

- **Problem Statement ID SIH25137**
- Problem Statement Title Student Innovation: Swadeshi for

**Atmanirbhar Bharat -Travel & Tourism** 

- Theme Travel & Tourism
- PS Category- Software
- Team ID 91583
- Team Name MABUZ





### PROPOSED SOLUTION



### **Challenges**

- Overcrowding at tourist & pilgrimage sites
- >Frequent safety and emergency risks
- Poor navigation and planning tools
- No offline access in remote areas

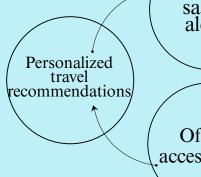




#### **Proposed Solution**

AI-based trip planning Predict crowd density Provide offline maps & guides Emergency alert system

# **Value Proposition**



Real-time safety alerts

Offline accessibility



Support local

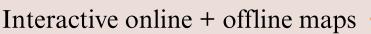
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### **Key Features**

Real-time notifications & alerts



Quick incident reporting system

Downloadable regional travel data

Personalized AI recommendations









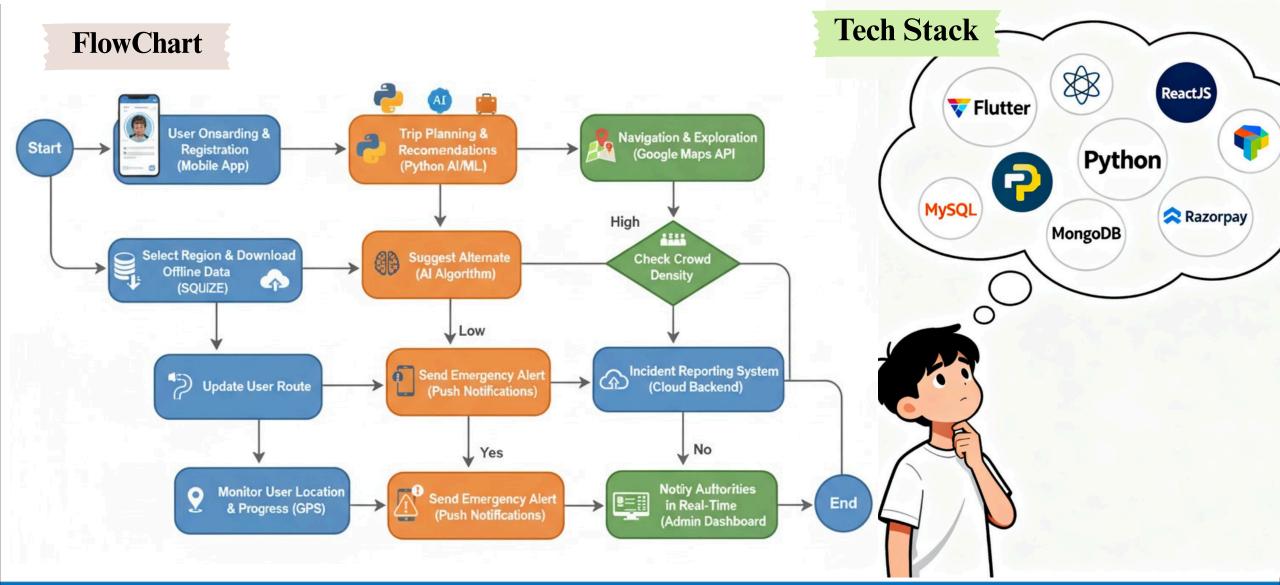






### TECHNICAL APPROACH







# FEASIBILITY AND VIABILITY





**1. Sign Up:** Easy to implement using mobile frameworks like Flutter/React Native



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2. Offline Data Access: SQLize integration allows smooth offline usage



**3. AI Trip Recomendations:** ML models can integrated with Python back-end



**4. Real-Time Navigation:** Google Maps API provides easy location tracking



**5. Crowd Density Monitoring:** Sensor or API API integration is technically acchievable



User Retention: Smooth registration increase app adoption and long-term usage.



Reliability: Offline data ensures usabilly even in low-network areas



3. User Engagement:
Personalized AI suggestions enhance satisfaction and interaction



 Trust & Convenience: Real-time navigation reduce errors and improves user confidence



 Safety & Experience: Crowd monitoring safety and enhances enancss user experience



## **IMPACT AND BENEFITS**









: Guides tourists in real-rime to avoid congested areas

# **Impacts**



: Enables quick response during incidents or hazards

#### Environmental Sustainability

: Reduces pollution and strain on facilities by controling visitor flow

### **Benefits**



#### **Operational Efficiency**

Minimimzs management and coordination efforts



#### **Enhanced Tourist Experience**

Personalized recommendations improve satisfaction



#### Scalability

Easily applicable to multiple sites or regions



#### **Data-Drived Decisions** ::::

Real-time analytics help authorities plan better intervetions.





## RESEARCH AND REFERENCES



TravelAgent: An AI Assistant for Personalized Travel Planning – **ArXiv** 

Sentiment Analysis in Tourism: Capitalizing on Big Data – **ScienceDirect** 

Using Sentiment Analysis in Tourism Research: A Systematic Review – Research Paper





Artificial Intelligence as a Catalyst for Sustainable Tourism – ScienceDirect

Travel Recommendation Systems:
Intelligent vs Traditional Approaches –
EasyChair

AI-Driven Innovations for Sustainable Tourism Development and Customer Engagement – **ResearchGate**