**CS639FinalApp : Team 10**

This is the Final Project of Mobile Application Development (CS639) Guided by Prof. Dr. Christelle Scharff

**Application Name : SafeResidence**

Team Members : 1) Sarjakkumar Kothiya,

2) Jalak Gevariya

**OverView:**

The SafeResidence app aims to enhance community safety by providing practical solutions through real-time information updates on nearby events.

**Goal (Problem that we gonna Solve):**

The main goal of the SafeResidence app is to help users stay aware of emergencies. It sends immediate alerts about incidents such as fires, accidents, crimes, and other emergencies happening nearby. The app aims to keep users informed and prepared so they can respond effectively when needed.

**Features:**

1) Live Alerts: Receive instant notifications about nearby incidents such as fires, accidents, crimes, and emergencies.

2) Verified Information Sources: Enhance credibility by verifying incident reports and shared information.

4) Direct Communication with Authorities: Improve response times by communicating directly with local law enforcement or emergency services.

5) Public Transit Integration: Stay informed with real-time public transit updates to plan safer routes, particularly during emergencies.

6) Safety Map: Visualize recent incidents and their locations on a map to stay informed about potential risks in specific areas.

7) Localized Safety Recommendations: Receive personalized safety advice based on your location and incident types.

8) Personal Safety Features: Access panic buttons or discreet distress signals for enhanced user safety.

9) Community Engagement: Share safety and security updates to foster community involvement.

10) Live Video: Access live video feeds from incidents for real-time visual information.

11) Education and Training Resources: Access safety education materials and emergency preparedness resources to empower proactive risk management.

**Targeting Users:**

Every resident such as Parents, Commuters and Travelers, Business Owners and Employees, Students and Campus Communities, and Local Authorities and Law Enforcement

**Uniqueness:**

In the market, there are existing solutions that suffer from numerous bugs and problems. Our goal is to address every potential issue that exists. Here are some unique features of our project designed to achieve this:

1) Public Transit Integration: Stay informed with real-time public transit updates to plan safer routes, particularly during emergencies.

2) Safety Map: Visualize recent incidents and their locations on a map to stay informed about potential risks in specific areas.

3) Personal Safety Features: Access panic buttons or discreet distress signals for enhanced user safety.

4) Education and Training Resources: Access safety education materials and emergency preparedness resources to empower proactive risk management.

5) Chatbox: people can chat in real time and can provide solutions for the particular event.

**Technologies/Frameworks:**

Currently, we have decided to use the following technologies and frameworks to build our project. However, some of these choices may change as we progress with the development of our project.  
  
1) App Development:

Programming Language: Kotlin.

IDE :Android Studio

2) RESTful API : App backend using frameworks like Node.js (Express.js) or Python (Flask/Django).

3) Real-Time Location Tracking:

Google Play Services Location API: Integrate Google Play Services Location API to access device location. This API provides convenient methods for retrieving user location updates.

4) Push Notifications:

Firebase Cloud Messaging (FCM): Implement FCM to send push notifications to your app users.

5) Maps and Location Services:

Google Maps Android API: Integrate Google Maps SDK to display maps and visualize incident locations.