MARATHWADA MITRA MANDAL'S
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Software Requirements Specification (SRS)

Group no: A-11

Class / Batch: IT-1

Group Members (Name & Roll No): Ranveer Shinde, SI153

Sairam Pampatwar , SI151

Nishant Ambadkar , SI116

Shivam Mandhani, SI155

1.Introduction

Maharashtra is one of India's most culturally rich and geographically diverse states. Known as the Land of Saints, Warriors, and Festivals, it offers a perfect blend of history, nature, spirituality, adventure, beaches, and modern city life. From the bustling metropolitan city of Mumbai to the serene Konkan beaches, and from the magnificent Sahyadri hill stations to the wildlife forests of Vidarbha, Maharashtra has something for every traveler.

Maharashtra is famous for:
Coastal Tourism (Konkan Region)
Beautiful beaches, seafood cuisine, lighthouses, sea forts, and water sports attract millions of tourists every year.
Hill Stations & Nature
Popular hill spots like Mahabaleshwar, Matheran, Igatpuri, Chikhaldara and Bhandardara offer cool climate, greenery and scenic views.

1.1 Purpose

The purpose of this document is to define the software requirements for developing a Tourism Guide Web Application for all districts of Maharashtra.
The platform will help travelers explore tourist attractions, culture, food, maps, routes, hotels, and travel services district-wise.

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Goals of the project include:

1. Offering district-by-district travel information.

2. Increasing tourism awareness through engaging content.

3..Providing a simple and intuitive visitor experience.

4. Integrating maps, travel routes, and booking links.

5. Ensuring easy access to local culture, festivals, cuisine, and history.

This SRS will assist designers, developers, and testers to build a system aligned with user expectations.

1.2 Scope

The Tourism Guide application will allow users to:

1. Browse all 36 districts of Maharashtra.
2. View major tourist attractions, photos, videos, and descriptions.
3. Get route maps, distances, travel suggestions, and itineraries.
4. Explore local food, culture, festivals, and heritage.
5. View hotels, stays, transport options, and nearby facilities.
6. Get emergency contacts and travel tips.

Key benefits:
1. One-stop platform for all Maharashtra tourism information.
2. Better planning for domestic and international tourists.
3. Easy mobile browsing with organized district-wise guides.
4. Future scope for multilingual support.

1.2 Definitions, Acronyms, and Abbreviations

Term	Definition
GPS	Global Positioning System

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Term	Definition
UI	User Interface
UX	User Experience
DBMS	DatabaseManagement System

1.3 References

1.Maharashtra Tourism Official Website

2.Google Maps Documentation

3.Government District Portals

4.WCAG Web Accessibility Guidelines

2.Case Study

2.1 Case Study Background

Problems faced by tourists today:

1.No single platform offering district-wise tourism information.
2.Lack of organized data on routes, local culture, and facilities.
3.Difficulty finding verified photos, hotel data, or transport availability.
4.Limited awareness of hidden or lesser-known tourist attractions.
5.Inadequate local guidance for food, festivals, and historical sites.

2.2 Problems Observed in Case Study

1.Scattered information across multiple websites.
2.Lack of trusted travel suggestions and itineraries.
3.No district-level cultural insights or travel tips in one place.
4.Complicated planning for multi-district travel.

2.3 Relevance to Proposed System

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The proposed system will address these issues by:

1. Providing a centralized, district-wise tourism guide .

2. Integrating maps, photos, and route suggestions
.
3. Offering cultural, historical, and local food information.

4. Improving travel planning with itineraries and filters.

1.4 Key Learnings from Case Study

1. Need for visually rich storytelling in tourism websites.

2. Importance of verified and trustworthy travel data.

3. Maps and navigation play a crucial role in tourism.

4. Mobile responsiveness is essential for travelers on-the-go.

2. Overall Description

2.1 The Tourism Guide system will be a standalone web application integrating with:

The Tourism Guide system will be a standalone web application integrating with:

1. Google Maps API

2. Hotel/Travel APIs (optional)

3. Category-based content system

4. Cloud database for storing district information

It will be hosted on cloud servers with high availability

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3.2 Product Functions

The product will include:

1.District Browsing: List and explore all 36 districts.

2.Tourist Attraction Details: Photos, descriptions, timings, fees.

3.Interactive Map Integration: Routes, distance, GPS navigation.

4.Culture & Food Section: Local cuisine, festivals, art, lifestyle.

5.Accommodation Finder: Stays, hotels, resorts (with links).

6.Travel Planner: Suggested itineraries (1-day, 2-day, 7-day).

7.Emergency Information: Police, hospitals, helplines.

8.Favorites List: Save attractions and districts.

9.Admin Panel: Manage districts, attractions, media, blogs.

3.3 User Characteristics

Table 3.3. User charecteristics

User Class	Role	Technical Knowledge
Tourist (Domestic)	Browse and plan trips	Basic
Tourist (International)	Explore culture & routes	Basic
Admin	Add/edit/delete district info	Moderate

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3.4 Constraints

1. Must support 36 districts with extensive content.

2. Mobile-first design for travelers.

3. Use only approved images and sources.

4. Limited initial content requiring placeholders.

5. Requires stable internet for map navigation.

3.5 Assumptions and Dependencies

1. Accurate district information provided by verified sources.

2. Google Maps service availability.

3. Updated cultural and festival data from official platforms.

4. Dependence on third-party travel APIs (optional).

3. Specific Requirements

3.1 Functional Requirements

FR1: District Directory

1. Show list of 36 district

2. Allow search, filter, and sort by region (Konkan, Vidarbha, etc.).

FR2: Tourist Attraction Modu

1. Display photos, videos, descriptions.

2. Show timings, ticket fees, best visiting season.

FR3: Map & Navigation Integration

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1.Provide GPS route display.

2.Show distances and transportation options.

FR4: Culture & Food Guide

1.Highlight local cuisines, festivals, arts, and traditions.

FR5: Accommodation Listings

1.Provide hotels, resorts, stays with contact links.

FR6: Itinerary Planner

1.Provide ready-made 1-day, 3-day, week-long plans.

FR7: Search & Filtering

1.Search attractions by name, activity type, popularity.

2.Filter by adventure, heritage, beach, hill station, etc.

FR8: Emergency Contacts

1.Display hospitals, police stations, and helplines.

FR9: Admin Portal

1.Manage district content, attractions, media, and blogs.

2.Dashboard for data analytics (optional).

4.2 Non-Functional Requirements

NFR1: Performance

1.Pages should load under 3 seconds on standard networks.

NFR2: Usability

2.Clean, attractive UI using district-based themes.

3.Mobile responsive across all devices.

NFR3: Security

1.HTTPS-enabled secure browsing.

2.Admin login protected with authentication.

NFR4: Reliability

1.99% uptime through stable cloud hosting.

NFR5: Scalability

1.Support future additions like booking, events, and languages.

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4. System Models

4.1 Use Case Diagram

Dig.4.1:Use Case Diagram

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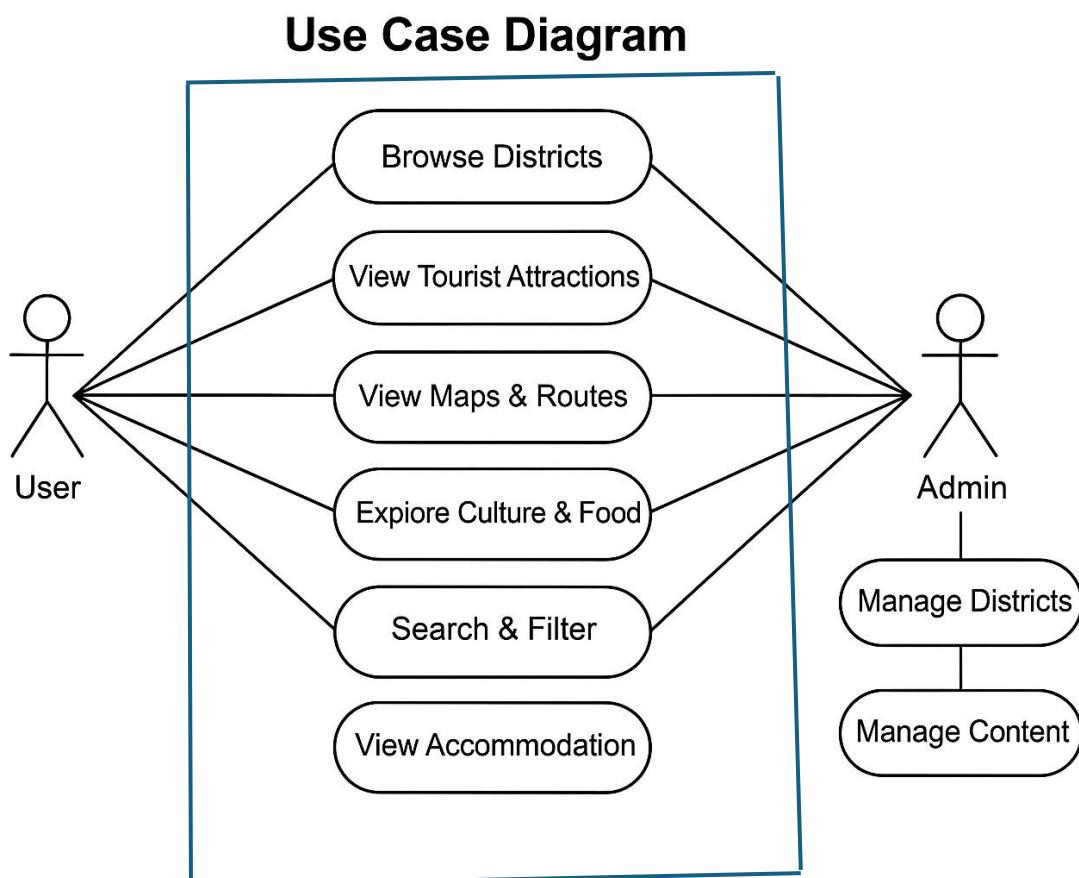**COLLEGE OF ENGINEERING**
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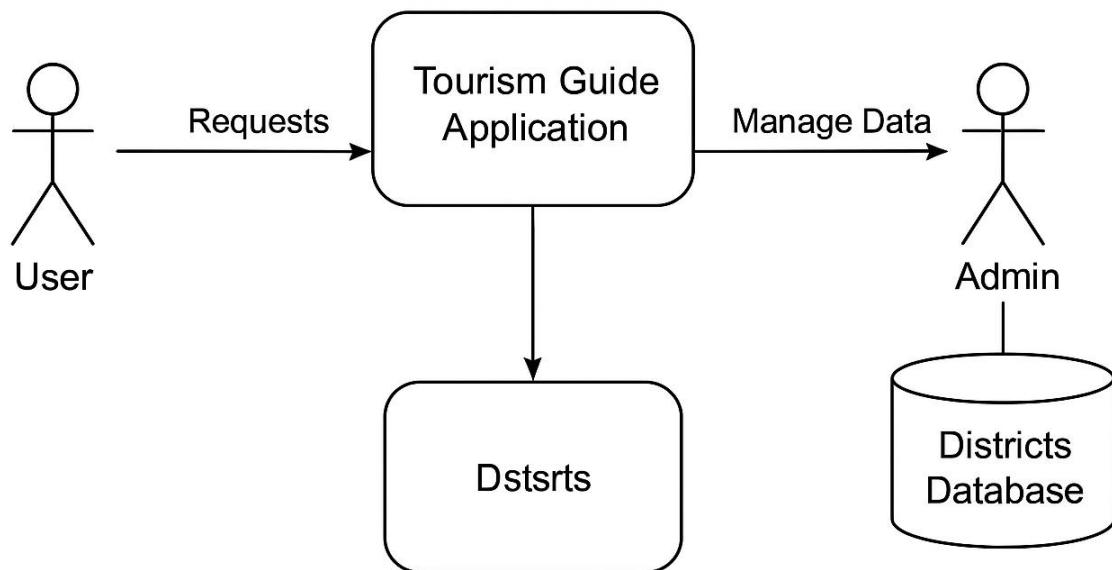
4.2 Data Flow Diagram (DFD)

Data Flow Diagram

Diagram:4.2 Data Flow Diagram (DFD)

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4.3 Entity Relationship Diagram (ERD)

Entity-Relationship Diagram

Diagram:4.3Entity Relationship Diagram (ERD)

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5.4 Other UML Diagrams

Diagram:5.4.1Class Diagram

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5.4.2Sequence Diagram
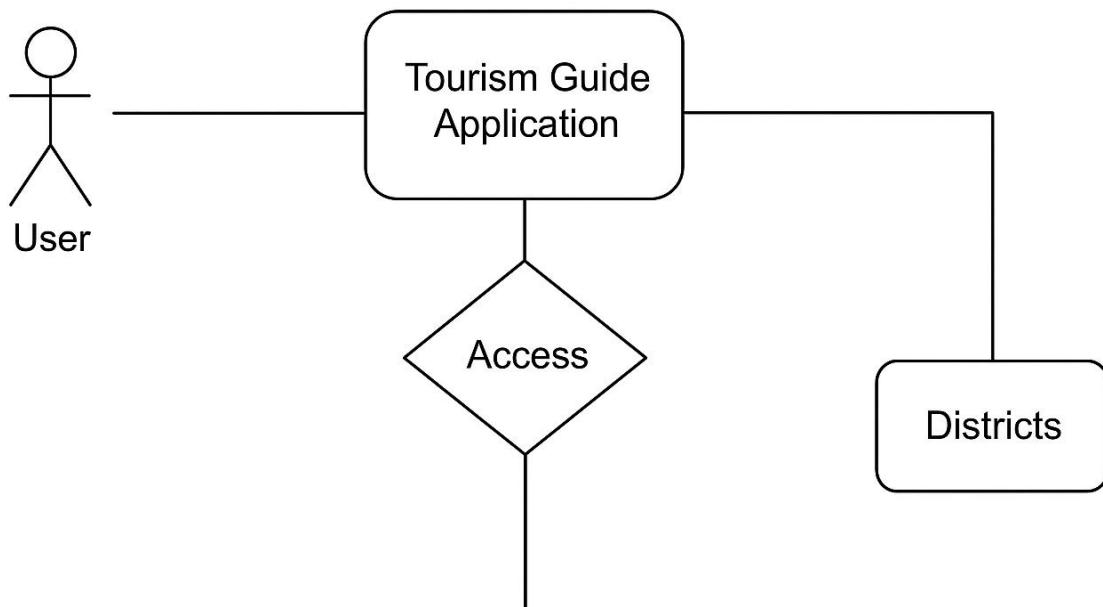

Diagram:5.4.2Sequence Diagram

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5.4.3Activity Diagram

Diagram: 5.4.3Activity Diagram

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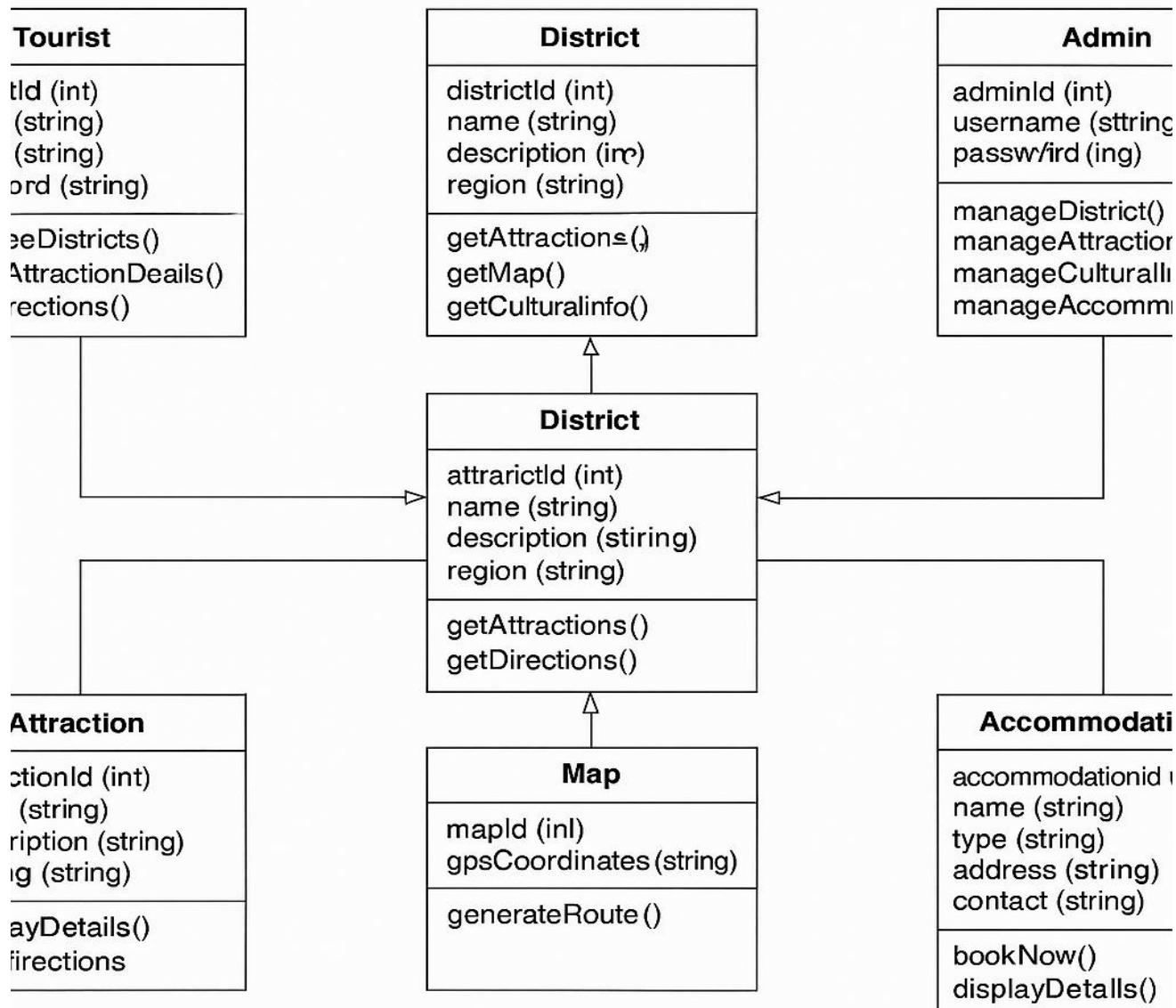
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5.4.4Component Diagram

Diagram5.4.4:Component Diagram

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5.4.5Architecture Diagram:

TOURISM GUIDE TO ALL DISTRICTS OF MAHARASHTRA

```
┌─────────────────────┐        ┌─────────────────────┐        ┌─────────────────────┐
│   User Interface    │◄──────│ Tourism Information │───────►│      Maps &         │
│ (Mobile App/Website)│        │ System─Maharashtra  │        │  Location Service   │
└─────────────────────┘        └─────────────────────┘        └─────────────────────┘
                                                               ┌─────────────────────┐
┌─────────────────────────────┐                               │  Festival & Cultural│
│  District Tourism Database  │                               │    Events Module    │
│                             │                               └─────────────────────┘
│ Konkan Region─Mumbai, Mumbai│
│ Suburban, Thane, Palghar,   │      ┌──────────┐             ┌─────────────────────┐
│ Raigad, Ratnagiri,          │◄────│    📍    │◄───────────►│  Review Feedback    │
│ Sinahudura                  │      └──────────┘             │      Module         │
│                             │                               └─────────────────────┘
│ Western Maharasatra─Pune,   │
│ Satara, Sangli, Kolhapur,   │                               ┌─────────────────────┐
│ Solapur                     │                               │     Review &        │
│                             │                               │  Feedback Module    │
│ Vidarbha─Nagpur, Wardha,    │                               └─────────────────────┘
│ Bhandara, Gondia,           │
│ Chandrapur, Gadchiroli,     │
│ Amravati, Yavatmal          │
│                             │
│ Marathwada─Aurangabad       │
│ (Chhatrapati Sambhajinagar, │
│ Nan/ded, Latur, Osmanabad,  │
│ Beed, Jalna, Parbhani,      │
│ Hingoli                     │
│                             │
│ Khandesh─Nashik, Dhule,     │
│ Nandurbar, Jalgaon,         │
│ Ahmednagar, Buldhana, Akola │
└─────────────────────────────┘
   ┌──────────┐  ┌──────────┐  ┌──────────┐
   │ Payment  │  │  Admin   │  │ Analytics│
   │ Gateway  │  │Dashboard │  │ & Reports│
   └──────────┘  └──────────┘  └──────────┘
```

Digram:5.4.5Architecture Diagram:

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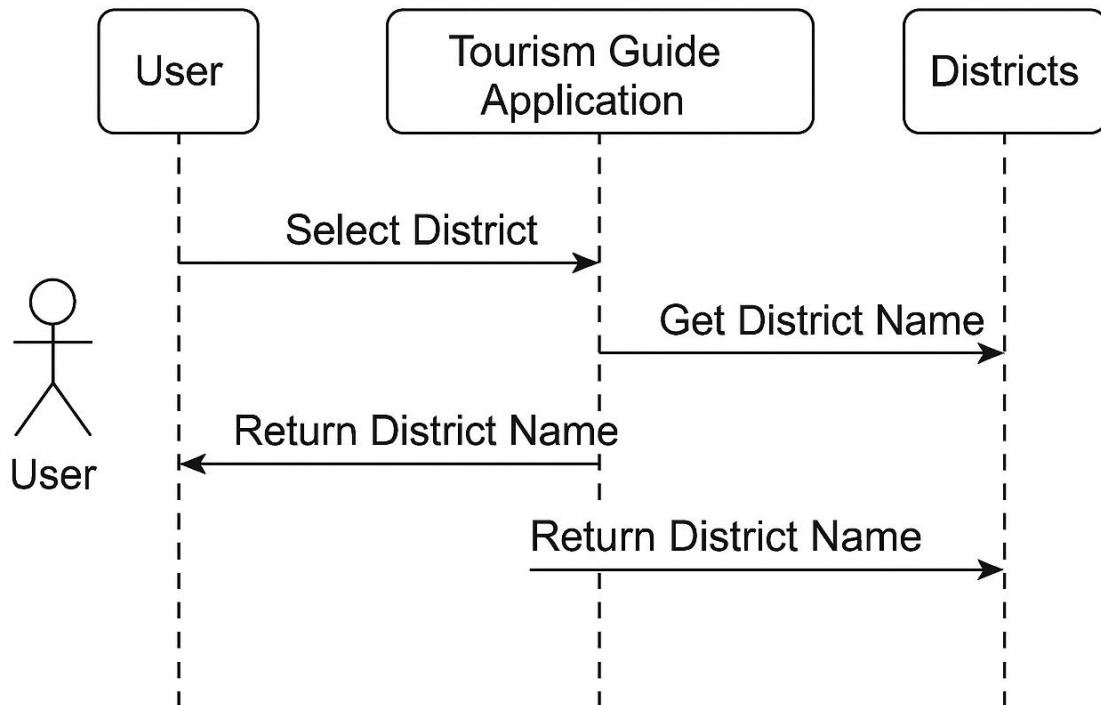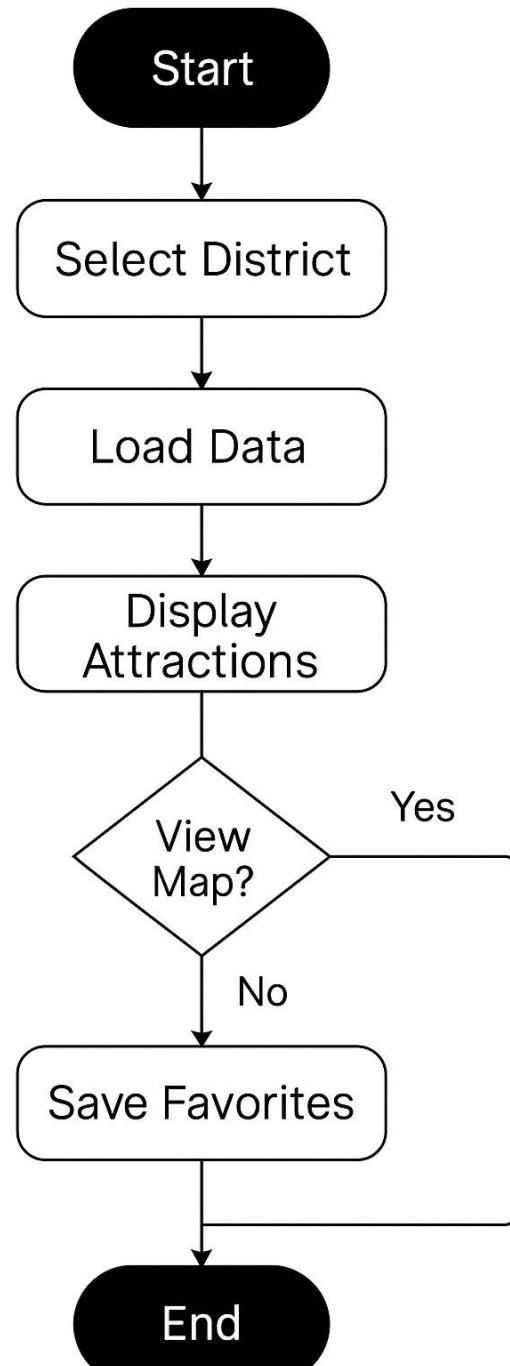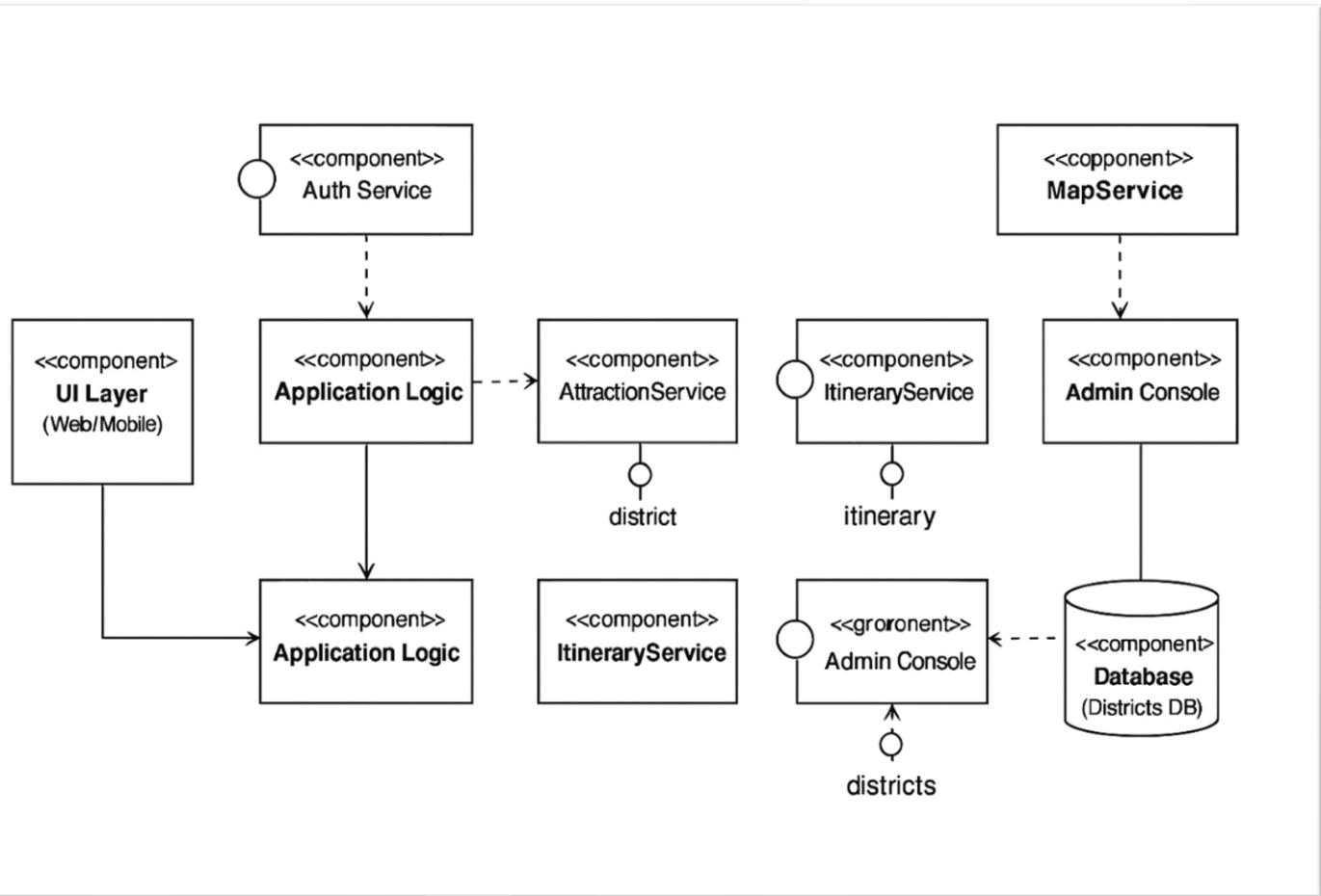
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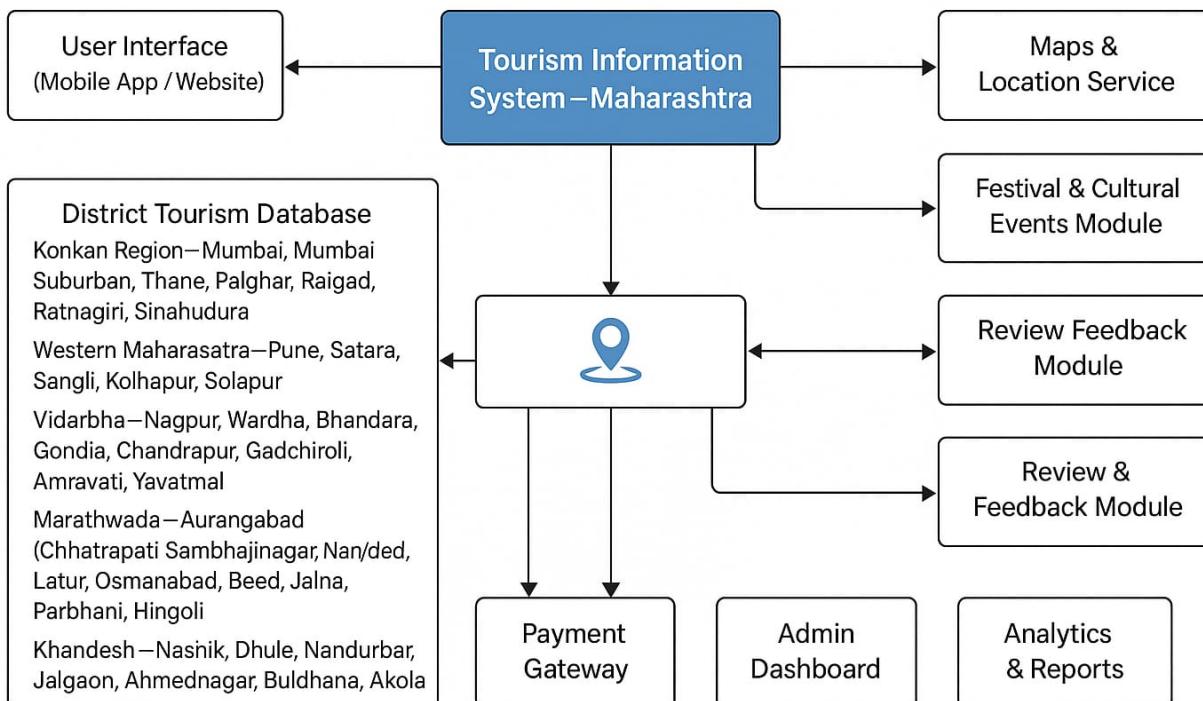**COLLEGE OF ENGINEERING**
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5. Appendices

Provide additional information like sample input/output screens, glossary of terms, or future scope.

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