Software Requirements Specification

for

TourEase (Get the best experience)

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of this tour guide system app is to provide tourists with an interactive and informative experience during their trips by offering guided tours and relevant information. Users get the local information about selected places. The information includes the places name, hotel names beside the selected area, local tour guides information. This will make the travel much easier for the user.

1.2 Document Conventions

In the Software Requirements Specification (SRS) for the TourEase Application, we will adhere to the following document conventions:

Document Title: The title of the SRS will clearly state its purpose.

Section Headings: Sections will be labeled with numeric and alphanumeric identifiers for easy reference.

Formatting: Clear fonts, styles, and consistent formatting will be used for readability.

References: Cite sources and standards when relevant. Appendices: Attach supplementary information as needed.

1.3 Intended Audience and Reading Suggestions

The primary audience includes:

Development Team:	Software developers, architects, and testers responsible for building and maintaining the app.
Project Managers:	Those overseeing the development process and ensuring it aligns with project goals and timelines.
Quality Assurance Team:	Quality Assurance Team: Testers responsible for verifying the application's functionality and quality.
Product Owners:	Individuals responsible for defining and prioritizing features and functionality.
UI/UX Designers:	Those responsible for the user interface and user experience design.
Analysts:	Professionals analyzing requirements and ensuring alignment with business objectives.
Stakeholders:	Any person with an interest in the project who is not a developer.

User:	Reviewer or author.

1.4 Product Scope

This travel guide application on mobile device will help user to search for global travel destination and help user to plan their vacation journey easily by providing user with the require information such as: latest information of the travel destination in details, nearby spot recommendation, prices of various hotel room in particular places, available transport, user rating, user comment, facilities, photo illustrations, local guide informations for exact places and other important information at any time. This application is design to be lightweight and user friendly with well planned user interface so that user will reach their require information in short time. Thus we also design it so that it can be used by any user including disabled users. The app will cover features for tourists, tour guides, and administrators. In general, this website would be designed to perform like any other Tour Guide management application available online.

1.5 References

IEEE 830-1998 - IEEE Recommended Practice for Software Requirements Specifications. https://www.scribd.com

2. Overall Description

2.1 Product Perspective

The Tour Guide Application is a self-containing shell, interacting with external services for payments and location data. It operates on mobile and web platforms and doesn't rely on other systems. However, it integrates with third-party services (e.g., payment gateways, maps) for specific functionality, enhancing the overall user experience. This integration is an essential part of the product's perspective.

2.2 Product Functions

Thus this system is like a self-containing shell, that covers all the major aspects in the computerization of tourist agencies. Some tasks are described in detail :

Sightseeing Tours: Tourists can enjoy sightseeing tours to any of the places, listed in Agencies Data File.

Deciding Hotels: Agency also makes the lists for the Hotels around the place with the cost. Billing details: Users can know the details of bus fare, hotel bills, charges for any places. Tour guide: Tourists can easily communicate with different guides according to the places. Report Generation: Details about the locations, hotels in that location and final report on the journey fare.

2.3 User Classes and Characteristics

The individual using our product will be someone who is at least relatively experienced with personal computers and who knows how to operate systems that have graphical user interfaces. It is not assumed that the clients are familiar with file transfer protocols or networking. The client simply has to know their email and password in order to log in.

2.4 Operating Environment

The Tour Guide Application is designed to operate on smartphones, including both iOS and Android platforms. It requires access to GPS, internet connectivity, and access to the device's storage for caching. The application is intended to function on smartphones with modern hardware and up-to-date operating systems to ensure optimal performance.

2.5 Design and Implementation Constraints

The design must ensure responsiveness on various screen sizes and resolutions. Implementation should adhere to mobile OS guidelines (iOS and Android). Development may be constrained by budget limitations and resource availability. Integration with third-party services, like mapping, must follow their APIs and requirements.

2.6 User Documentation

Along with the software product, a user manual would be written to help people understand the working methodology and usage of the developed prototype system. It would be written for nontechnical individuals and the level of content or terminology would differ considerably from. For example, a System Administration Guide, which is more detailed and complex. The user manual would follow common user documentation styles capturing purpose and scope of the product along with key system features and operations; step-by-step instructions for using the system including conventions, quick references, tips for errors and malfunctions; pointers to reference documents; and glossary of terms.

2.7 Assumptions and Dependencies

The product would build on leveraging existing systems. In this regard, necessary inspirations could be obtained by analyzing related systems such as SmartGuide.

3. External Interface Requirements

3.1 User Interfaces

A first-time user of the mobile application should see the log-in page when he/she opens the application, after logging in, he/she should be able to see the search page directly when the

application is opened. Here the user chooses the type of search he/she wants to conduct. Every user can use this with just their email address, phone number and password.

3.2 Hardware Interfaces

Since the application must run over the internet, all the hardware required to connect to the internet will be hardware interface for the system. As for e.g. Modem, WAN–LAN, Ethernet Cross-Cable.

3.2 Software Interfaces

Software used Description	Description
Operating system	Operating system We have chosen Windows operating system for its best support and user-friendliness.
Database	Database To save the flight records, passengers records we have chosen SQL+ database.

4. System Features

4.1 System Feature 1

4.1.1 Description and Priority

The system needs high priority when data is to be updated. The guide should not be allocated to two groups at the same day and same time.

4.1.2 Stimulus/Response Sequences

The conformation of the booking needs a quick responseUpdating data at the same time needs a quick response.

4.1.3 Functional Requirements

These following features collectively form the core functionality of the Tour Guide Application for smartphones.

- User Registration and Authentication
- Tour Browsing and Search
- GPS Location Services

- Interactive Maps and Directions
- Reviews and Ratings
- Tourist Profile Management
- Guide Profile Management
- Messaging and Communication
- Tourist Feedback and Ratings
- Document Upload for Guides
- Scalability and Performance Optimization
- Accessibility
- Regular Updates and Maintenance
- Integration with External Services (e.g., payment gateways, mapping services)

5. Other Nonfunctional Requirements

5.1 Performance Requirements

When a user searches for a tour location, the application should not take much time to return the results, similarly for the motel and package information. Considering that the application is of moderate size, it should be able to display 10 results at a time on each page, when the customer looks up for any particular data. Since the Online tourism websites have much traffic, the user should also be able to logon to the system using high speed internet.

5.2 Security Requirements

It must be ensured that access will be provided to the authorized persons through user ID andpassword. Network security will be provided by the use of firewalls. Checks can be performed at regular intervals to ensure data integrity.

5.3 Software Quality Attributes

Reliable:

For all services that rely on TourEase for access control, lack of availability of the supported services. The product should not crash under any circumstance such as user entering invalid values, user trying to find unusual data etc. It should show appropriate messages for every user generated message.

Transparent:

Ideally, the user should not be aware that authentication is taking place beyond the requirement to enter a password.

Scalable:

The system should be capable of supporting large number of client and servers. This suggests modular, distributed architecture

Portable:

Our product will be portable to carry and will run in any machine provided it runs a WindowsOperating System

5.4 Business Rules

- 1. A condition or capability needed by a stakeholder to solve a problem or achieve an objective.
- 2. A condition or capability that must be met or possessed by a solution or solution component to satisfy a contract, standard, specification, or other formally imposed documents

6. Other Requirements

No other requirements are needed for our project.

Appendix A: Glossary

WAN - Wide Area Network

Appendix B: Analysis Models

Will include Entity-Relation diagram, Context Flow Diagram and other required data flow charts

Appendix C: To Be Determined List

System Analysis and Design Methods by Jeffery I. Whitten, Lonnie D Bentley, Systems Analysis and Design: An Object-Oriented Approach with UML by Alan Denis, Modern Systems Analysis and Design, Global Edition 9th Edition by Joe Valacich, Joey George