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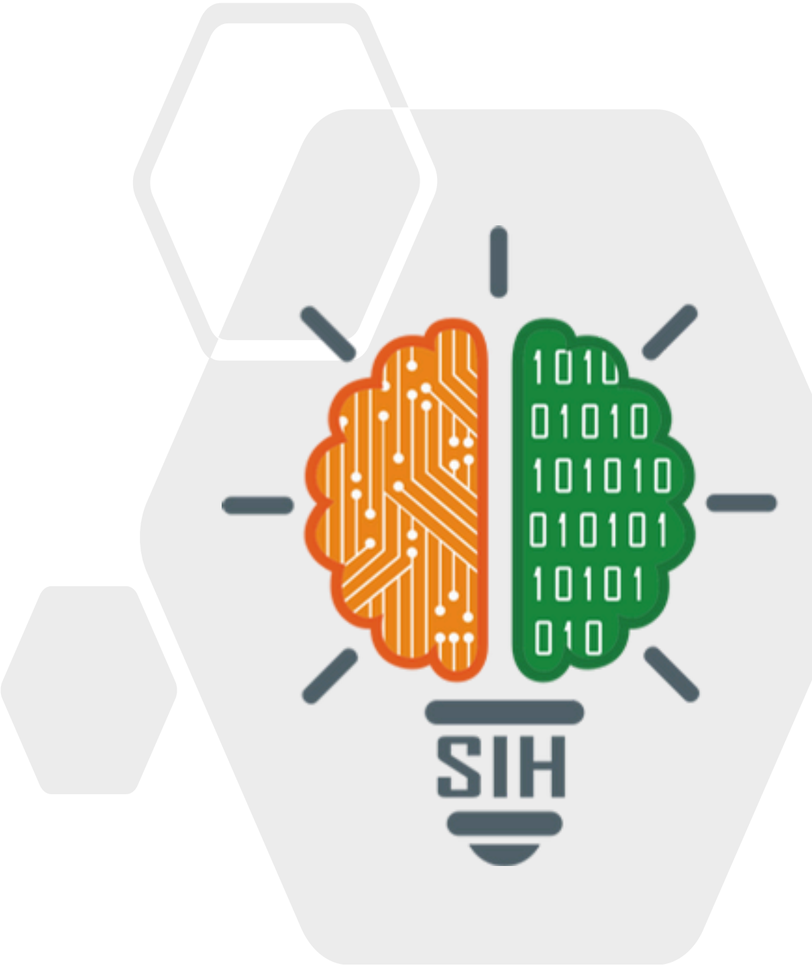
- **Problem Statement ID -** SIH1724
- **Problem Statement Title -** Platform for Inter-departmental cooperation (at city level) in Indian Cities, for sharing data & resources, unified phasing, planning and implementation of projects.
- **Theme -** Miscellaneous
- **PS Category -** Software
- **Team ID -** 30299
- **Team Name -** Zenith



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City Forge

Inter-Departmental Project Collaboration

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Coordination between all the involved Government Departments, proper planning & risk management has always been a **major issue** in major infrastructural projects & tasks.

Introducing **City Forge**, a mobile application where one can find every needed information about all the projects.

Mobile Application is a one stop platform & presents all the information about the projects & resources and visualizes the work distribution.

Risk Predictions provides data-driven insights helping in better planning. This reduces cost and improves resource management.

Discussion Forum acts as an environment that allows the users to convey relevant information, ideas or comments.

Real-Time Monitoring conducted by drones provides accurate details about the status of the projects with any hinderances.

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TECHNICAL APPROACH

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Tech Stack:

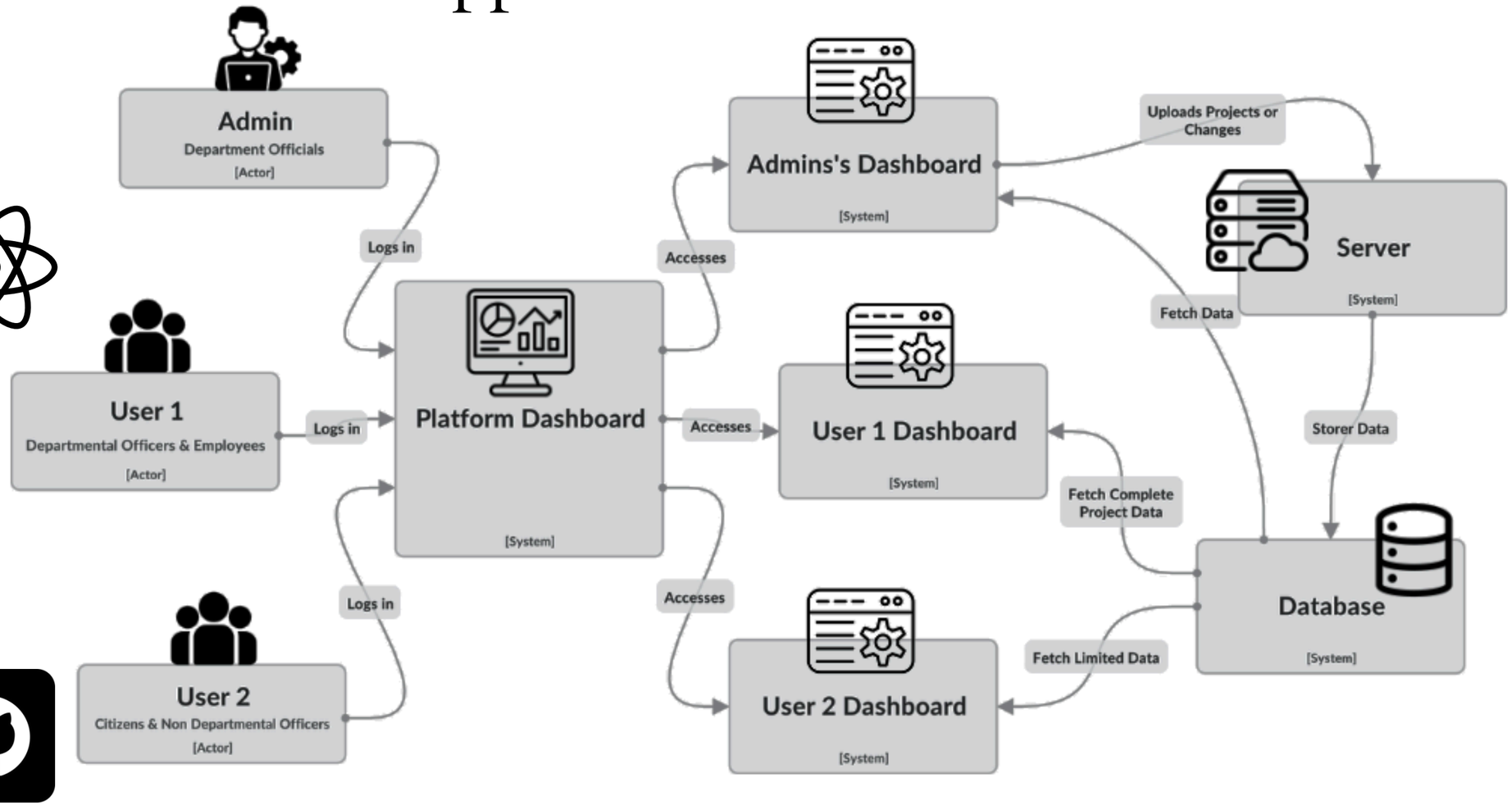
APPLICATION:
React Native,
Expo Go

SCRIPTS:
Javascript, Python

DATABASE:
MongoDB

TOOLS:
Postman,
Github, VSCode

Application Architecture:



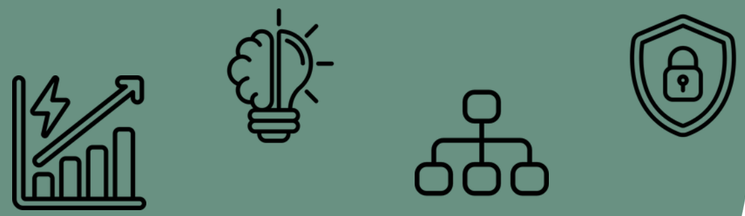
FEASIBILITY AND VIABILITY

Feasibility Analysis

- Implemented in phases for optimization
- Robust Architecture of the platform ensures scalability
- Use of AI tools decreases the workload making it more feasible

Potential Challenges

- Cybersecurity Risks
- Departmental Silos
- Usage Adoption
- Public Trust Issues



Viable Strategies

- User friendly with intuitive User Interface
- Modular Approach
- Real-Time Monitoring of projects for transparency

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IMPACT AND BENEFITS

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Impact:

- Increased Efficiency
- Enhanced Coordination
- Data-Driven Decisions
- Increased Transparency
- Resource Management

Benefits:

- Cost Reduction
- AI Support
- Risk Management
- Public Engagement
- Data Visualization

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RESEARCH AND REFERENCES

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Resources followed:

- https://briq.com/blog/the-importance-of-cross-department-collaboration-in-construction
- https://www.researchgate.net/publication/366345017_Collaboration_and_Data_Sharing_in_Inter-Organizational_Infrastructure_Construction_Projects
- https://www.itcon.org/paper/2023/20
- https://www.ibef.org/government-schemes/pm-gati-shakti-yojana

External tools used:

- https://github.com/newtein/erm
- https://github.com/Aditya1942/React-native-auth
- https://github.com/aaronksaunders/ReactNativeRealm-Expo-Template

Research Paper:

Article

Collaboration and Data Sharing in Inter-Organizational Infrastructure Construction Projects

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