

- **PROBLEM STATEMENT ID : OPEN INNOVATION - WOMEN SAFETY**
- **TEAM NAME : MINDMESH**
- **TEAM ID : HK-043**
- **TEAM MEMBERS :**
 - NAYSHA KAMBOJ**
 - KANANREET KAUR**
 - KALPANA SHARMA**
 - SHIVI SAXENA**



HACK KRMU 5.0

PROBLEM & SOLUTION

Women often feel unsafe while:

- 1.traveling alone (especially at night)**
- 2.using public transport**
- 3.walking in isolated areas**
- 4.being in emergency situations**

Current issues:

- 1. No quick way to alert trusted contacts instantly**
- 2.Delays in sharing live location**
- 3. No automatic alert if user is unable to respond**
- 4.Lack of easy incident reporting system**



HerShield



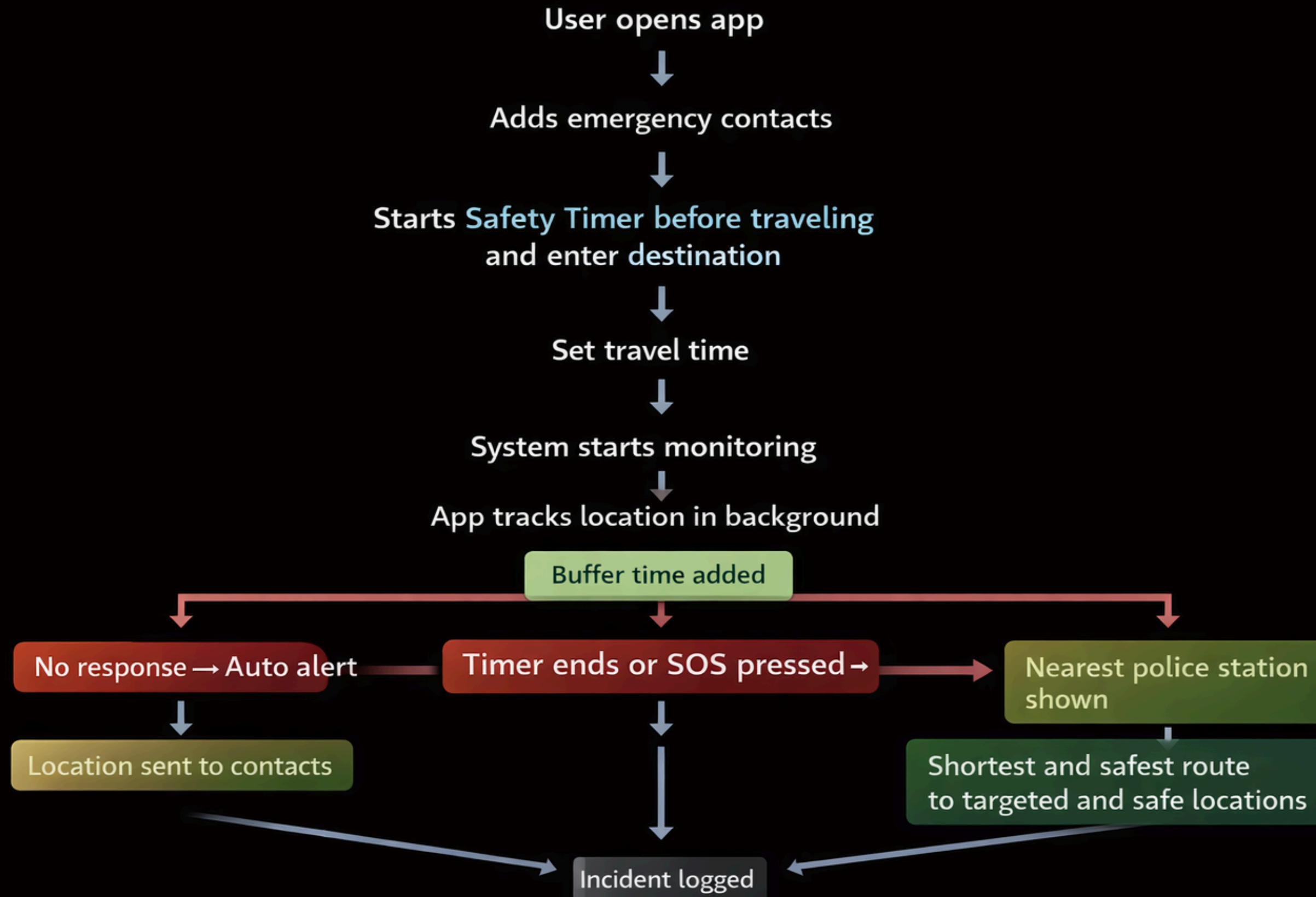
PROBLEM & SOLUTION

Solutions-

- 1. safety timer**
- 2. constant notification about nearest police stations**
- 3. (crime zone and safe zones)safest and shortest route**
- 4. Because emergencies don't always give you time to press SOS.**



FLOW OF SOLUTION



TECH STACK & APPROACH

Frontend

HTML – Structure of web pages

CSS – Styling and responsive design

JavaScript –

Safety Timer logic

Geolocation API integration

Dynamic alerts & notifications

Backend–

Python (Flask Framework)

Handles SOS requests

Manages API routes

Processes timer expiration logic

Connects frontend with database





HACK KRMU 5.0

UNIQUENESS & INNOVATION FACTOR

1. More Than Just an SOS Button

Most existing solutions only provide manual emergency calling.

Our system focuses on proactive safety, reducing panic and dependency on quick human reaction.

2. Safety Timer – Predictive Protection

Users can set a safety time window.

If they fail to check in, SOS is triggered automatically.

Why it's innovative:

It sends help even when the user cannot react.

3. Live Nearest Police Station Tracking

Our app continuously shows the closest police station and fastest route, so users don't waste time searching during emergencies.

Why it's innovative:

Instant awareness = faster response.

UNIQUENESS & INNOVATION FACTOR

4. Safest Route Navigation

**Instead of only suggesting the shortest path, our system suggests the safest route, prioritizing:
main roads**

police proximity

Why it's innovative:

Navigation based on safety, not just distance.

5. Proactive Safety System

Our platform builds a complete safety ecosystem that focuses on:

Prevention → Prediction → Protection

FEASIBILITY & CHALLENGES

Feasibility

- **Google Maps integration via Google Maps Platform (Distance Matrix + Geolocation)**
- **Nearest police stations via Google Places API**
- **Tech Stack: HTML, CSS, JavaScript, Python, MySQL**
- **Free API tier sufficient for hackathon prototype**
- **No extra hardware required (works on smartphones)**



FEASIBILITY & CHALLENGES

Key Challenges

- **Dynamic Traffic Variation** → Inaccurate ETA may cause false alerts
- **Continuous GPS Usage** → Battery drain & permission issues
- **Internet Dependency** → App won't function offline
- **API Rate Limits & Key Security Risks**
- **User Privacy Concerns** → Sensitive location data handling
- **False Emergency Trigger** → User forgets to stop timer



RESEARCH & REFERENCE

Problem Research

- **Crimes against women remain a serious concern.**
- **Most apps only provide manual SOS.**
- **In emergencies, users may not get time to press SOS.**
- **Lack of awareness about safe routes & nearby police stations.**

References Used

- **Government crime statistics reports**
- **Publicly available police station location data**
- **Research on women safety mobile applications**
- **Navigation and mapping safety studies**