ID: SDI005
Creating a Safer Delhi for Women: Strengthening Law and Order for Inclusive Urban Safety

Team Name: **Shield for She**

Team Members

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Choice of Theme:

- The theme addresses the urgent need for enhancing women’s safety in Delhi by leveraging modern technologies such as Artificial Intelligence (AI) and Machine Learning (ML). Ensuring safe, inclusive urban spaces is critical to achieving gender equity and aligns with UN Sustainable Development Goal 11: Sustainable Cities and Communities.

Current State of Affairs:

- Delhi has implemented initiatives such as AI-enabled CCTV surveillance and safety apps like Himmat Plus, yet gaps persist in proactive crime prevention, response times, and public awareness. While policies like the Safe City Project provide a foundation, they require advanced technological interventions like real-time threat detection and predictive analytics to create meaningful impact.

Solutions:

Our one-stop AI- and ML-powered platform is designed to enhance women’s safety through the following features:

1. **Real-Time Crime Detection:**
   - Integration of AI-enabled CCTV systems that use computer vision and ML algorithms to analyze live video feeds for detecting suspicious activities, such as harassment or unauthorized intrusions.
   - Gesture and behavior recognition systems trained to identify distress signals and report incidents in real time to authorities.
2. **Safety Zone Classification Using ML:**
   - Classification of public spaces into Red (unsafe), Yellow (moderately safe), and Green (safe) zones based on historical crime data, real-time feedback, and crowd-sourced inputs.
   - Predictive ML models identify potential hotspots for crimes based on trends and patterns.
3. **Street Lighting Optimization:**
   - IoT-enabled smart lighting systems connected to the platform provide real-time updates on lighting conditions.
   - ML-based prioritization of poorly lit areas for urgent repair based on safety zone classifications and user feedback.
4. **SheRide:**
   - A transport feature offering bike taxi services for women by women, integrated with safety protocols such as GPS tracking, panic buttons, and automated route alerts to nearby police stations.
   - Personalized safety recommendations using AI for route optimization based on safety zone data.
5. **Comprehensive Crime Reporting and Emergency Assistance:**
   - One-tap reporting of crimes integrated with NLP-based chatbots for instant communication in multiple languages.
   - AI-powered predictive analytics to optimize resource allocation for emergency responses.

Feasibility

Our solutions leverage Delhi’s existing smart city infrastructure while introducing advanced AI and ML tools to enhance effectiveness. With the city's ongoing focus on safety initiatives, the platform’s features align seamlessly with current policies and interventions. The use of crowd-sourced feedback and scalable ML models ensures that the solutions remain adaptive and cost-effective.

Risks and Mitigation:

1. **Data Privacy and Security Risks:**
   - Mitigation: Use end-to-end encryption, anonymized data handling, and compliance with data protection laws.
2. **Algorithmic Bias in AI/ML Models:**
   - Mitigation: Regular audits and diverse training datasets to ensure fairness and reduce biases.

Feasibility

3.Technical Failures:

- **Mitigation:** Ensure robust system testing, redundancy mechanisms, and 24/7 technical support.

4.Resistance to Adoption:

- **Mitigation:** Conduct awareness campaigns, offer user-friendly interfaces, and provide multilingual support.

5.Funding Challenges:

- **Mitigation:** Leverage public-private partnerships and government funding under the Safe City Project.

Conclusion:

By integrating AI, ML, and IoT technologies with existing systems, our platform addresses women's safety in a proactive, data-driven manner. These scalable and replicable solutions will not only transform Delhi into a safer city but also serve as a model for other urban centers across India.

One Stop - Software Solution Preview