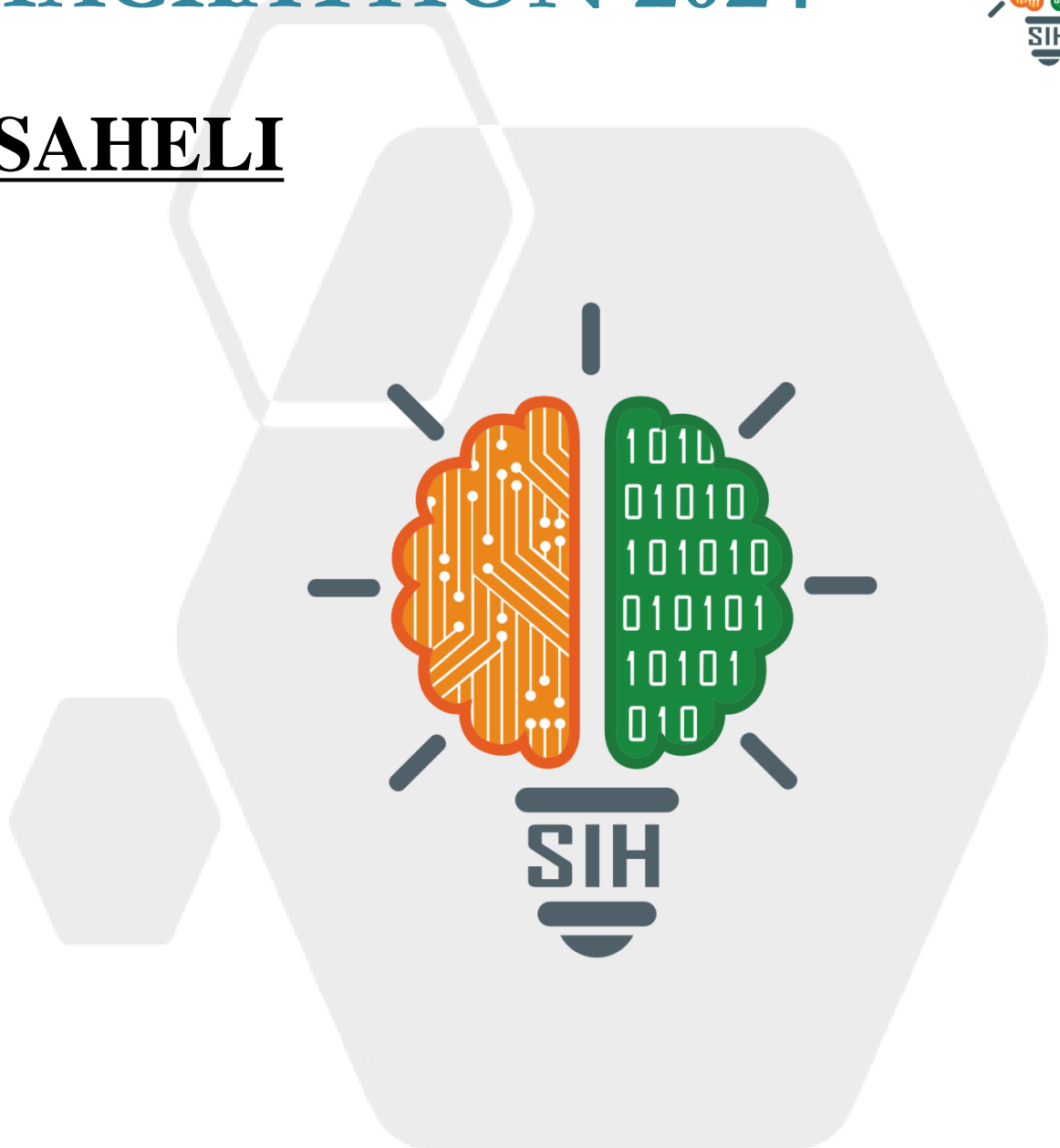


SMART INDIA HACKATHON 2024



SAHELI

- **Problem Statement ID :** SIH1588
- **Problem Statement :** Student Innovation
- **Theme:** Miscellaneous
- **PS Category:** Software
- **Team ID:** 23631
- **Team Name :** Team Achievers



Proposed Solution: A Comprehensive Safety & Support Network

❑ Real-Time Location Sharing

Automatically shares the user's live location with selected contacts and nearby authorities upon detection of the word "help."

❑ Silent SOS Activation

By speaking "help," the app triggers an emergency alert without drawing attention to the attacker. It ensures immediate action.

❑ Proximity-Based Contact Alerts

The top 5 contacts are selected based on proximity, ensuring the fastest response. Fake Shutdown: When attackers attempt to shut down the phone, the app pretends to power off while continuing to operate in the background (location sharing and alerts remain active).

❑ Fake Shutdown

When attackers attempt to shut down the phone, the app pretends to power off while continuing to operate in the background (location sharing and alerts remain active).

❑ Fake Call Feature

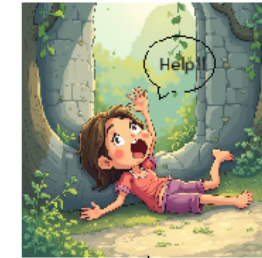
Allows users to simulate a fake incoming call for situations like feeling unsafe in public or during a cab ride. Information such as vehicle number or description is recorded and sent to the authorities if further help is needed.

POLICE DASHBOARD INTEGRATION

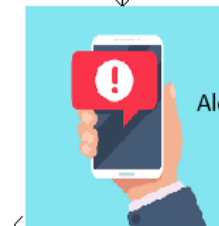
The app sends real-time alerts to the nearest police station, including live coordinates and a detailed incident report.

❑ Crime Zoning

Alerts are visualized in a zone-based map (Red, Yellow, Green zones) to identify high-risk areas and optimize police response.



Help Word Detection



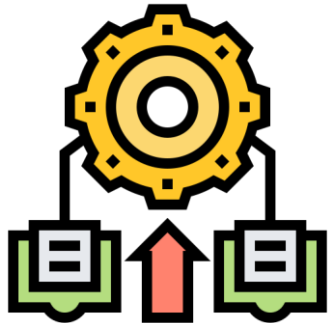
Alert Triggers



Notification and co-ordinates of location sent to nearby people



Alert Message, Co-ordinates of location and IP addresses of nearby people sent to Police Dashboard



TECHNICAL APPROACH

1

Cross-Platform Accessibility

The app will be developed for both Android and iOS platforms to reach a broader user base.

2

Proximity-Based Emergency Contact Alerts

Utilizing geolocation services to rank emergency contacts by their closeness to the victim.

3

Secure Backend Infrastructure

Cloud-based infrastructure ensuring secure data processing, real-time communication, and scalability.

4

Machine Learning Integration

Leveraging machine learning to analyze crime patterns, IP tracking, and identify suspects based on proximity and activity in a given area.

5

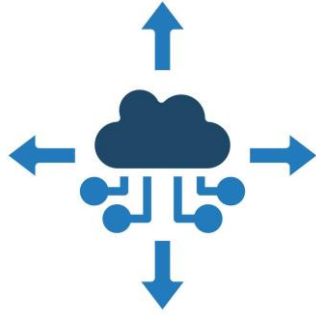
API Integration

Integrating with Google Maps for location tracking, SMS/Call APIs (e.g., Twilio) for contact alerts, and APIs for real-time communication with police dashboards.

6

Real-Time Alerts

Enables police to receive alerts immediately and track live location data. Zone-Based Crime Mapping: Automatically categorizes areas as high, medium, or low risk based on data from alerts, helping authorities focus on crime hotspots



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Battery Efficiency

Location updates are sent at intervals to conserve battery life while ensuring real-time communication.

Fake Shutdown

Simulates phone shutdown to deceive attackers while keeping tracking and alerts operational.

Easy Integration

Can be seamlessly integrated with existing police systems for immediate action.

Efficient Monitoring

The dashboard allows authorities to monitor real-time alerts and crime trends efficiently.

User Privacy & Data Security

Robust encryption of data ensures that only authorized contacts and authorities access the user's location and alert details. Scalable and Cost-Effective: The cloud-based infrastructure ensures scalability for mass use without high operational costs.

IMPACT AND BENEFITS



1

Enhanced Security

Real-time alerts, location sharing, and silent activation provide women with a strong sense of safety in distress situations.

2

Faster Response Times

Saheli's real-time alert system ensures immediate action from emergency contacts and nearby authorities, minimizing risks.

3

Crime Prevention Through Data

By analyzing the alert data, police can focus on high-risk zones, preventing future incidents.

4

Proactive Police Response

The Police Dashboard enables authorities to act in real-time, providing faster and more coordinated responses.



RESEARCH AND REFERENCES



Title	Link
<p><u>Rising Crimes Against Women (NCRB 2023):</u>Over 400,000 cases reported in 2023, primarily harassment and assault. Many remain unreported due to fear and access issues.</p> <p>Saheli Solution: Voice-activated SOS ensures immediate help without manual operation</p>	Source: NCRB - Crimes Against Women
<p><u>Global Violence Against Women (WHO):</u>1 in 3 women face physical/sexual violence, often without witnesses. Discreet emergency tools are crucial.</p> <p>Saheli Solution: Silent SOS and fake shutdown features protect users discreetly while sending alerts.</p>	Source: WHO - Violence Against Women
<p><u>Smart Policing Initiatives:</u> Real-time data reduces crime response times by 35%. Crime mapping lowers incidents by 20% in targeted areas.</p> <p>Saheli Solution: Police Dashboard provides real-time alerts and crime trend analysis.</p>	Source: Smart Policing Initiatives – Crime Mapping
<p><u>Proximity-Based Response (Harvard Initiative):</u> Proximity alerts improve timely assistance, ensuring help comes from nearby contacts.</p> <p>Saheli Solution: Proximity-based SOS prioritizes alerts to nearby contacts.</p>	Source: Harvard Humanitarian Initiative - Crisis Management
<p><u>Competitor Analysis:</u> Existing apps lack voice activation and advanced features, relying on manual activation.</p> <p>Saheli Advantage: Integrates voice recognition, fake shutdowns, and a police dashboard for real-time action.</p>	Source: I am Safe Application