**TRAVEL TICKET BOOKING APPLICATION DOCUMENTATION**

**Table of Contents**

**1. Introduction**

1.1. Purpose

1.2. Scope

1.3. Audience

1.4. Definitions, Acronyms, and Abbreviations

1.5. References

1.6. Overview

**2. System Overview**

2.1. System Description

2.2. System Context

2.3. System Requirements

2.4. Assumptions and Dependencies

**3. Functional Requirements**

3.1. User Registration and Authentication

3.2. Search for Available Buses and Cars

3.3. Booking Tickets

3.4. Payment Processing

3.5. Ticket Confirmation and Management

3.6. Admin Module

3.7. Notifications and Alerts

**4. Non-Functional Requirements**

4.1. Performance

4.2. Scalability

4.3. Security

4.4. Usability

4.5. Availability

4.6. Maintainability

**5. System Architecture**

5.1. Overview

5.2. Logical Architecture

5.3. Physical Architecture

5.4. Data Flow Diagrams

5.5. Entity-Relationship Diagrams

**6. Detailed Design**

6.1. Database Design

6.2. User Interface Design

6.3. Component Design

6.4. Class Diagrams

6.5. Sequence Diagrams

**7. Implementation**

7.1. Development Environment

7.2. Code Structure

7.3. Key Modules

7.4. Integration

7.5. Version Control

**8. Testing**

8.1. Test Plan

8.2. Test Cases

8.3. Testing Tools

8.4. Bug Tracking

8.5. Performance Testing

8.6. Security Testing

**9. Deployment**

9.1. Deployment Environment

9.2. Deployment Steps

9.3. Rollback Procedures

9.4. Monitoring

**10. User Guide**

10.1. Getting Started

10.2. User Registration

10.3. Searching for Buses and Cars

10.4. Booking Tickets 1

0.5. Payment Process

10.6. Managing Bookings

10.7. User Profile Management

10.8. Contact Support

**11. Admin Guide**

11.1. Admin Login

11.2. Managing Users

11.3. Managing Bookings

11.4. Viewing Reports

11.5. System Maintenance

**12. Security**

12.1. Security Architecture

12.2. Data Security

12.3. User Authentication

12.4. Authorization

12.5. Security Best Practices

**13. Performance**

13.1. Performance Objectives

13.2. Load Testing

13.3. Performance Tuning

**14. Maintenance**

14.1. Scheduled Maintenance

14.2. Handling Issues

14.3. Updating the Application

**15. Future Enhancements**

15.1. Planned Features

15.2. User Feedback

15.3. Market Trends

**16. Appendices**

16.1. Glossary

16.2. Acronyms

16.3. Additional Resources

16.4. FAQ

**Detailed Content for Each Section**

**1. Introduction**

1.1. **Purpose**:

* To provide detailed documentation for a bus and private car travel ticket booking application.
* To serve as a reference for developers, testers, and users.

1.2. **Scope**:

* Covers functional and non-functional requirements, design, implementation, and usage.
* Excludes third-party integrations not explicitly mentioned.

1.3. **Audience**:

* Developers, testers, system architects, end-users, and administrators.

1.4. **Definitions, Acronyms, and Abbreviations**:

* Define key terms and acronyms used throughout the document.

1.5. **References**:

* List any documents, websites, or resources referred to in the documentation.

1.6. **Overview**:

* Brief overview of the application, its purpose, and its primary functionalities.