

## PYEXPO'25





Team name : NeoNexus

Team ID : T003

## **Problem statement:**

Tourists, especially families traveling with children, often face challenges ensuring their safety while exploring new destinations. Parents worry about losing sight of their children in crowded places, and finding them quickly can be difficult. Additionally, tourists struggle with planning their itinerary efficiently, discovering hidden or less crowded attractions, and overcoming language barriers when navigating unfamiliar locations.

## **Proposed solution:**

1. Child Safety & Tracking System

**Technology:** IoT (ESP32, NEO-6M GPS), Django, OpenStreetMap.

Real-time Child Location Tracking: Parents can track their child's live location via a GPS-enabled IoT device.

**Geofencing Alerts**: If a child moves beyond a predefined boundary, parents receive instant alerts via a mobile app/website.

Manual Location Request: Parents can trigger a forced location request if needed.

**Dynamic Boundary Feature:** When traveling, the safe zone can adjust based on the parent's real-time location. **Route Guidance:** If a child moves away, the system provides a **navigation route to reach them** quickly.

- 2. Hidden Spot Recommendation System: Recommends hidden gems based on tourist preferences, location, and interests.
- **3. Intelligent Itinerary Planner :** Plans an **efficient itinerary** based on distance, travel time, and user preferences.

## **Project outcome:**

The project reduces the risk of losing a child in crowded places. It gives parents peace of mind during travel. It provides quick navigation to locate the child if they wander off. It encourages exploration of unique spots beyond mainstream attractions. It enhances the overall travel experience by offering tailored recommendations. Itinerary Planning ensures smooth and efficient travel.



Github Link

