

AI-BASED SMART-CITY SERVICE FINDER: EMPOWERING VISITORS AND LOCAL BUSINESSES

Project Reference No.: 48S_BE_4017

College : Smt. Kamala And Sri Venkappa M. Agadi College Of
Engineering And Technology, Gadag
Branch : Information Science And Engineering
Guide (S) : Dr. Shivarajkumar Hiremath
Student (S) : Mr. Manoj S M
Mr. Abhishek N A
Ms. Chandana K A
Ms. Meghana N P

Keywords:

Service Discovery, Smart City, Business Visibility, Location-based Services, Admin Dashboard

Introduction:

The project aims to provide a smart-city service discovery platform for visitors and local residents. It bridges the gap between service seekers and providers, allowing users to discover nearby services like pharmacies, restaurants, and other essential utilities based on geolocation. Business owners can register their services via QR code-enabled forms, create digital profiles, and gain visibility. The platform also includes an admin panel to ensure the quality and authenticity of business listings. The proposed system is highly relevant for urban infrastructure enhancement, local business empowerment, and real-time service accessibility.

Objectives

The objectives of proposed system are as follows

- To develop a user-centric service discovery that allows users to search and navigate to nearby services.
- To allow business owners to easily create digital profiles with real-time updates.
- To provide users with contact details, services offered, and directions.
- To improve business online visibility through the app's platform.

Methodology:

The system comprises three main platforms: User Platform, Business Owner Platform, and Admin Panel.

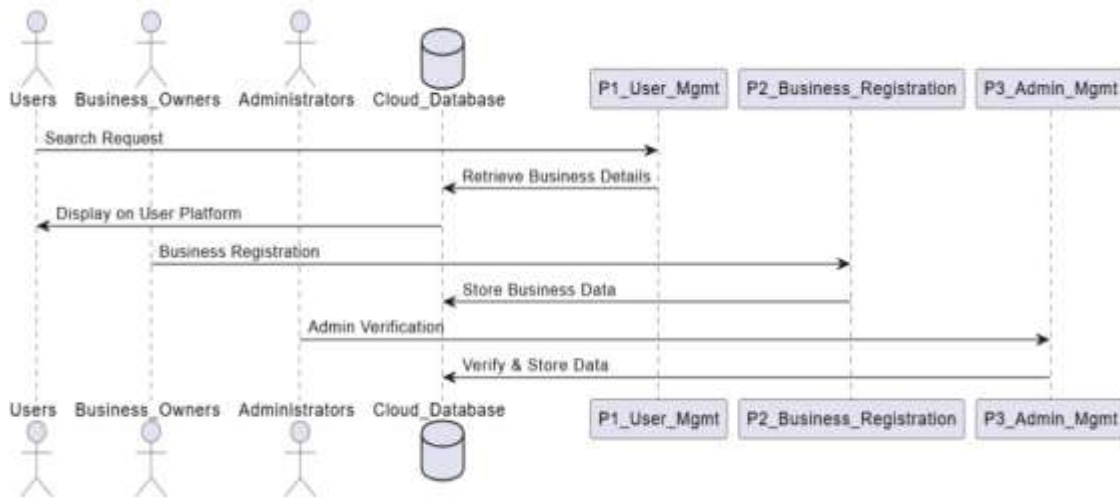


Fig 1: Methodology of Proposed System

User Platform:

- City and service category selection
- Keyword search with filters
- Nearby service locator using GPS

Business Owner Platform:

- QR-code based registration
- Digital profile creation with service details and optional media

Admin Panel:

- Manage business listings and subscriptions
- Monitor server health and security

Database:

- MongoDB

Tech Stack:

- HTML, CSS, JS (Frontend)
- Django (Backend)

Results and Conclusion:

The outcomes of our project include a user-friendly service locator for service finders, improved online presence for businesses, and an efficient platform for

admin operations. The system aims to enhance city navigation for visitors and increase local economic activity.

Future Scope:

1. Integrate AI-based recommendation engine.
2. Expand to include government and emergency services.
3. Enable real-time traffic and crowd density integration.
4. Multilingual support for broader reach.
5. Expand to PAN-India coverage for cross-city assistance.

Project Outcome & Industry Relevance:

The platform empowers users and businesses in smart cities, bridging gaps in service access and visibility. It is highly relevant to local commerce, and urban development authorities seeking digital transformation.

Working Model vs. Simulation/Study:

This project involves a working model with demonstration of service discovery and business registration.

Project Outcomes and Learnings:

Through this project, we learned full-stack development, real-time geolocation-based querying, UI/UX design, secure backend implementation, and database management for location data. It also enhanced team collaboration and problem-solving skills.