- May 24: Model Tr... (Blue)
- May 25: Impleme... (Blue)
- May 25: Accident ... (Blue)
- May 25: Testing 1 (Blue)
- May 25: +9 more (Blue)
- May 31: Learning ... (Green)

The sidebar on the left shows the team "2023-224 The future of crime pr..." and the General channel selected. The right sidebar shows sections for Unscheduled tasks, Unassigned tasks (Traveena C. it20001452), and Completed tasks.

This screenshot shows the Microsoft Teams Individual Tasks view for July 2023. The calendar grid displays various tasks assigned to the user. The tasks are color-coded and include:

- July 25: Model Testi... (Blue)
- July 25: Past Rese... (Blue)
- July 28: Application ... (Blue)
- July 28: Full Code I... (Blue)

The sidebar on the left shows the team "2023-224 The future of crime pr..." and the General channel selected. The right sidebar shows sections for Unscheduled tasks, Unassigned tasks (Traveena C. it20001452), and Completed tasks.

General

September 2023

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Unscheduled tasks

+ Add task

Unassigned

Traveena C. it20001452

Completed

Activate Windows
Go to Settings to activate Windows.

3.5 Teams Planner Charts

Group Tasks

General

Status

4 Tasks left

| Status | Count |
|-------------|-------|
| Not started | 2 |
| In progress | 2 |
| Late | 0 |
| Completed | 20 |

Bucket

To do

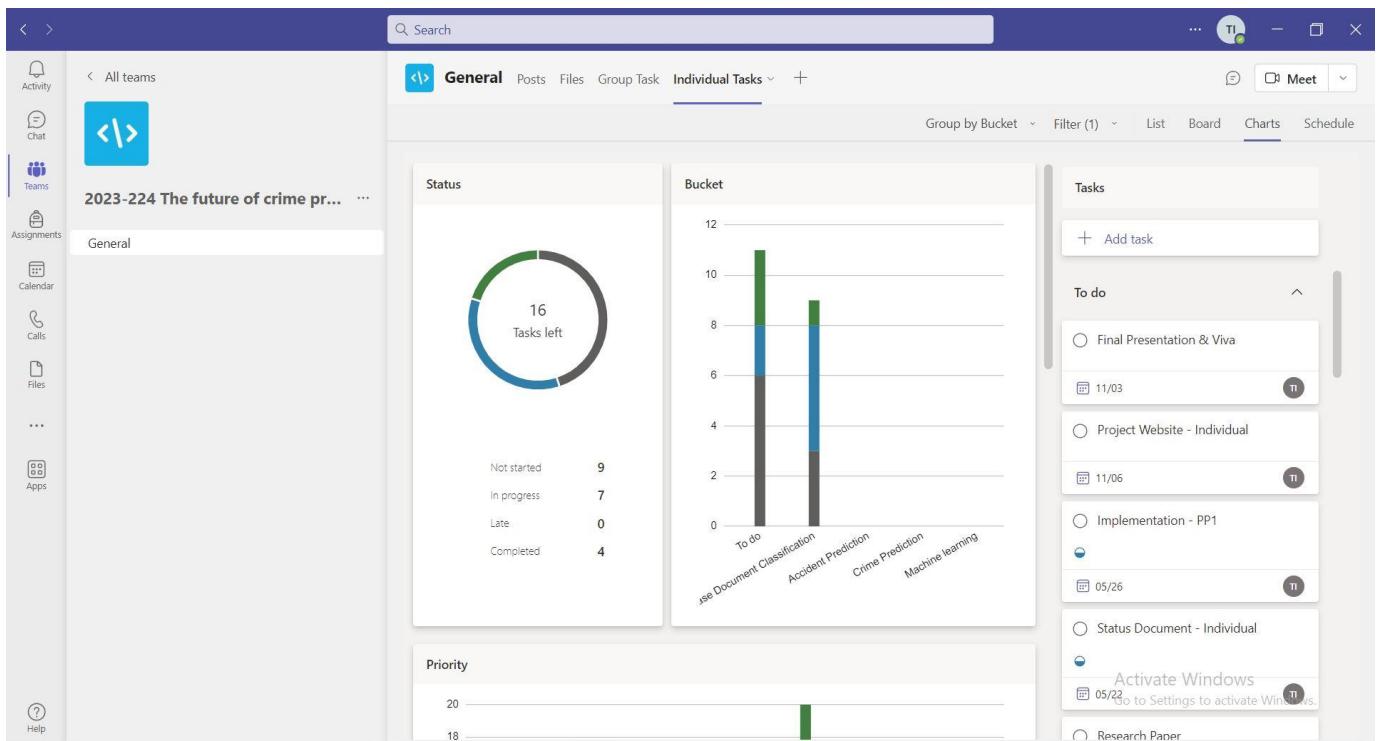
Priority

Tasks

+ Add task

- PP2 90%
- Final Doc viva & Presentation
- Testing
- PP1 50%
- Activate Windows

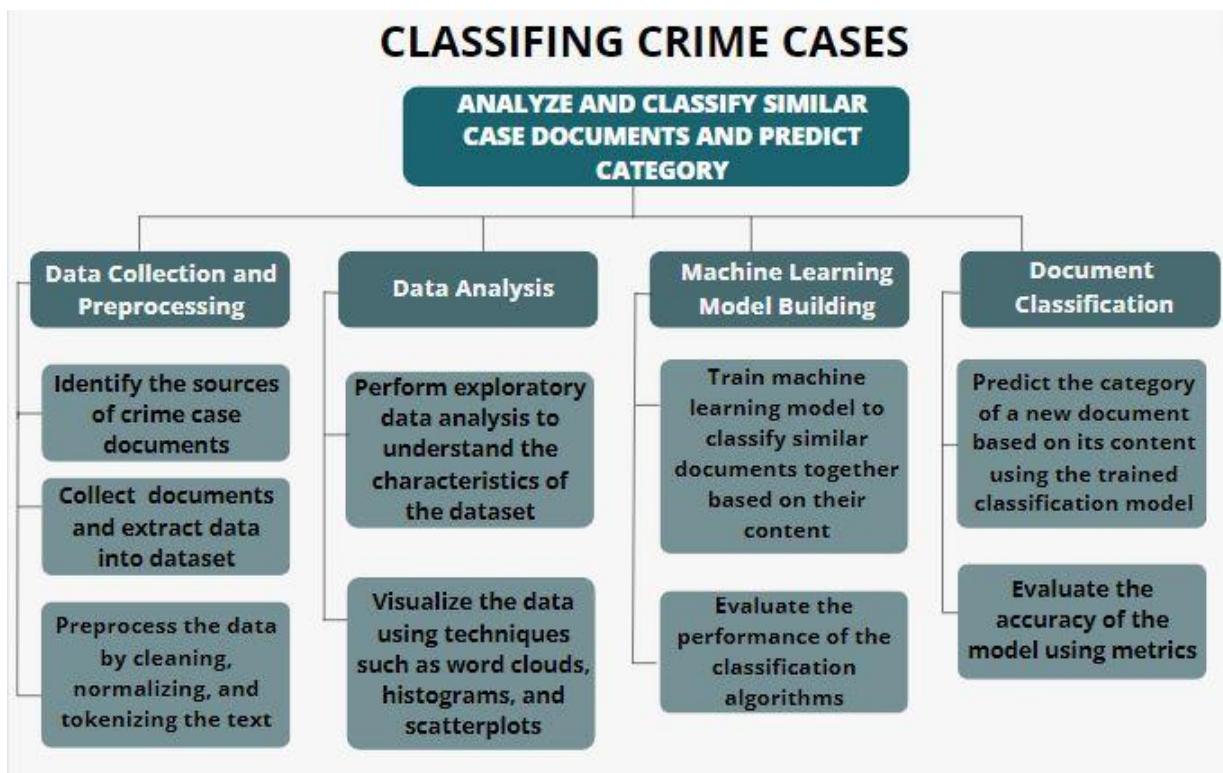
Individual Tasks



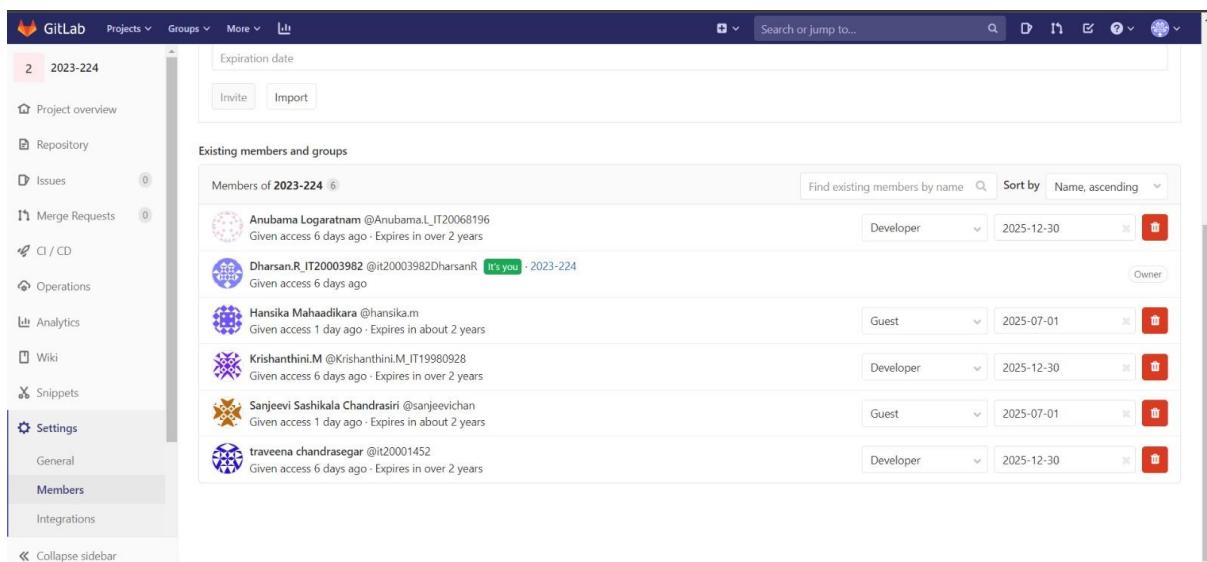
4. Gantt Chart

| Tasks | 2022 | | 2023 | | | | | | | | | | |
|--------------------------------------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| | December | January | February | March | April | May | June | July | August | September | October | November | December |
| Topic Clarification | | | | | | | | | | | | | |
| Topic Assessment | | | | | | | | | | | | | |
| Project Charter | | | | | | | | | | | | | |
| Requirements Gathering | | | | | | | | | | | | | |
| Making of Project Proposal | | | | | | | | | | | | | |
| Project Presentation | | | | | | | | | | | | | |
| Proposal Report | | | | | | | | | | | | | |
| Progress Presentation-1 | | | | | | | | | | | | | |
| Research Paper | | | | | | | | | | | | | |
| Final Report | | | | | | | | | | | | | |
| Progress Presentation-2 | | | | | | | | | | | | | |
| Testing and Fixing issues | | | | | | | | | | | | | |
| Website Assessment and Research Book | | | | | | | | | | | | | |
| Final Report (Soft bound) | | | | | | | | | | | | | |
| Status Document Submission | | | | | | | | | | | | | |
| Final Presentation and Viva | | | | | | | | | | | | | |
| Final Report Submission | | | | | | | | | | | | | |

5. Work Breakdown Structure



6. Gitlab Commits



2023-224

Project overview

- Details
- Activity
- Releases
- Repository
- Issues (0)
- Merge Requests (0)
- CI / CD
- Operations
- Analytics
- Wiki
- Snippets
- Settings

2023-224 Project ID: 1904

2 Commits 5 Branches 0 Tags 102 KB Files

Project ID: 2023-224 Term_ID: TMP-23-224

master 2023-224 / +

History Find file Web IDE Download Clone

Update README.md Dharsan.R_IT20003982 authored 6 minutes ago a61a35be

README Auto DevOps enabled Add LICENSE Add CHANGELOG Add CONTRIBUTING Add Kubernetes cluster

| Name | Last commit | Last update |
|-----------|------------------|---------------|
| README.md | Update README.md | 6 minutes ago |

README.md

Topic: The Future of Crime Prevention: Police Case Analysis Using Machine Learning. ID: 2023 - 224

Main Objective: Develop a comprehensive machine learning system that can prevent and solve crimes by analyzing and predicting accident locations, criminal cases, clustering crimes against women and classifying case documents by text analysis. The system aims to enhance public safety by identifying patterns and trends in criminal activity, automating document classification, and providing interactive visualizations to

GitLab Projects Groups More

2023-224

Project overview

- Details
- Activity
- Releases
- Repository
- Issues (0)
- Merge Requests (0)
- CI / CD
- Operations
- Analytics
- Wiki
- Snippets
- Settings

quickly and consistently discover important classification in crime occurrences? 4.How can clustering crimes against women be used to forecast potential future criminal activities and enhance public safety?

Individual Research Question:

IT20003982: How can machine learning models predict future accident locations and causes for accidents? How effective are machine learning algorithms in identifying connections in accident data that may be difficult for humans to detect?

IT19980928:What is the importance of technology-based methods in predicting future criminal activities based on the nature of the crime? Why Current manual methods of analysis are inefficient and often lead to inaccuracies in investigate cases? How Machine learning algorithm could be used to develop an automated system for analyzing criminal cases?

IT20001452:What are the specific challenges faced by law enforcement agencies and the court system in Sri Lanka regarding the handling of criminal cases? What are the current challenges in the criminal case handling procedure in Sri Lanka, and how do they impact the judicial system? How can an automated text analysis system assist in improving the efficiency and accuracy of the criminal justice system in Sri Lanka?

IT20068196:How can clustering-based crime forecasting models accurately predict future locations and types of crimes against women, and identify high-risk areas for such crimes? What is the problem with current crime forecasting models in regards to crimes against women? How can a clustering-based crime forecasting model contribute to the development of effective crime prevention strategies for crimes against women?

Individual Objectives:

IT20003982: Develop a machine learning system that can analyze and predict accident locations, causes as well as identify connections between police accident cases, in order to inform targeted safety measures and accident prevention strategies.

IT19980928:Criminal case analysis System for Police to predicting future crimes cases through identifying patterns and trends in terms of nature of the crime.

IT20001452:Develop an automated text analysis system that classifies crime occurrences into relevant categories for law enforcement agencies in Sri Lanka which helps to improve the accuracy and quality of criminal investigations.

IT20068196:Develop a model for predicting crimes against women.Provide information on the locations and types of crimes against women. Enable law enforcement agencies to take preventive measures and allocate resources more effectively

7. WhatsApp Research Project Group

The screenshot shows a WhatsApp group chat interface. At the top, the group name is "POLICE - Research - 2023" and the location is "Anuuuuuuu, Dharshan, Krishhhh, +94 77 222 4848, +94 77 691 8328...". The messages are as follows:

- Dharshan: Okay madam 09:00 (Saturday)
- Hansika Mahaadikara: +94 77 222 4848 10:20 hav a lecture till 10 09:19
- Dharshan: Okay madam.. We'll join 09:21

A context menu is open over Dharshan's second message, showing options: "Join conversation", "teams.microsoft.com", "You're invited to a Teams meeting!", and "PP1 - Discussion". The "PP1 - Discussion" option is highlighted. Below this, a long URL is provided:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzVhN2IzMTEtY2U1ZS00MTBkLTihNTUtMDQ3Njg2Y2E4YmFh%40thread.v2/0?context=%7b%22Tid%22%3a%2244e3cf94-19c9-4e32-96c3-14f5bf01391a%22%2c%220id%22%3a%22bc10%2d-f40n-103f-a210-

The right side of the screen shows the group info panel for "POLICE - Research - 2023", which has 6 participants. It includes a profile picture of two people holding gears, the group name, and a link to edit the group. Below this, there is a section for "TMP-23-224" (Group created by Dharshan, on 22/12/2022 at 10:42), a "Media, links and docs" section with 8 items, and a note about activating Windows.

THE FUTURE OF CRIME PREVENTION: POLICECASE ANALYSIS USING MACHINE LEARNING

(Clustering crimes against women and crime forecasting prediction)

Project Id

2023-224

Status Document - 1

Anubama Logaratnam - IT20068196

Supervisor – Ms. Hansika Mahaadikara

Co-Supervisor - Ms. Sanjeevi Chandrasiri

BSc (Hons) in Information Technology Specializing in
SoftwareEngineering

Department of Computer Science & Software Engineering

Sri Lankan Institute of Information Technology

Sri Lanka

May 2023

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1. Microsoft Teams Details

1.1 Team Members

The screenshot shows the Microsoft Teams interface for a specific team. On the left, there's a sidebar with various icons for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps. The main area displays the team's name, "2023-224 The future of crime prevention: police case analysis using machine learn...", and its description, "Research Project Group Discussion". Below this, the "Members" tab is selected, showing a list of participants. There is one entry under "Owners": Dharsan.R (it20003982), listed as the Owner. Under "Members and guests", there are three entries: Traveena C. (it20001452), Krishanthini M. (it19980928), and Anubama L. (it20068196), all listed as Members.

1.2 Team Meetings with Supervisor

The screenshot shows the Microsoft Teams Chat interface for a meeting titled "PP1 - Discussion". The meeting took place on Saturday, May 20, 2023, from 10:02 AM to 10:35 AM, with a total duration of 32m 33s. Four people attended the meeting. The participants are listed in the "Participants" section, which includes the organizer (Dharsan.R), two presenters (Anubama Logarithnam and Krishanthini M.), and one other attendee (Hansika Mahadikara). The interface also shows a summary of the meeting duration and average attendance time.

Excel - TAF evaluation(1-160) (1) - Saved

File Home Insert Draw Formulas Data Review View Automate Help Table Design

Comments Catch up Viewing Share

You don't have permission to download or print this file.

Read-only This workbook was opened in read-only mode

D116 Project ID Project Topic (please copy it from the TAF)

115 TMP-23-224 Police Investigation Analysis and Future Prediction

116 TMP-23-225 LittleGenie - E Learning Platform for Grade 1 & Grade 2 School Children

Sheet1 Workbook Statistics

Give Feedback to Microsoft 180% + 9:15 AM 3/7/2023 24°C Humid

KR Krishantha M. IT20068196

TI Traveena C. IT2003452

AL Anubama Logarithm

DI Dharsan.R IT20035982

Hansika Mahadevika

TAF_TMP-23-224.pdf - Adobe Acrobat Reader (64-bit)

File Edit View Sign Window Help

Home Tools TAF_TMP-23-224.pdf

Anubama.L (IT20068196)

The sub objective of clustering crimes against women and using machine learning for crime forecasting prediction is to create an effective solution to reduce and prevent such crimes. This involves collecting relevant data, performing clustering analysis, using machine learning algorithms for prediction, evaluating the model's accuracy, integrating it with crime reporting systems, and continuously monitoring and updating the model. The end goal is to provide real-time warnings and recommendations to police investigators to improve the safety of women. This solution will be more time-efficient and accurate than relying solely on the human mind.

Collecting and preprocessing crime data and clustering algorithms are applied to group similar crimes against women based on their characteristics. The resulting clusters are then analyzed to identify patterns and trends that may be relevant to the investigation. Finally, predictive models are trained on the crime data to forecast future crimes and identify areas where additional resources may be needed. This task has significant advantages for police investigators and public safety, as it can improve crime prevention efforts, enhance resource allocation, and inform decision-making.

By identifying patterns, trends, and relationships in crime data, this task can help police investigators better understand the factors that contribute to crime and take proactive measures to prevent it. The ability to forecast future crimes can help allocate resources more effectively and respond to emerging crime trends. This novel approach can improve public safety, enhance the effectiveness of police investigators, and contribute to a safer community.

KR Krishantha M. IT20068196

TI Traveena C. IT2003452

AL Anubama Logarithm

DI Dharsan.R IT20035982

Hansika Mahadevika

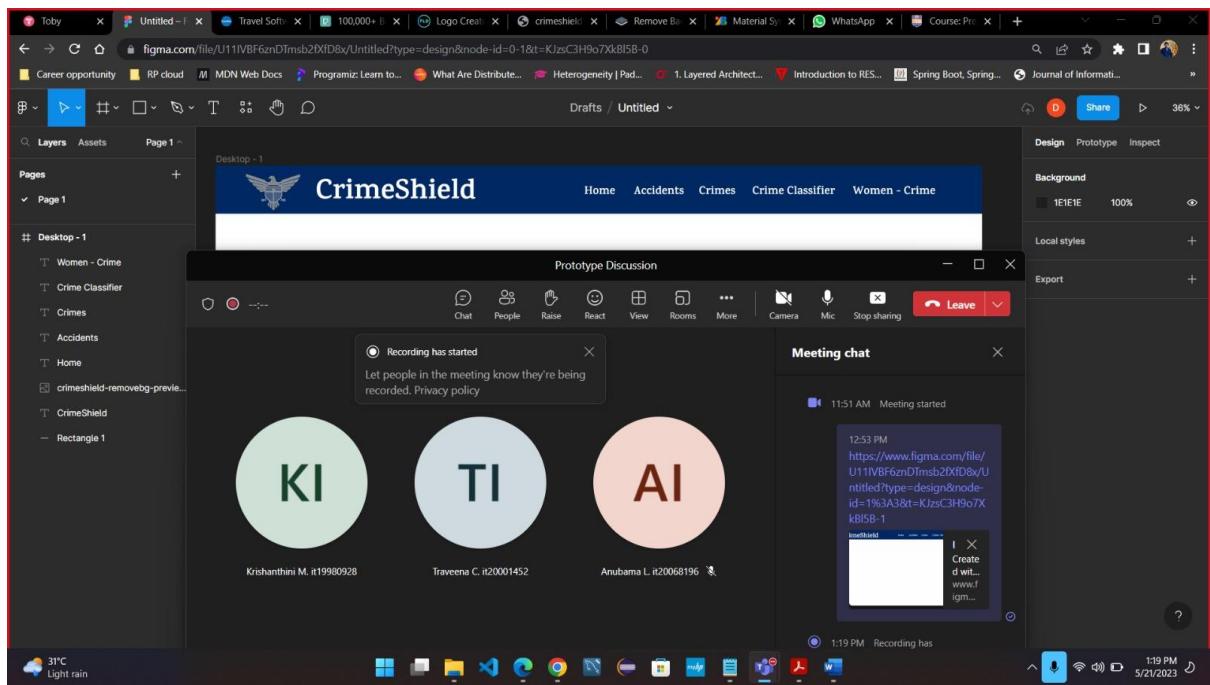
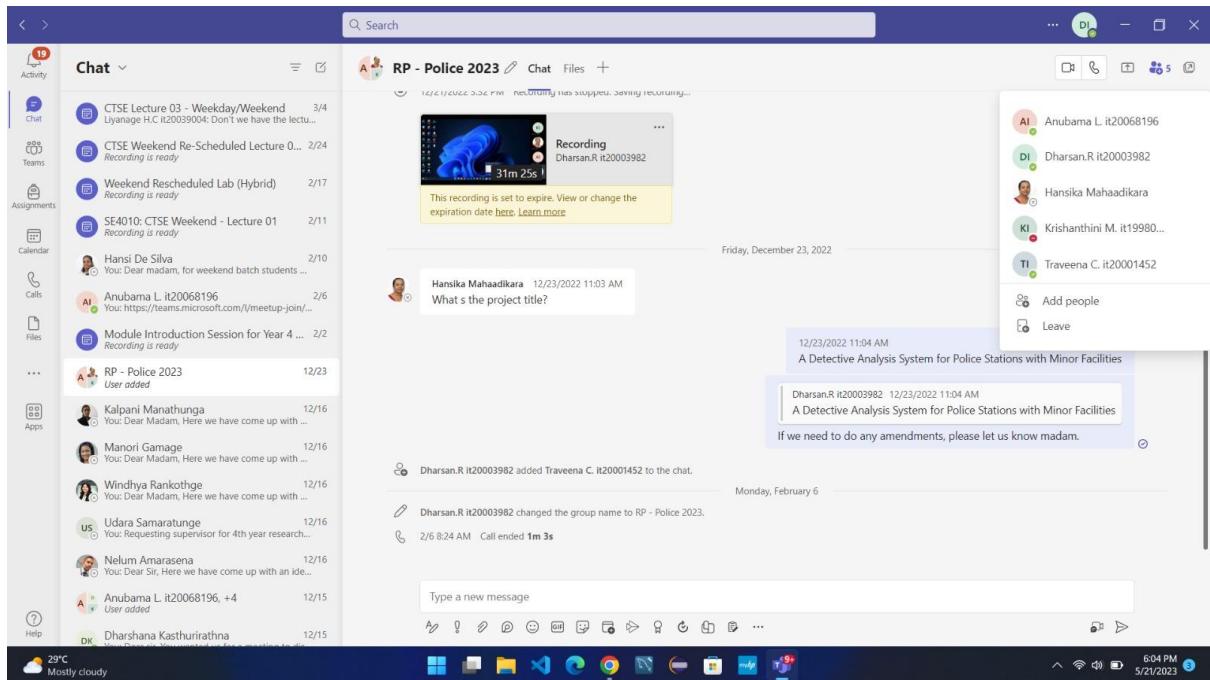
2. Teams calls with Research Team

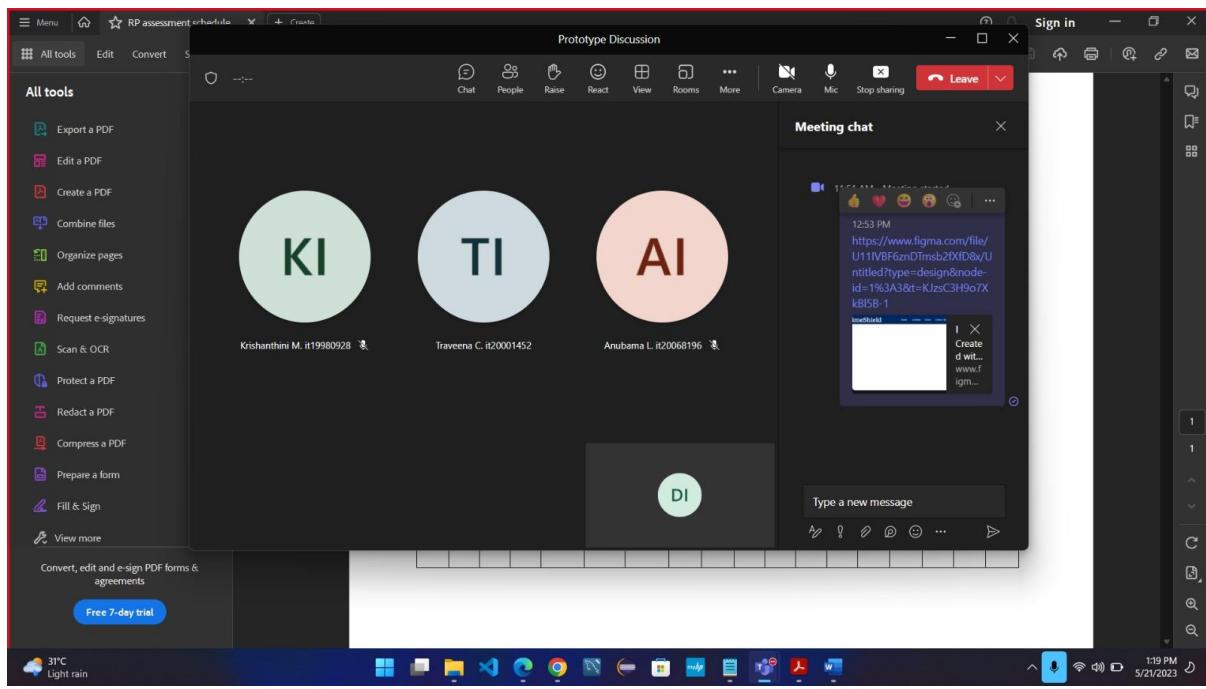
The screenshot shows the Microsoft Teams interface for a team named "2023-224 The future of crime pr...". The left sidebar includes icons for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps. The main area displays the team's name and a search bar. Below the title, there are tabs for Members, Channels, Analytics, Apps, and Tags. The Members tab is selected, showing a list of users. The Owners section contains one entry: Dharsan.R (it20003982). The Members and guests section contains three entries: Traveena C. (it20001452), Krishanthini M. (it19980928), and Anubama L. (it20068196), all listed as Member.

The screenshot shows the Microsoft Teams interface for the same team, now on the Analytics page. The left sidebar remains the same. The main area features a summary table with the following data:

| Summary | | Engagement | |
|---------|-----------|------------|----------|
| 4 | Users | 9 | Apps |
| 0 | Meetings | 2 | Posts |
| 1 | Replies | 0 | Mentions |
| 0 | Reactions | | |

Below the summary, there are two sections: "Active users" and "Role". The "Active users" section shows 4 active users and 0 inactive users. The "Role" section shows 4 Owners + Members and 0 Guests.





Microsoft Teams

General Posts Files Group Task Individual Tasks +

Meeting started 4 replies from IT20003982

Meeting Recorded by: Dharsan.R IT20003982 14m 49s

This recording is set to expire. View or change the expiration date here. Learn more

Dharsan.R IT20003982 13:47 I added a tab at the top of this channel. Check it out!

Dharsan.R IT20003982 13:59 I added a tab at the top of this channel. Check it out!

New conversation

About

Research Project Group Discussion

Members (4)

Recently contributed

Dharsan.R IT20003982

Krishanthini M. IT19980928

Traveena C. IT20001452

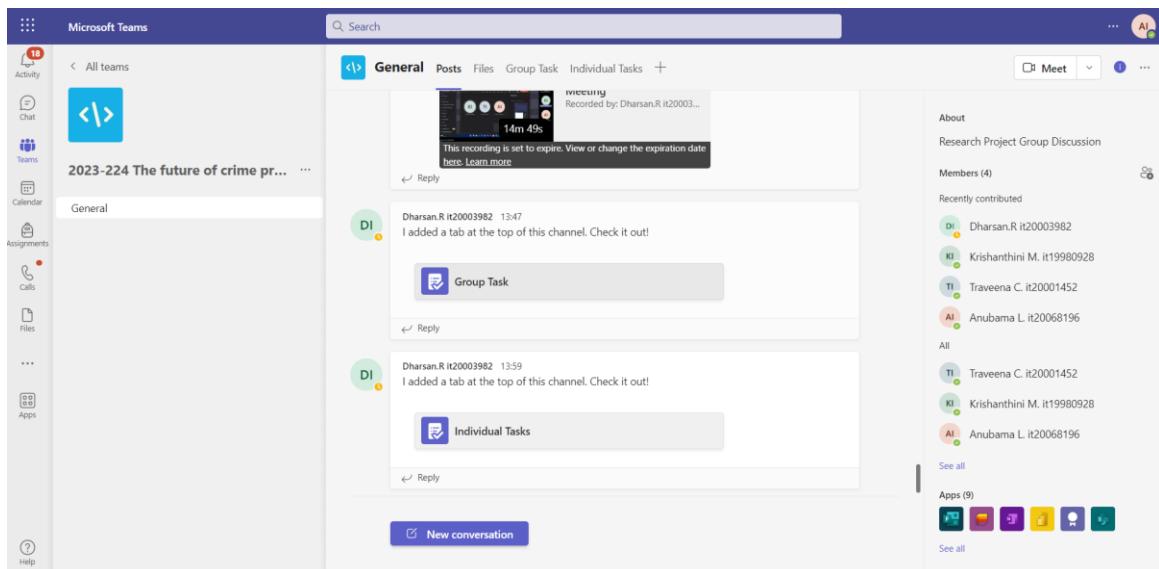
Anubama L. IT20068196

All

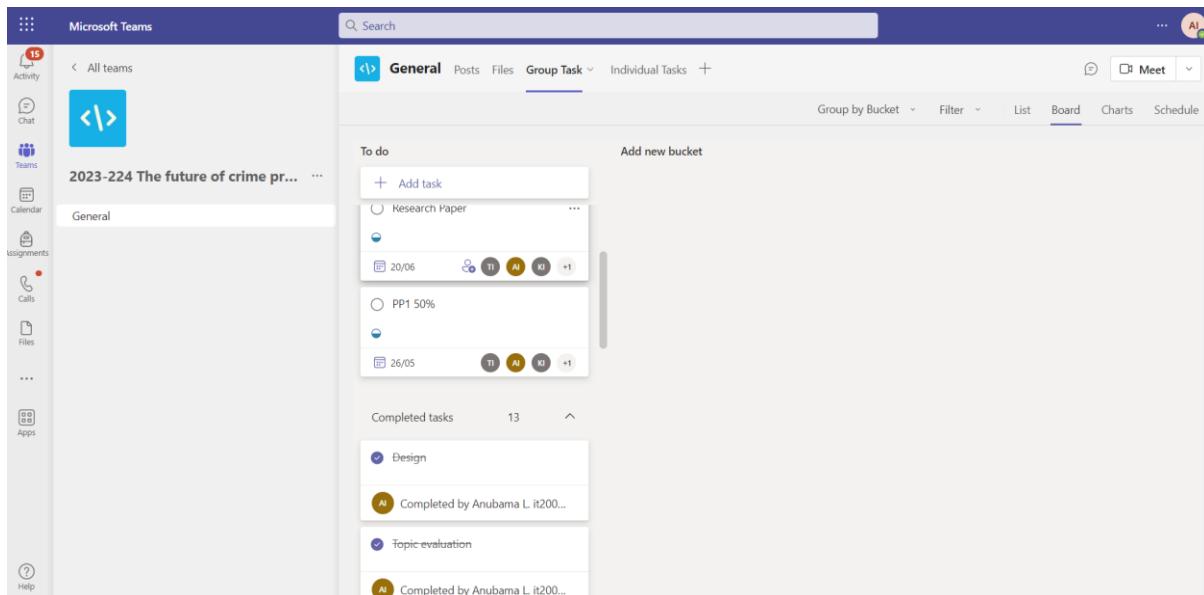
See all

Apps (9)

3. MS Teams Planner



3.1 Planner Board Group Tasks



Individual Tasks

The screenshot shows the Microsoft Teams interface with the 'General' tab selected. The 'Individual Tasks' section is active, displaying three columns: 'To do', 'Crime Prediction', and 'Machine learning'. Each column contains several task cards with details like title, due date, and AI status.

| To do | Crime Prediction | Machine learning |
|-------------------------------------|-----------------------------|---------------------------------|
| + Add task | + Add task | + Add task |
| Final presentation & Viva 03/11 | Model training-pp1 26/05 | Testing 28/07 |
| Project website-individual 06/11 | Prevention -crime 31/07 | Learning ML algorithms 31/05 |
| Implementation-PP1 26/05 | Crime Prediction 31/07 | |
| Status document-individual 22/05 | | |
| Research paper | | |

Completed tasks: 1

- Referring research papers (Completed by Anubama L. it200...)

3.2 Completed Tasks Group Tasks

The screenshot shows the Microsoft Teams interface with the 'General' tab selected. The 'Group Task' section is active, displaying a 'To do' column and a 'Completed tasks' section. The 'Completed tasks' section lists several tasks with completion status and user information.

| To do | Completed tasks |
|-----------------------|-------------------------------------|
| + Add task | Add new bucket |
| Completed tasks: 13 | |
| Design | Completed by Anubama L. it200... |
| Topic-evaluation | Completed by Anubama L. it200... |
| Topic assessment form | Completed by Anubama L. it200... |
| Proposal-Reports | Completed by Krishanthini M. it1... |

Individual Tasks

The screenshot shows the Microsoft Teams interface with the 'General' team selected. The top navigation bar includes 'General', 'Posts', 'Files', 'Group Task', 'Individual Tasks', and '+'. Below the navigation is a search bar and filter options ('Group by Bucket', 'Filter (1)', 'List', 'Board', 'Charts', 'Schedule'). The main area displays tasks categorized into 'To do', 'Completed tasks', and 'Machine learning' buckets. The 'To do' section contains tasks like 'Final report-Individual' (due 10/09) and 'Crime Prediction' (due 29/07). The 'Completed tasks' section lists 'Proposal presentation' and 'Proposal Document' (both completed by Anubama L. it200...). The 'Machine learning' section contains tasks like 'Model training-pp1' and 'Testing'.

3.3 Pending Tasks Group Tasks

The screenshot shows the Microsoft Teams interface with the 'General' team selected. The top navigation bar includes 'General', 'Posts', 'Files', 'Group Task', 'Individual Tasks', and '+'. Below the navigation is a search bar and filter options ('All Active', 'Filter', 'List', 'Board', 'Charts', 'Schedule'). The main area displays group tasks in a table format. The columns are 'Task title', 'Assigned to', 'Priority', 'Due', and 'Bucket'. Tasks listed include 'Final Report' (due 10/09), 'Progress Presentation_2' (due 28/07), 'Research Paper' (due 20/06), and 'PP1 50%' (due 26/05). Each task row has a small circular icon with initials and an AI icon.

Individual Tasks

The screenshot shows the Microsoft Teams Planner interface for a team named "General". The left sidebar includes links for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps. The main area displays a list of tasks under the "General" category. The tasks are listed in a table with columns for Task title, Assigned to, Priority, Due date, and Bucket. Most tasks are assigned to "Anubama L. it20068196". The tasks include:

| Task title | Assigned to | Priority | Due | Bucket |
|------------------------------|-----------------------|----------|------------------|--------|
| + Add a task | | | | |
| ○ Final presentation & Viva | Anubama L. it20068196 | 03/11 | To do | |
| ○ Project website-individual | Anubama L. it20068196 | 06/11 | To do | |
| ○ Implementation-PP1 | Anubama L. it20068196 | 26/05 | To do | |
| ○ Status document-individual | Anubama L. it20068196 | 22/05 | To do | |
| ○ Research paper | Anubama L. it20068196 | 20/06 | To do | |
| ○ Report | Anubama L. it20068196 | 10/09 | To do | |
| ○ Full code implementation | Anubama L. it20068196 | 29/07 | To do | |
| ○ Final report-Individual | Anubama L. it20068196 | 10/09 | To do | |
| ○ Model training-pp1 | Anubama L. it20068196 | 26/05 | Crime Prediction | |
| ○ Prevention -crime | Anubama L. it20068196 | 31/07 | Crime Prediction | |
| ○ Crime Prediction | Anubama L. it20068196 | 31/07 | Crime Prediction | |
| ○ Testing | Anubama L. it20068196 | 28/07 | Machine learning | |
| ○ Learning ML algorithms | Anubama L. it20068196 | 31/05 | Machine learning | |

3.4 Teams Planner Schedule

Group Tasks

The screenshot shows the Microsoft Teams Planner interface for a team named "General". The left sidebar includes links for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps. The main area displays a calendar view for December 2022. The calendar shows days from Monday to Sunday. Two tasks, "Project Charter", are highlighted in green boxes at the bottom of the calendar. To the right of the calendar, there are sections for "Unscheduled tasks" (with a "+ Add task" button) and "To do" and "Completed" lists.

Microsoft Teams

Activity Chat Teams Calendar Assignments Calls Files ... Apps Help

2023-224 The future of crime pr... General

General Posts Files Group Task Individual Tasks +

May 2023 Hide future recurring tasks Week Month

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |

Group by Bucket Filter List Board Charts Schedule

Unscheduled tasks + Add task

To do

Completed

This screenshot shows the Microsoft Teams calendar for May 2023. The calendar is set to 'Month' view. Several tasks are listed as green boxes with icons: 'Proposal...' on May 5, 'Visiting L...' on May 11, and 'PP1 50%' on May 26. The sidebar includes links for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps.

Microsoft Teams

Activity Chat Teams Calendar Assignments Calls Files ... Apps Help

2023-224 The future of crime pr... General

General Posts Files Group Task Individual Tasks +

December 2022 Hide future recurring tasks Week Month

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 28 | 29 | 30 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |

+2 more

Project Charter

Group by Bucket Filter List Board Charts Schedule

Unscheduled tasks + Add task

To do

Completed

This screenshot shows the Microsoft Teams calendar for December 2022. The calendar is set to 'Month' view. A repeating task, 'Project Charter', is listed for every day from December 2 to December 8. The sidebar includes links for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps.

Microsoft Teams

Activity Chat Teams Calendar Assignments Calls Files ... Apps Help

2023-224 The future of crime pr... General

General Posts Files Group Task Individual Tasks +

March 2023 Hide future recurring tasks Week Month

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 27 | 28 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Group by Bucket Filter List Board Charts Schedule

Unscheduled tasks + Add task

To do

Completed

This screenshot shows the Microsoft Teams calendar for March 2023. The calendar is set to 'Month' view. Tasks are listed as green boxes with icons: 'Project C...' on March 10, 'proposal...' on March 24, and 'Proposal' on March 31. The sidebar includes links for Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps.

Microsoft Teams

Activity

Chat

Teams

Calendar

Assignments

Calls

Files

...

Apps

Help

Search

General

2023-224 The future of crime pr...

Group Task

Individual Tasks

General Posts Files Group Task Individual Tasks +

Group by Bucket Week Month Unscheduled tasks

To do

Completed

+ Add task

February 2023

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Topic Ass... Design Project C...

February 2023

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Individual Tasks

Microsoft Teams

Activity

Chat

Teams

Calendar

Assignments

Calls

Files

...

Apps

Help

Search

General

2023-224 The future of crime pr...

Individual Tasks

General Posts Files Group Task Individual Tasks +

Group by Bucket Week Month Unscheduled tasks

To do

Crime Prediction

Machine learning

Completed

+ Add task

May 2023

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 1 | 2 | + | 3 | 4 | 5 | 6 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |

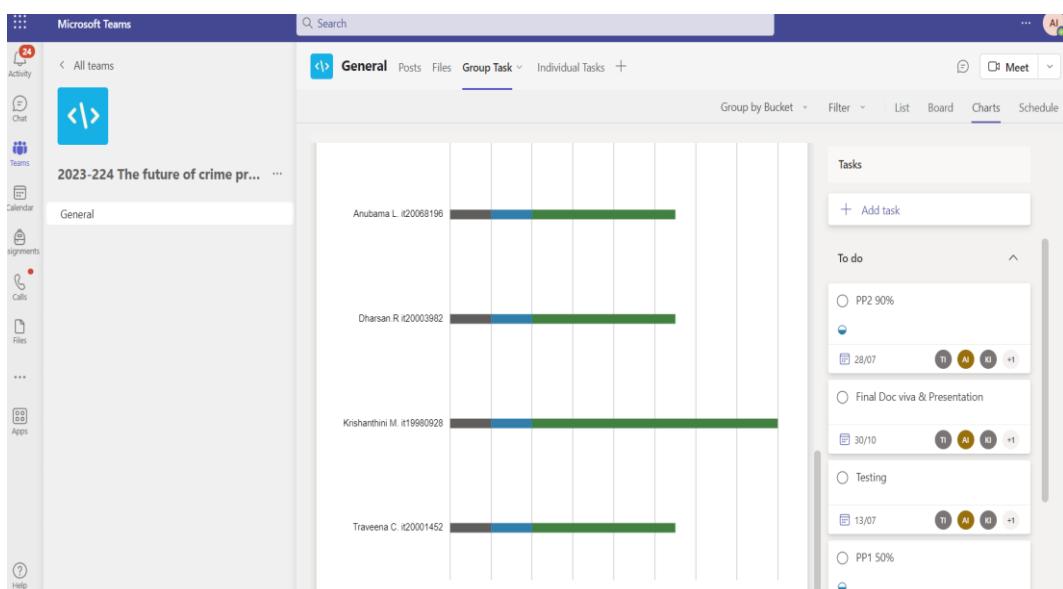
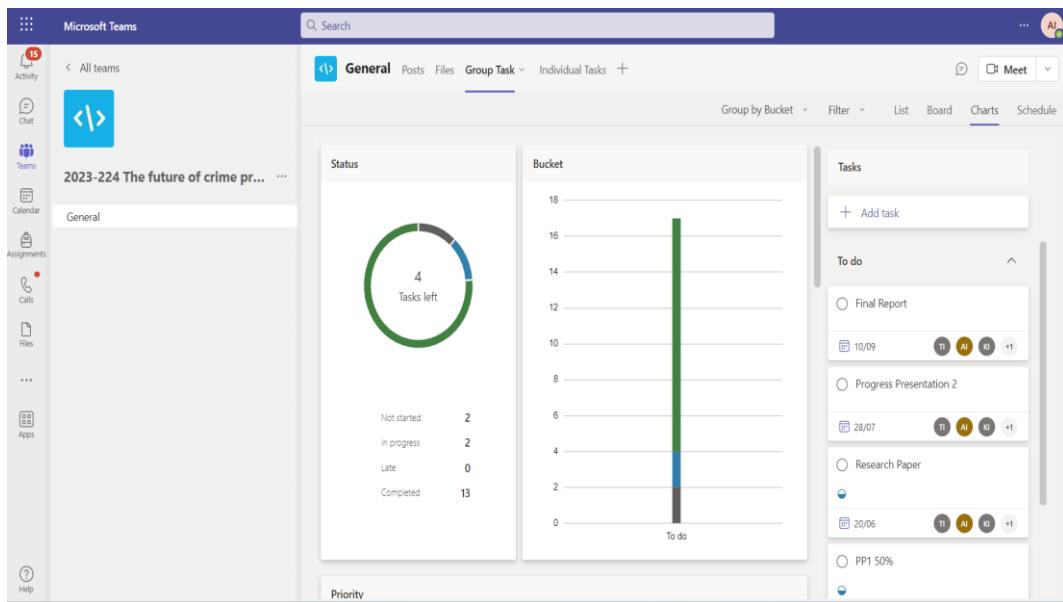
Status do... Learning ...

May 2023

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---------|-----------|----------|--------|----------|--------|
| 1 | 2 | + | 3 | 4 | 5 | 6 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |

3.5 Teams Planner Charts

Group Tasks



Individual Tasks

The screenshot shows the Microsoft Teams interface with the 'Individual Tasks' board selected. On the left, the sidebar includes Activity, Chat, Teams, Calendar, Assignments, Calls, Files, and Apps. The main area displays a donut chart titled 'Status' with 13 tasks left, and a bar chart titled 'Bucket' showing task distribution across To do, Crime Prediction, and Machine learning categories.

| Status | Count |
|-------------|-------|
| Not started | 9 |
| In progress | 4 |
| Late | 0 |
| Completed | 3 |

| Bucket | Count |
|------------------|-------|
| To do | 10 |
| Crime Prediction | 3 |
| Machine learning | 3 |

The right side features a 'Tasks' panel with a 'To do' list containing items like 'Final presentation & Viva' (due 03/11), 'Project website-individual' (due 06/11), 'Implementation-PP1' (due 26/05), and 'Status document-individual'.

This screenshot shows the same Microsoft Teams interface but with different data in the bar chart. The 'Bucket' chart now displays tasks across five categories: To do, Accident Prediction, Crime Prediction, Machine learning, and Case Document Classification. The total count of tasks is 10.

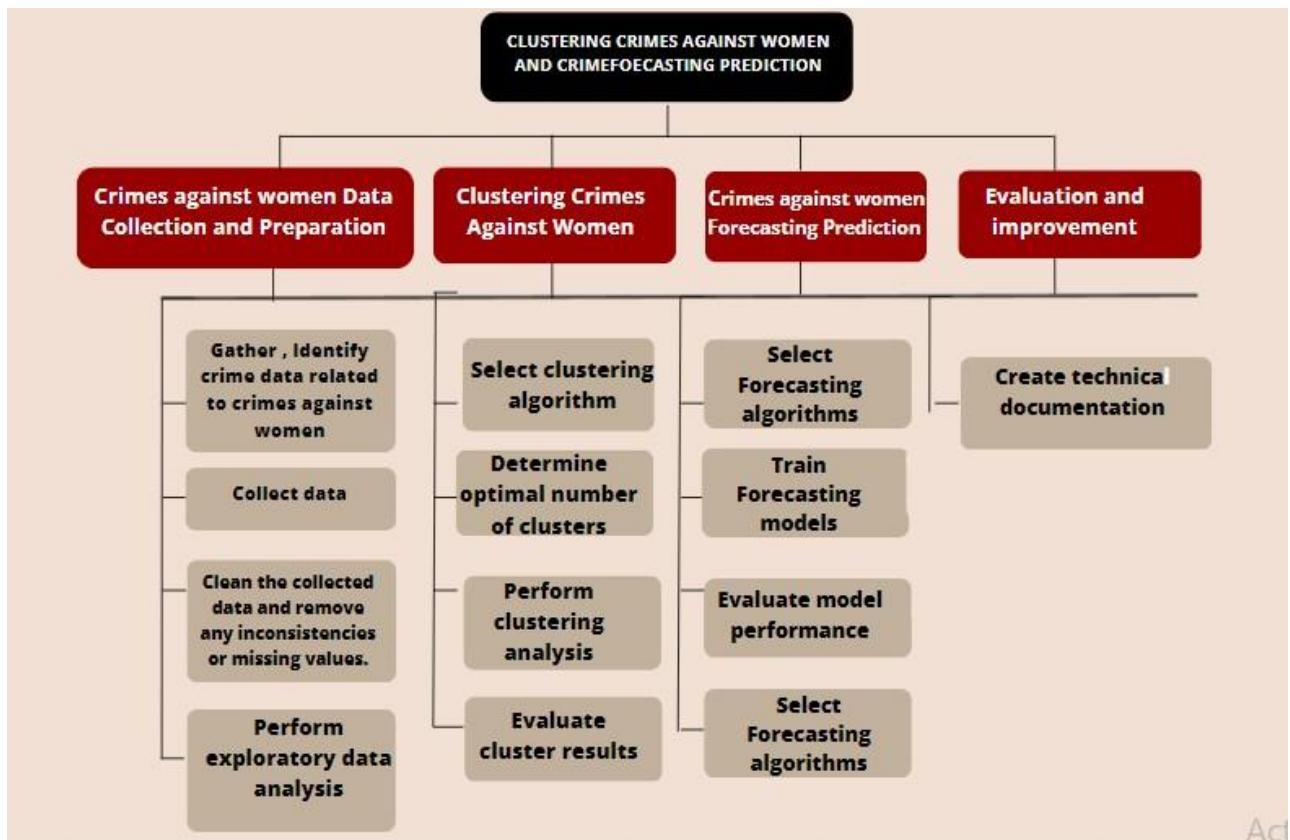
| Bucket | Count |
|------------------------------|-------|
| To do | 7 |
| Accident Prediction | 1 |
| Crime Prediction | 1 |
| Machine learning | 1 |
| Case Document Classification | 1 |

The 'Tasks' panel remains the same, listing the same four items under 'To do'.

4. Gantt Chart

| Tasks | 2022 | 2023 | | | | | | | | | | | |
|--------------------------------------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| | December | January | February | March | April | May | June | July | August | September | October | November | December |
| Topic Clarification | | | | | | | | | | | | | |
| Topic Assessment | | | | | | | | | | | | | |
| Project Charter | | | | | | | | | | | | | |
| Requirements Gathering | | | | | | | | | | | | | |
| Making of Project Proposal | | | | | | | | | | | | | |
| Project Presentation | | | | | | | | | | | | | |
| Proposal Report | | | | | | | | | | | | | |
| Progress Presentation-1 | | | | | | | | | | | | | |
| Research Paper | | | | | | | | | | | | | |
| Final Report | | | | | | | | | | | | | |
| Progress Presentation-2 | | | | | | | | | | | | | |
| Testing and Fixing issues | | | | | | | | | | | | | |
| Website Assessment and Research Book | | | | | | | | | | | | | |
| Final Report (Soft bound) | | | | | | | | | | | | | |
| Status Document Submission | | | | | | | | | | | | | |
| Final Presentation and Viva | | | | | | | | | | | | | |
| Final Report Submission | | | | | | | | | | | | | |

5. Work Breakdown Structure



6. Gitlab Commits

The screenshot shows the GitLab interface for a project named "2023-224". The sidebar on the left includes links for Project overview, Repository, Issues, Merge Requests, CI / CD, Operations, Analytics, Wiki, Snippets, Settings (which is currently selected), General, Members, and Integrations. The main area displays the "Existing members and groups" section, which lists five members with their access details and expiration dates:

| Member | Access Level | Expiration Date | Action Buttons |
|----------------------------------------------|--------------|-----------------|---------------------------------------|
| Anubama Logaratnam @Anubama.L_IT20068196 | Developer | 2025-12-30 | Remove Edit |
| Dharsan.R_IT20003982 @it20003982DharsanR | Owner | 2023-224 | Remove Edit |
| Hansika Mahaadikara @hansika.m | Guest | 2025-07-01 | Remove Edit |
| Krishanthini.M @Krishanthini.M_IT19980928 | Developer | 2025-12-30 | Remove Edit |
| Sanjeevi Sashikala Chandrasiri @sanjeevichan | Guest | 2025-07-01 | Remove Edit |
| traveena chandrasegar @it20001452 | Developer | 2025-12-30 | Remove Edit |

2023-224

Project overview

- Details
- Activity
- Releases
- Repository
- Issues (0)
- Merge Requests (0)
- CI / CD
- Operations
- Analytics
- Wiki
- Snippets
- Settings
- Collapse sidebar

2023-224 Project ID: 1904

2 Commits 5 Branches 0 Tags 102 KB Files

Project ID: 2023-224 Tem_ID: TMP-23-224

master 2023-224 / + History Find file Web IDE Clone

Update README.md Dharsan.R_IT20003982 authored 6 minutes ago a61a35be

README Auto DevOps enabled Add LICENSE Add CHANGELOG Add CONTRIBUTING Add Kubernetes cluster

| Name | Last commit | Last update |
|-----------|------------------|---------------|
| README.md | Update README.md | 6 minutes ago |

README.md

Topic: The Future of Crime Prevention: Police Case Analysis Using Machine Learning. ID: 2023 - 224

Main Objective: Develop a comprehensive machine learning system that can prevent and solve crimes by analyzing and predicting accident locations, criminal cases, clustering crimes against women and classifying case documents by text analysis. The system aims to enhance public safety by identifying patterns and trends in criminal activities, automating document classification, and providing intersection visualizations to

GitLab Projects Groups More

2023-224

Project overview

- Details
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quickly and consistently discover important classification in crime occurrences? 4.How can clustering crimes against women be used to forecast potential future criminal activities and enhance public safety?

Individual Research Question:

IT20003982: How can machine learning models predict future accident locations and causes for accidents? How effective are machine learning algorithms in identifying connections in accident data that may be difficult for humans to detect?

IT19980928:What is the importance of technology-based methods in predicting future criminal activities based on the nature of the crime? Why Current manual methods of analysis are inefficient and often lead to inaccuracies in investigate cases? How Machine learning algorithm could be used to develop an automated system for analyzing criminal cases?

IT20001452:What are the specific challenges faced by law enforcement agencies and the court system in Sri Lanka regarding the handling of criminal cases? What are the current challenges in the criminal case handling procedure in Sri Lanka, and how do they impact the judicial system? How can an automated text analysis system assist in improving the efficiency and accuracy of the criminal justice system in Sri Lanka?

IT20068196:How can clustering-based crime forecasting models accurately predict future locations and types of crimes against women, and identify high-risk areas for such crimes? What is the problem with current crime forecasting models in regards to crimes against women? How can a clustering-based crime forecasting model contribute to the development of effective crime prevention strategies for crimes against women?

Individual Objectives:

IT20003982: Develop a machine learning system that can analyze and predict accident locations, causes as well as identify connections between police accident cases, in order to inform targeted safety measures and accident prevention strategies.

IT19980928:Criminal case analysis System for Police to predicting future crimes cases through identifying patterns and trends in terms of nature of the crime.

IT20001452:Develop an automated text analysis system that classifies crime occurrences into relevant categories for law enforcement agencies in Sri Lanka which helps to improve the accuracy and quality of criminal investigations.

IT20068196:Develop a model for predicting crimes against women.Provide information on the locations and types of crimes against women. Enable law enforcement agencies to take preventive measures and allocate resources more effectively