SMART INDIA HACKATHON 2024

TITLE PAGE

- **Problem Statement ID – 1587**
- **Problem Statement Title- Student Innovation**
- **Theme - Disaster Management**
- **PS Category- Software**
- **Team ID- Inception**
- **Team Name (Registered on portal) - Inception**

Inception

IDEA TITLE

SMART INDIA HACKATHON 2024

- **Proposed Solution:** The solution is an app that provides weather forecasts, disaster alerts, and emergency assistance features. Users can request help by sharing their location with nearby police stations during a disaster, and the app facilitates post-disaster volunteering and donations to affected individuals.

- **Addressing the Problem:** It provides real-time alerts, ensures quick response through location-sharing, and supports recovery efforts with donations and volunteers.

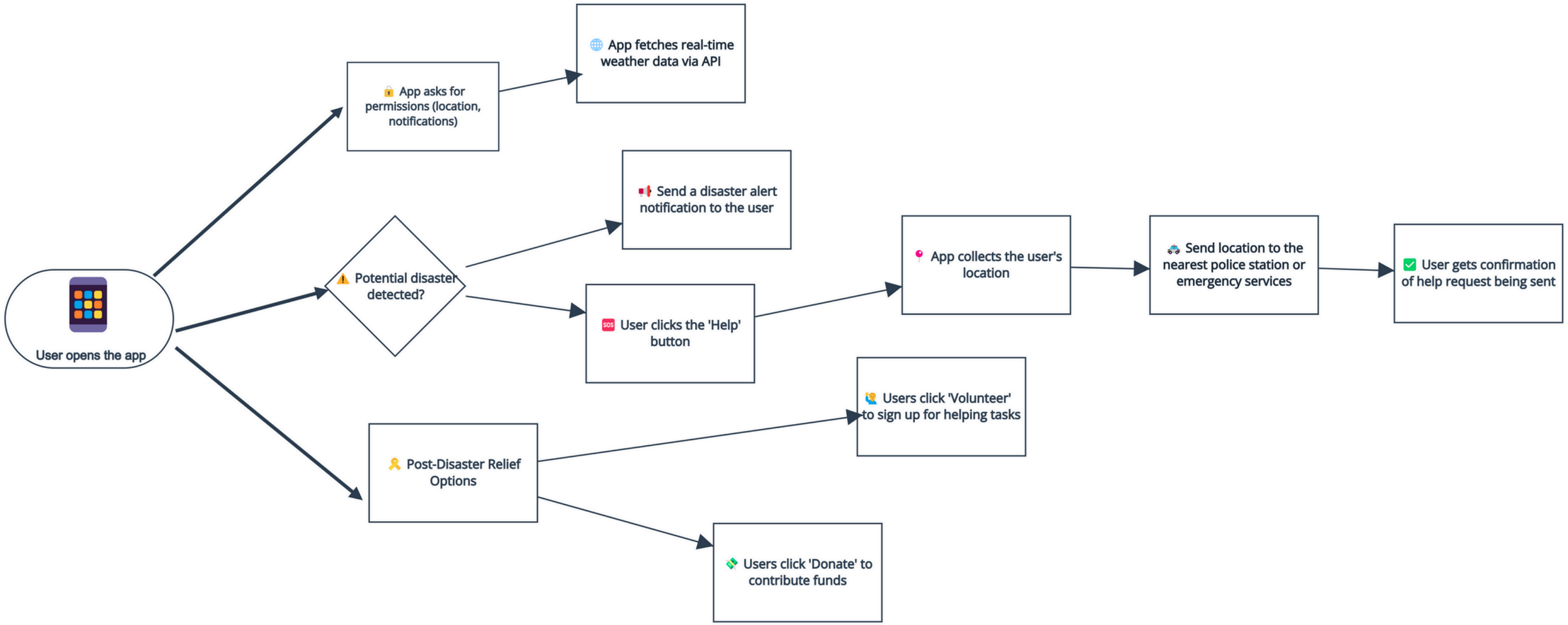
- **Innovation and Uniqueness:** Our idea merges real-time alerts, location-based assistance, and post-disaster support in a single app for seamless disaster management.

Inception

TECHNICAL APPROACH

SMART INDIA HACKATHON 2024

Technoogies used : Mobile app development (Android/iOS/Flutter), geolocation (Google Maps API), cloud services, disaster APIs .



Inception

FEASIBILITY AND VIABILITY

SMART INDIA HACKATHON 2024

- **Methodology:** Collect user requirements, design a user-friendly interface, develop iteratively using Agile, conduct real-world testing, and deploy scalable cloud-based services.
- **Feasibility:** Technically feasible using current geolocation and cloud services, but challenges include ensuring system reliability during high traffic and maintaining user data privacy.
- **Challenges:** Handling system overload during disasters, ensuring data privacy for location-sharing, and preventing delayed responses in low-connectivity areas.
- **Strategies:** Implement autoscaling on cloud infrastructure, secure data with encryption, and include offline features to minimize delays in remote areas.

Inception

IMPACT AND BENEFITS

SMART INDIA HACKATHON 2024

- **Impact:** Improves community resilience by providing real-time alerts and location-based assistance. Minimizes economic losses by enabling faster responses and efficient resource distribution. Promotes environmental recovery by coordinating volunteers and donations post-disaster.

- **Benefits:** Reduces response time during emergencies, ensuring quicker aid to those in need. Optimizes resource allocation through real-time geolocation and coordination with local authorities. Supports recovery efforts by connecting affected individuals with donations and volunteer networks.

Inception

RESEARCH AND REFERENCES

SMART INDIA HACKATHON 2024

- Firebase Cloud Messaging (FCM): A robust solution for sending notifications and alerts across platforms in real-time, essential for disaster alerts.

- Google Maps API for precise geolocation and location-sharing features.