

S.No	Problem Statement ID	Problem Statement Name	Domain
24	CT-CWS - 01	New Age Women's safety app	Child / Women Safety

Description:

The **New Age Women Safety App** is designed to automatically sense danger and trigger an SOS alert, even when the user cannot operate their mobile device. Using multimodal data from the mobile device, such as audio, video, images, motion detection, and other sensors, the app identifies potentially dangerous situations and sends alerts to pre-defined emergency contacts or law enforcement with the user's real-time location.

This app serves as a proactive solution to enhance women's safety by leveraging smart technologies to respond to emergencies effectively.

Objectives:

1. Automatic Danger Detection:

- Use data from various mobile sensors (audio, video, motion, etc.) to identify situations where the user is in danger.

2. SOS Alert Triggering:

- Automatically send an SOS alert with the user's real-time location and surrounding data (e.g., audio clip or video).

3. Emergency Communication:

- Notify pre-defined emergency contacts or law enforcement agencies with critical information about the situation.

4. User-Friendly Operation:

- Ensure the app operates even if the user cannot physically interact with their mobile device.

5. Multimodal Safety Features:

- Include options for voice-activated alerts, gesture recognition, or pre-configured motion patterns to trigger alarms.

Expectations:

For Hackathon Participants:

1. Prototype Development:

- Build a basic version of the app that integrates multiple mobile sensors and triggers alerts based on present danger conditions.

2. Sensor Integration:

- Use audio analysis (e.g., detecting screams), video analysis, and motion detection to identify emergencies.

3. Real-Time Location Sharing:

- Implement GPS tracking to share the user's location in real-time with emergency contacts.

4. Data Privacy:

- Ensure the app encrypts sensitive data, like location and multimedia files, to protect user privacy.

5. Simple User Interface:

- Create a user-friendly design to allow easy configuration of contacts and alert triggers.

For End Users and Organizations:

1. Automatic Safety Alerts:

- Provide a reliable mechanism to send alerts in dangerous situations without user intervention.

2. Enhanced Responsiveness:

- Improve response time by sharing real-time location and contextual data with emergency responders.

3. Customization:

- Allow users to set personalized emergency contacts and customize alert triggers (e.g., keywords, gestures).

4. Scalable Use:

- Support a wide variety of devices and environments, ensuring usability across demographics.

Expected Results:

1. Enhanced Safety:

- Enable women to feel safer with an app that proactively monitors and reacts to dangerous situations.

2. Quick Alerts:

- Ensure immediate SOS notifications with accurate location and contextual data for effective assistance.

3. Ease of Use:

- Provide a seamless and intuitive app experience that requires minimal user input.

4. Multimodal Danger Detection:

- Reliably detect emergencies through multiple data points (e.g., sudden falls, suspicious noises, or abnormal movement).

5. Scalable and Reliable:

- Deliver a robust application that works effectively across various mobile platforms and environmental conditions.