**Software Requirements Specification for Visit Srilanka Travel and Tourism website**

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Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
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**Document Approval**

Quality Software Corporation and have reviewed this document and hereby agree that the contents herein are accurate. Any changes to this document must be communicated in writing and signed off by both parties.

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| Signature | Signature |
| Date: | Date: |
| Name: | Name: |
| Customer: | Virtusa Corporation |

# 1. Introduction

## 1.1 Purpose

This document's goal is to give a thorough explanation of Sri Lanka's tourism management system. It will describe the functions and characteristics of the system, its interfaces, what the system will perform, the limitations that must be met for it to function, and how the system will respond to outside stimuli. Both the stakeholders and the system's developers should read this paper. They can easily book everything related to their tour just by using their mobile phones.

## 1.2 Document Conventions

I'm utilizing the following resources in my project to write the paper for the tourism management system. I've used times new roman font style, size 12, bold for the headers, size 16 for heading 1, and size 14 for the subheadings to make this text easier to read and comprehend. diagrams are provided in this document.

## 1.3 Intended Audience and Reading Suggestions

Both interested software developers and the travel agencies who will use this software are part of the target audience for this publication. Ms. Halikai Suthaharan, a lecturer, is supervising the development of this project. The software is helpful for clients who visit the website directly.

## 1.4 Product Scope

The Tourism Management System project involves the creation of a managing tourism website that enables users to look up the availability of various tourist destinations, the costs of various hotel rooms in certain locations, as well as the various reservation packages. This project also includes several other capabilities, like online user registration, website management staff or administrator editing customer information or package details, as well as adding, removing, or changing website details. This website is generally intended to function like any other online tourist management website.

## 1.5 References

Anon., n.d. *SYSTEM REQUIREMENT SPECIFICATIONS.* [Online]   
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# 2. **Overall Description**

## 2.1 Product Perspective

This project involves organizing the entire journey in accordance with the tourist's preferred routes and financial constraints in order to get a competitive edge. They should be satisfied with Sri Lankan culture. As a result, visitors to Sri Lanka may effectively and efficiently manage their precious time as well as their money.



**Figure 1 Product perspective**

## 2.2 Product Functions

Thus, this system functions as a self-contained shell that covers all the significant components of computerizing a travel business. Some tasks include detailed descriptions.

**Emergency Services**

1. Alert.

2. Help.

3. Healthcare

You can access the website for assistance if you require it. Alert locations can be found via alerts, and if you require health facilities at your destination, you can also access those through the website.

**Hotels**

The agency also makes reservations on behalf of hotels that are members of the agency.

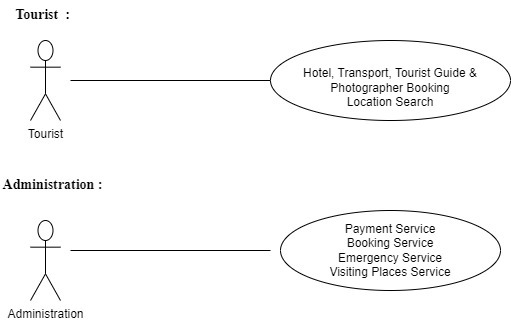
**Billing**

After the customer makes a reservation or booking, a bill will be created for him or her, and payment must be made immediately.

**Report generation**

Includes information on the places, accommodations there, and a summary of the travel costs.

## 2.3 User Classes and Characteristics



**Figure 2 User Classes and Characteristics**

## 2.4 Operating Environment

Every known operating system, including Windows is supported by the system. It can run on a PC with at least 2 GB of RAM.

## 2.5 Design and Implementation Constraints

All HTML code must follow the HTML specification. Each script must be written in JavaScript. The SQL engine and database utilized shall be the MySQL server. All users must log in before they may make reservations or access the system's information. System will require a minimum of 2 GB of memory. To access their online accounts and perform operations, all users must have their valid login and password*.*

## 2.6 Assumptions and Dependencies

Every user has a basic understanding of the English language. All users have a fundamental understanding of how to operate a computer and a smartphone. The travel website stakeholders are aware of how to operate the system. A computer, laptop, printer, etc. are available at the travel agency. The travel website is open 24 hours every day. The search process must be quick and easy.

# 3. Project scope and impact

Mobile websites and applications have drastically changed the way that modern travelers make reservations and change them. Customers may now rapidly amend their reservations without speaking to a customer support representative and have control over their reservation in the palm of their hand.

## 3.1 Scope Inclusions

Diagram

Description automatically generated

**Figure 3 Context diagram**

3.2​ Scope Exclusions​

* predictability in search
* Huge, lovely pictures.
* Customer evaluations.
* Simple calendars that are foolproof.
* Clear pricing without additional costs.
* Use intriguing and evocative copy.
* Integration of Google Maps
* easy checkout

## 3.3​ Impact on other systems​

### 3.3.1 ​Affected by Other Systems​

They can reserve hotels, transport, Tourist Guide, and other services. Access to every nugget of knowledge about a foreign location is made possible via the internet. Websites, for instance, offer ratings and evaluations of tourist attractions. Information on the culture, cuisine, and languages that travelers may encounter can be found on websites like blogs and YouTube.

### 3.3.2 ​Effects on Other Systems

IoT technology has been widely used in the travel sector to date to offer a higher level of personalization in hotels and on flights. This is largely accomplished by enabling customers to control additional appliances or services through a centralized device, such as a tablet or even a smartphone.

# External Interface Requirements

## User Interfaces

|  |  |
| --- | --- |
| Diagram  Description automatically generated  **Figure 4 Visit Srilanka Travel & Tourism** | Graphical user interface, application  Description automatically generated  **Figure 5 Login page** |

|  |  |
| --- | --- |
| Graphical user interface  Description automatically generated  **Figure 6 Register** | Graphical user interface, application, chat or text message  Description automatically generated  **Figure 7 Registration Success** |

|  |  |
| --- | --- |
| Graphical user interface, application  Description automatically generated  **Figure 8 Visiting places** | Graphical user interface, text, application, chat or text message  Description automatically generated  **Figure 9 Booking services** |

|  |  |
| --- | --- |
| Graphical user interface, text, application, chat or text message  Description automatically generated  **Figure 10 Location awareness** | Graphical user interface, text, application, chat or text message  Description automatically generated  **Figure 11 Emergency services** |

|  |  |
| --- | --- |
| Graphical user interface, text, application, chat or text message  Description automatically generated  **Figure 12 Online payment** | Graphical user interface  Description automatically generated  **Figure 13 Tourist review** |

## 

## 4.2 Hardware Interfaces

* Processor: Intel(R) Core (TM) i3-8130U CPU @ 2.20GHz 2.21 GHz
* Speed: 2.0 GHZ above
* Hard Disk: 80 GB
* RAM: 512 MB
* Input devices: Keyboard and mouse
* Monitor: 15.6’’ HD Display
* Internet: 100kbps above
* Printer: Any printer compatible for Windows

## 4.3 Software Interfaces

* Operating System: Windows 10
* Front End: ASP.NET
* Back End: SQL

## 4.4 Communications Interfaces

The software must be web browser enabled and HTTP protocol is used to transfer data.

# System Features

## C:\Users\DELL\Desktop\Group Design Documents\photo1700495902.jpeg5.1 Use case diagram

**Figure 14 Use case diagram**

## 5.2 Description and Priority

* Easy Booking system
* Tourist review
* Transport
* Emergency services
* Images
* Pricing
* Search filters

**Table 1Priority of our system's features**

## 5.3 STIMULUS/RESPONSE SEQUENCES

* Search for our system services in Travel and tourism website.
* Displays a detailed list of available services and make a “Reservation” or Book a trip plan on a particular plan.
* Cancel an existing Reservation.

## 5.4 Functional requirement

**Tourist Module:**

There are two different user kinds. Both site visitors and tourists. The user module is divided into the following sections.

* Search:

All users of the site can look up tourist attractions in Sri Lanka by location, Visiting Places. They can learn about the various leisure options offered at each tourist attraction, as well as information on the providers, amenities, and costs.

* Registration:

Tourist must register with the system and supply all their information in the services. He or she must supply a username and password. This module takes care of the registration process, user login process, and security checking related to these.

* Online reservation

In this module, visitors can reserve online the following services one month in advance: Transport Service, Emergency Service and hotels and restaurants service. They can also pay their costs for bookings online. They can also revoke the reservation and receive the amount returned after deducting booking fees.

* Review:

Tourist have the option to provide feedback, which falls under this sub module.

**Administration module**

The following modules are sub modules of the administrator module.

* Information

This module contains information about various tourist attractions in the form of images, newsreels, audio clips, and a video gallery. This module handles data update, deletion, and addition. New information-filled centers are being added to the system.

* Customer Module

Clients of the system include recreational facilities and service providers at tourist hotspots. Before performing any operations, they must first register. Therefore, online client registration, client permit revocation, client login, and security checking are all handled in this module.

* Reports & Mail

This section considers the generation of various reports, mailings to customers and visitors, and the provision of reports and data.

* Commercials

The clients can advertise here. This module creates and uses the functionality.

### 5.4.1 Data Archival and Retention

All the data you register will be stored on the website to prepare your trip plan. We will protect our customer’s details under this PDPA law. To comply with any statutory requirements, records will be retained for a period of not less than eight years after the completion of the relevant transaction.

### 5.4.2 User Profiles, Roles and Privileges

Roles of system

* Administration system
* User

Administering User Privileges, Roles, and Profiles.

* Managing Oracle Users
* Viewing Information About Database Users and Profiles
* Managing Resources with Profiles
* Understanding User Privileges and Roles
* Managing User Roles
* Granting User Privileges and Roles
* Revoking User Privileges and Roles
* Granting to and Revoking from the PUBLIC Role
* Granting Roles Using the Operating System or Network
* Viewing Privilege and Role Information

### 5.4.3 Reporting Requirements

The management of a vast amount of tourist information data is one of the web-based travel and tourism system's most crucial tasks. Data must be guaranteed to be accurate, consistent, and current. The quality and efficiency of the system will be directly impacted by the data's internal structure and external form.

The most fundamental criterion is always that the data be accurate. Since there is a wide range of tourist information and data, a comprehensive data collection specification is necessary before the data collection in order to guarantee the integrity of the data obtained. After data collection, data entry is a crucial step that can impact accuracy.

Operators therefore should be knowledgeable and trustworthy, and the system's corrective process can lower the likelihood of mistake. Users may take part in activities to assure the accuracy of the data through the proper link in the page and offer error mechanisms, and travel information and data are extremely open.

When we talk about consistency, we imply that when the same information appears in several places, it should still be consistent. Therefore, the data must be limited. When constructing the database, the data must be relevant in order to offer consistency for the ongoing maintenance of data protection. Data redundancy should be taken into consideration for the potential dispersed data.

High standards for instantaneity are required of tourist information. Information collection sensitivity and efficiency should be high in order to provide real-time features, although technological requirements might be flexible. The information about tourism is updated by qualified people for this tourist information management system.

# 6. Other Nonfunctional Requirements

## 6.1 Performance Requirements

The application for the tourism management system should be able to reply to client questions quickly. The program shouldn't take too long to produce the results when a user searches for a tour site; the same goes for searches for accommodation and package information.

When a consumer searches for a certain piece of information, the application should be able to show 10 results at a time on each page given its average size. Due to the huge volume of traffic on online travel websites, the user should also be able to access the system utilizing high speed internet. Most requests made to the application should receive a response in within 5 seconds.

## 6.2 Safety Requirements

* Use unique member id to prove user authentication and validation of members.
* Personal information should be protected.
* There are no perceived risks for any external party or to the property.

## 6.3 Security Requirements

* It must be verified that the allowed individuals will have access using their user ID and password.
* Firewalls will be used to provide network security.
* To ensure data integrity, regular internal checks can be made.

## 6.4 Software Quality Attributes

Lack of availability of the supported services for all services that depend on TMS for access control is not reliable.

* Under no circumstances:

Including when a user enters incorrect values or tries to locate uncommon data—should the product crash. Every user-generated message ought to display the proper message.

* Transparent:

Beyond having to provide a password, the user should ideally not be aware that authentication is happening.

* Scalable:

The system should be able to support numerous servers and clients. This implies a distributed, modular architecture.

* Portable:

Our product will be transportable and work on any computer if it has a Windows operating system.

## 6.5 Business Rules

* superior photography
* a succinct description of the region including highlights of key locations
* Web links to hotel and booking sites are provided with hotel recommendations.
* information about outdoor activities and recreation
* guides to museums, theatres, and other sites in the arts and humanities
* packing advice
* packing advice
* Airport information
* Public transportation information
* Relevant language and regional dialect advice

## 6.6 Compatibility Requirements

Once a trip has been planned, user has the ability of importing the route onto their preferred navigation application such as Google Maps or Maps.

## 6.7 Development Requirements

### 6.7.1 development environment

The relationship between tourism and environment is well established, and the environment has become a constant indicator of tourism development. The importance of the environment in relation to tourist activity derives from the fact that the environment is often considered the key component of tourism.

### 6.7.2 Development data

Tourism data provides comprehensive information about the travel and tourism industry, domestic tourism. It includes transaction-level information such as tourism car rentals, mode of transport, hotel stays, restaurant visits, and visits to attractions.

### 6.7.3 coding standards

HTML and CSS form the foundation of web development. We use HTML to determine where elements are placed on a web page and use CSS to style it. Since the languages ​​work together, we are going to use both to build a complete website.

## 6.8 Deployment Requirements

### 6.8.1 Installation packaging requirements

* Instructions on how to install the system shall be provided.
* The system shall be provided with an installation mechanism

### 6.8.2 Deployment Requirements

* Have access to DNS record management or known the people to contact
* Set up the DNS records and make sure that all the settings are connect
* Set up and test the website on the production server

### 6.8.3 Documentation Requirements

Installation Guide, User Manual and Help File are provided separately with the product. Context sensitive help is integrated implicitly with the product.

### 6.8.4 Applicable standards

* Customer respect and their comment
* Organizational skills
* Feedback and rating
* Rates of currency exchange and import duties

### 6.8.5 on-line user documentation and help system requirements

An on-line help system will be provided along with the software in order to serve as a reference and to help new users learn to use the program

### 6.8.6 Usability requirements

A user interface for updating tour information would also be useful in allowing the system to be adapted for different situations

# 

# 7. Other Requirements

## Appendix A: Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Active Article | The document that is tracked by the system; it is a narrative that is planned to be posted to the public website. |
| Author | Person submitting an article to be reviewed. In case of multiple authors, this term refers to the *principal author*, with whom all communication is made. |
| Database | Collection of all the information monitored by this system. |
| Editor | Person who receives articles, sends articles for review, and makes final judgments for publications. |
| Field | A cell within a form. |
| Historical Society Database | The existing membership database (also HS database). |
| Member | A member of the Historical Society listed in the HS Database. |
| Reader | Anyone visiting the site to read articles. |
| Review | A written recommendation about the appropriateness of an article for publication; may include suggestions for improvement. |
| Reviewer | A person that examines an article and can recommend approval of the article for publication or to request that changes be made in the article. |
| Software Requirements Specification | A document that completely describes all the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Stakeholder | Any person with an interest in the project who is not a developer. |
| User | Reviewer or Author. |

**Table 2 Glossary**

## Appendix B: Analysis Models

**Level 2 DFD for registration**

**Diagram

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**Figure 15 DFD for registration**

**Level 2 DFD for processing online request**

**Diagram

Description automatically generated**

**Figure 16 DFD for processing online request**

**Level 2 DFD for payment receive and update**

**Diagram

Description automatically generated**

**Figure 17 DFD for payment receive and update**

## Appendix C: Interview Questions and Answers with the interviewee’s signatures

Text, letter

Description automatically generated

**Figure 18 Letter**

