**Creating a Safer Delhi for Women: Strengthening Law and Order for Inclusive Urban Safety**

**Introducing: Safe Sakhi**

The "Safe Sakhi" app is a comprehensive women's safety solution that prioritizes user authentication, security, and community engagement. With Aadhaar-based authentication, Safe Sakhi ensures verified user identification, preventing misuse and establishing trust. Users can customize emergency gestures or voice commands to trigger SOS services. The app takes permission for camera, mic and location services from the user. As soon as the user turns on the app, the location turns on automatically. If the app is running in background then also the location will be on. The app automatically shares location with emergency contacts, Delhi Police (nearest police station), and nearest app users, while also activating flashlight, loud voice alerts announcing police arrival, and silent audio/video recording. A safety map and anonymous crowdsourced reporting features enable users to flag unsafe locations and share incidents. Additional safety measures include automatically storing the data on the app's secure cloud, and a password-protected SOS deactivation system to safeguard against criminal tampering. The gamification safety initiative ensures that the user earns points for proactive participation, redeemable for vouchers and discounts. Collaborations with NGOs provide immediate assistance, post-incident therapy, and legal support, ensuring holistic care. Advanced features like flagging a trigger as 'mistake' ensures proper reporting to the police. With AI-powered persona assistance, users receive personalized guidance and awareness, conversational support through training it on safety laws, advanced analytics, and local data.

**Aadhaar-based Authentication:**
Ensures verified user identity, reducing the chances of fake alerts or misuse of the app. Every emergency report includes Aadhaar details for authenticity and accountability, allowing strict action against false reports.

**Camera, Mic, and Location Access:**
Permissions are requested upon installation to enable seamless functionality.

**Automatic Location Tracking:**
The app keeps the user's location on even when running in the background, ensuring real-time tracking during emergencies.

**Customizable Emergency Triggers:**
Users can set unique gestures like "tapping the back of the phone three times" or voice commands like "help" to activate emergency services.

**Safety Map (flagged locations) :**
Displays unsafe areas based on data from police reports, user experiences, and public information.

**Crowdsourced Reporting:**
Enables users to share incidents, safety tips, and real-time updates anonymously or as individuals. This creates a community-driven knowledge base for safety awareness by sharing user-reported methods criminals use, providing information on how to detect threats and handle emergencies, ensuring women stay informed and cautious.

**Immediate Actions Upon SOS Activation:**

- **Flashlight Activation**: Turns on to attract attention.
- **Loud Deterrent Sound**: Plays messages like "Delhi Police on their way" to deter attackers.
- **Silent Audio and Video Recording**: Begins recording discreetly, saving the data to both the user's device and a secure cloud server.
- **Location Sharing**: Sends live location to emergency contacts, the nearest police stations, and nearby Safe Sakhi users.
- **Trusted Members Notification:** Emergency alerts and live recordings are shared with the user's trusted contacts for faster help.
- **Secure SOS Deactivation:** Requires the app password to stop the SOS. Prevents criminals from tampering with the system.

**Post-Accidental Activation Handling:**

- **Mistake Flagging:** Users can flag accidental SOS triggers as a mistake after entering their app password. However,all recordings and data remain stored for police investigation if needed.

**Cloud Backup for Evidence Preservation:**

- **Data Security:** All audio and video recordings are securely stored on the app's cloud, even if deleted from the user's device. This ensures critical evidence is available during investigations.

**AI Persona Agent:** Acts as an interactive guide, providing real-time advice on safety laws, emergency protocols, and flagged areas. It's trained on legal, safety, and analytics data for accurate and personalized assistance.

**Collaboration with NGOs**

- **Emergency and Post-Incident Support:** Partnered NGOs receive emergency alerts to assist victims and offer therapy, legal aid, and other support. NGOs also get visibility and access to a wider audience through the app.Volunteer Network

**Local Volunteers:** Users can volunteer to be present in flagged areas, providing immediate on-ground support. Volunteers are also alerted during emergencies in their vicinity. For example: Victim is 200m away from the nearest police station and 500m away from you.

**Choice of theme and rationale:** Our selected theme is "Creating a Safer Delhi for Women: Strengthening Law and Order for Inclusive Urban Safety." The chosen theme focuses on leveraging advanced technology and fostering community participation to enhance women's safety. It addresses critical gaps in existing systems by integrating Aadhaar-based verification, real-time SOS features, AI-driven safety tools, and crowdsourced incident reporting and many more. As a team of 4 college girls and engineering students who commute through the metro on a daily basis, we have personally experienced and witnessed various safety concerns, motivating us to develop innovative technological solutions to address these issues and create a safer, more inclusive urban environment for women.

**Current State of Affairs:** Delhi, like many other cities, faces significant challenges in ensuring women's safety.Current systems, such as women's helplines, apps like Himmat, Bharatiya Nyaya Sanhita 2023, the Women's Helpline (181),CCTV networks under the Safe City Project, and initiatives like the "Eyes and Ears" scheme, have improved awareness and response mechanisms. However, challenges like delayed responses, underutilization of technology, lack of integration among systems, and insufficient community engagement hinder their effectiveness. 'Safe Sakhi' seeks to address these gaps by integrating advanced technologies like AI, Aadhaar-based authentication, and real-time location services with community-driven solutions. It complements existing policies, such as the Sexual Harassment at Workplace Act and the Nirbhaya Fund-backed initiatives, by introducing an interactive and secure platform. Features such as live SOS alerts, AI persona assistants, crowdsourced safety mapping, and collaborations with NGOs focus on root causes while offering immediate safety solutions.

**Tailored Use Cases : •Real-Time SOS Alerts with Aadhaar-Based Authentication**

Use Case: A woman in distress triggers the SOS using a predefined gesture (e.g., tapping her phone thrice). The app immediately sends live video and audio recordings, location data, and her Aadhaar-verified details to Delhi Police and emergency contacts.
Technology Integration: Builds on existing SOS systems like Himmat by adding Aadhaar authentication, ensuring credibility and reducing false alarms.

**•Crowdsourced Safety Mapping:** Use Case: Users report unsafe areas or incidents anonymously or with their profile. These reports are aggregated with data from Delhi Police, creating a dynamic safety map highlighting flagged areas.
Technology Integration: Enhances the Safe City Project by providing community-driven, real-time safety updates.

**•AI-Powered Conversational Assistant:** Use Case: Users access a conversational AI assistant for advice on legal rights, self-defense tips, or immediate emergency steps based on their location and situation.
Technology Integration: Augments existing helpline services by offering instant, personalized assistance available 24/7.

**•NGO Collaboration for Post-Incident Support:** Use Case: Victims are connected with NGOs for counseling, legal aid, and rehabilitation through the app's post-incident workflow.Technology Integration: Complements existing policies like the Sexual Harassment at Workplace Act by providing access to NGO services seamlessly.

**•Community Engagement and Gamification**: Use Case: Users earn points for contributing safety reports, volunteering, or participating in awareness campaigns, redeemable for discounts and vouchers. Technology Integration: Builds on the Eyes and Ears scheme by encouraging active participation through incentives.

**•Dynamic Flagging of Public Transport:** Use Case: Public transport routes are rated for safety based on user feedback, incidents, and police reports, creating a trust index. Technology Integration: Builds on the Nirbhaya Fund-backed GPS tracking in public transport, providing a transparent safety metric.

**Feasibility:**

The proposed solutions for Safe Sakhi are both practical and impactful because they leverage existing infrastructure, such as Aadhaar, CCTV, and GPS, ensuring seamless integration with current systems like the Safe City Project and Himmat App. This can be easily accessible through mobile phones. Everyone has a mobile phone. 'Safe Sakhi' can be accessed in multiple languages removing the language barrier. It enhances efficiency by using AI for real-time alerts, safety mapping, and proactive monitoring, while gamification and community participation incentivize user engagement. By incorporating cloud backups, NGO collaborations, and dynamic safety features, the app addresses immediate, preventive, and post-incident needs, ensuring a holistic, scalable approach to women's safety in Delhi and even in other cities.

**Risks:**

**•Data Privacy & Security Risk:** Breach of personal data or misuse of sensitive information. Mitigation: Implement strong encryption for data storage and transfer, follow strict privacy policies, and use two-factor authentication.

**•False Alarm Risk:** Accidental activation of SOS causing unnecessary alarms. Mitigation: Use Aadhaar authentication for validation, set a time delay before SOS can be turned off, and require a password to cancel an alert. Implement a reporting feature for false alarms to improve accountability.

**•Technology Reliability:** Dependence on AI and cloud services could lead to technical failures, impacting the app's reliability.Mitigation: Regularly test app features, maintain backup systems, and offer an offline mode for basic functionality.

**•User Adoption and Engagement:** Lack of engagement from users could limit the app's effectiveness. Mitigation:Integrate gamification to motivate participation and spread awareness through marketing via NGOs.

Emergency Response Delays Risk: Delays in response from authorities due to technical issues. Mitigation: Ensure regular updates