**Prototype Document for Safety Alert Mobile Application**

**Project Code:** SHK24003

**1. purpose of app:**

The primary purpose of this mobile application prototype is to provide users with a quick and discreet way to notify relevant authorities or organization members in situations where they feel unsafe or are being abused. By using simple gestures, users can activate the app to alert the appropriate parties and receive guidance or assistance.

**2. Target Audience:**

The target audience for this app includes:

* **Employees of Organizations:** Individuals who may face abuse or unsafe situations at their workplace.
* **Travelers:** People who might encounter unsafe situations while commuting or traveling.
* **General Public:** Anyone who needs a quick way to alert authorities or loved ones during emergencies.

The app will be designed with a user-friendly interface that caters to a broad demographic, ensuring ease of use for individuals of all ages and tech-savviness.

**3. Functionalities:**

The prototype focuses on the following core functionalities:

* **Gesture-Based Activation:** Users can tap or use specific gestures to activate the app.
* **Notification and Alerts:** The app sends notifications about potential hazards and provides live streaming voice notes.
* **Emergency Contact:** Automatically contacts nearby police stations, organization members, or other relevant authorities based on the situation.
* **Self-Defense Tutorials:** Provides quick access to self-defense tutorials.
* **User Experience Logging:** Allows users to log their experiences, which can be used to provide tailored notifications or guidance.

**4.Tools Used:**

The prototype will be developed using digital mockup tools like Figma for UI design and basic interactive prototyping. The back-end logic will be simulated using a simple database structure that mimics data flow and integration.

Framework: React.js

Tools: Visual studio code

Backend: MongoDB

**5. After Deployment:**

Initial feedback will be gathered from potential users, including organization members and safety experts. Based on their input, the prototype will be refined to ensure it meets user needs and adheres to safety protocols.

**6. Focus on User Experience:**

The app will prioritize:

* **Usability:** Ensuring the app is intuitive with minimal steps to activate in an emergency.
* **Accessibility:** Making the app accessible to users with different abilities.
* **User Guidance:** Providing clear instructions and feedback to users during emergencies.

**7. Testing the Scenarios:**

Test scenarios will include:

* **Workplace Emergency:** Simulating a situation where an employee feels unsafe at work.
* **Travel Incident:** Testing how the app handles an unsafe situation during travel, including location tracking and notifying nearby authorities.
* **General Emergency:** Evaluating the app’s performance in different types of emergencies, such as public harassment.

**8. Documentation:**

Documentation will include:

* **Design Decisions:** Explanation of why certain features and design elements were chosen.
* **Assumptions:** Assumptions made about user behaviour and emergency scenarios.
* **Rationale:** The reasoning behind the app’s workflow and user interface.

This documentation will be shared with stakeholders to ensure everyone has a clear understanding of the prototype’s goals and limitations.

**9. Manage Expectations:**

It will be clearly communicated that this is a prototype with limited functionality. The app currently focuses on core features like gesture-based alerts and notifications. Further development will be needed to implement additional features, improve scalability, and ensure robustness.

**10. Deployment:**

After testing, the next steps will include:

* **Feedback Collection:** Gather more detailed feedback from a wider audience.
* **Refinement:** Make necessary changes to the prototype based on feedback.
* **Validation:** Ensure the prototype meets safety standards and user expectations.
* **Full-Scale Development:** Plan for the development of a full-scale application, including additional features, security measures, and integration with real-world emergency services.