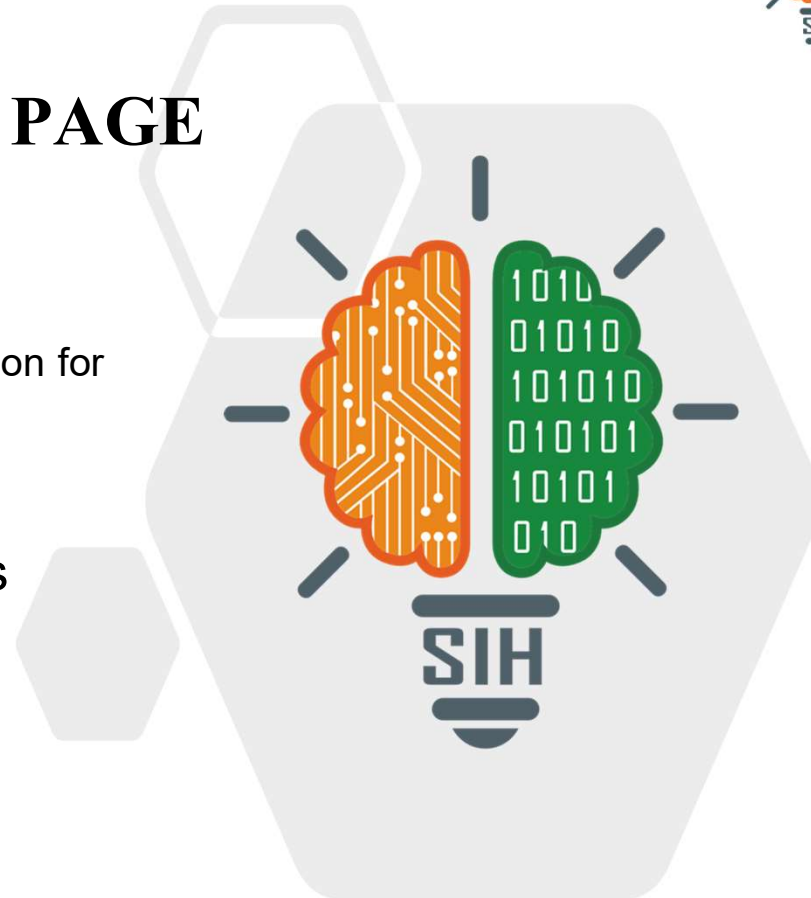


SMART INDIA HACKATHON 2024



TITLE PAGE

- **Problem Statement ID** –SIH1710
- **Problem Statement Title**- Enhancing Navigation for Railway Station Facilities and Locations
- **Theme**- Transportation and logistics
- **PS Category**- Software
- **Team ID**- 3477
- **Team Name**- Bugz Bunnies



LOCO YATRA



Proposed Solution

- AR Navigation:** Provides augmented reality navigation within railway stations.
- Quickest Route:** Calculates and displays the fastest route to points of interest and train platforms.
- Dynamic Updates:** Accounts for train delays and updates estimated times.
- Audio Assistance:** Offers audio guidance for visually impaired and disabled users.
- Safety Reporting:** Includes a feature for reporting suspicious activity within the station.
- Call A Coolie:** Allows users to call a porter service with stable pricing and fair opportunities for all porters.
- Disability Services:** Facilitates access to wheelchairs and assistance for visually impaired individuals.

Bugz
bunnies

TECHNICAL APPROACH

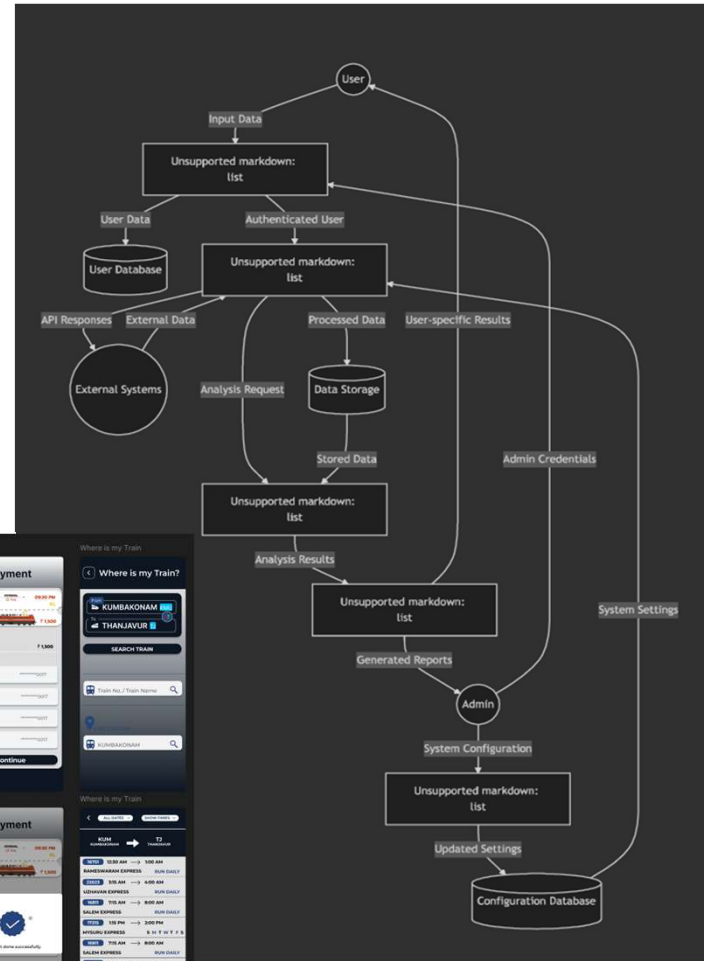


Frameworks / DBMS:

- ARKit (iOS)
- ARCore (Android)
- Vuforia
- KTOR (Kotlin framework)
- Firebase
- Android Maps SDK

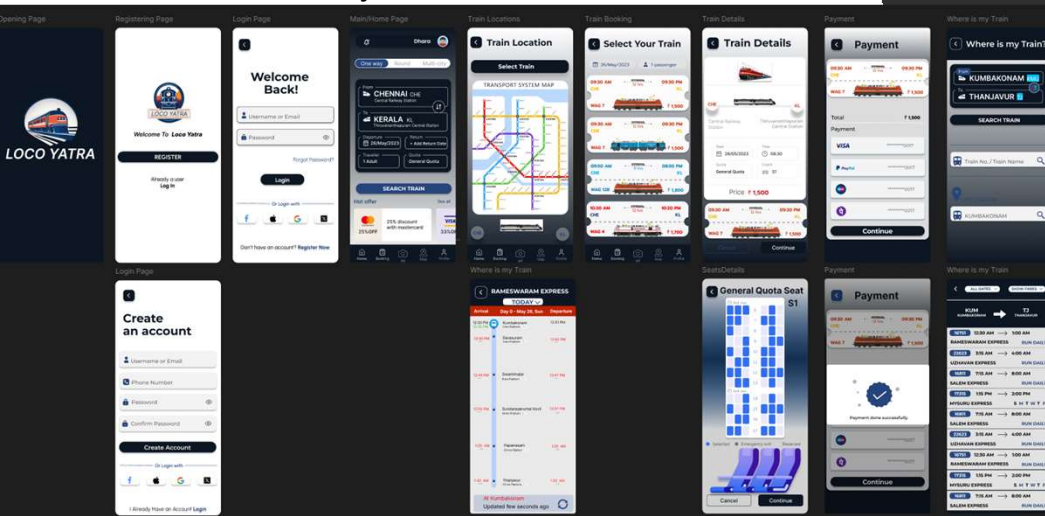
Programing Languages:

- Kotlin
- Python



Data Flow Overview

- Input Data:** Data from external sources.
- User:** Interacts with the system.
- User Data:** User preferences and authentication.
- Authenticated User:** Verified identity.
- User Database:** Stores user data.
- API Responses:** Data from external APIs.
- External Data:** Outside system data.
- Processed Data:** Analysed or transformed data.
- User-Specific Results:** Personalized results.
- External Systems:** Interacting systems.
- Analysis Request:** Data analysis request.
- Data Storage:** Stores data.
- Stored Data:** Persisted data.
- Admin Credentials:** Administrative access.
- Analysis Results:** Data analysis output.
- Generated Reports:** Reports from analysis.
- Admin:** System administrator.
- System Configuration:** System settings.
- Updated Settings:** Modified configurations.
- Configuration Database:** Stores system settings.
- Process:** Input, user, and external data are processed.
- Analyse:** Results in reports and updates.
- Admin:** Manages and updates settings.



@SIH Idea submission- Template

FEASIBILITY AND VIABILITY



Feasibility

- **Scalability:** Ability to handle growing user numbers and workloads efficiently.
- **Integration:** Compatibility with existing railway station systems and technologies.
- **Device Compatibility:** Functionality across various devices and platforms.

Viability

- **Maintenance:** Ongoing efforts to keep the system operational.
- **Updates:** Strategy for deploying new features and patches.
- **Bug Fixing:** Process for identifying and resolving system defects.

IMPACT AND BENEFITS



How will it impact the world?

- **Travel Navigation:** Guides travelers to their destinations.
- **Time Savings:** Reduces travel time.
- **Prevents Getting Lost:** Minimizes the risk of losing one's way.
- **Current Location:** Confirms present position.
- **Train Navigation:** Helps track train locations.
- **Call A Coolie :** Easy access to coolie services.
- **Disability Services:** Accessible support for disabled individuals.
- **Suspicious Activity:** Immediate reporting of security concerns.

RESEARCH AND REFERENCES



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