

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

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# Table of Contents

<b>1. Introduction.....</b>	<b>6</b>
1.1 Purpose.....	6
1.2 Document Conventions.....	6
1.3 Intended Audience and Reading Suggestions .....	6
1.4 Product Scope .....	6
1.5 References.....	7
<b>2. Overall Description.....</b>	<b>8</b>
2.1 Product Perspective.....	8
2.2 Product Functions .....	8
2.3 User Classes and Characteristics.....	9
2.4 Operating Environment.....	9
2.5 Design and Implementation Constraints .....	9
2.6 Assumptions and Dependencies.....	9
<b>3. Project scope and impact.....</b>	<b>10</b>
3.1 Scope Inclusions .....	10
3.2 Scope Exclusions .....	11
3.3 Impact on other systems.....	11
3.3.1 Affected by Other Systems .....	11
3.3.2 Effects on Other Systems.....	11
<b>4. External Interface Requirements .....</b>	<b>12</b>
4.1 User Interfaces .....	12
4.2 Hardware Interfaces .....	17
4.3 Software Interfaces .....	17
4.4 Communications Interfaces.....	17
<b>5. System Features .....</b>	<b>18</b>
5.1 Use case diagram .....	18
5.2 Description and Priority .....	19
5.3 STIMULUS/RESPONSE SEQUENCES.....	19
5.4 Functional requirement .....	20
5.4.1 Data Archival and Retention.....	21

5.4.2 User Profiles, Roles and Privileges.....	21
5.4.3 Reporting Requirements .....	21
<b>6. Other Nonfunctional Requirements.....</b>	<b>23</b>
6.1 Performance Requirements .....	23
6.2 Safety Requirements .....	23
6.3 Security Requirements .....	23
6.4 Software Quality Attributes .....	23
6.5 Business Rules .....	24
6.6 Compatibility Requirements .....	24
6.7 Development Requirements.....	25
6.7.1 development environment.....	25
6.7.2 Development data .....	25
6.7.3 coding standards.....	25
6.8 Deployment Requirements.....	25
6.8.1 Installation packaging requirements .....	25
6.8.2 Deployment Requirements.....	25
6.8.3 Documentation Requirements.....	25
6.8.4 Applicable standards.....	26
6.8.5 on-line user documentation and help system requirements .....	26
6.8.6 Usability requirements .....	26
<b>7. Other Requirements .....</b>	<b>27</b>
Appendix A: Glossary.....	27
Appendix B: Analysis Models .....	28
Appendix C: Interview Questions and Answers with the interviewee’s signatures.....	30

<b>Figure 1 Product perspective .....</b>	<b>8</b>
<b>Figure 2 User Classes and Characteristics .....</b>	<b>9</b>
<b>Figure 3 Context diagram .....</b>	<b>10</b>
<b>Figure 4 Visit Srilanka Travel &amp; Tourism .....</b>	<b>12</b>
<b>Figure 5 Login page .....</b>	<b>12</b>
<b>Figure 6 Register .....</b>	<b>13</b>
<b>Figure 7 Registration Success .....</b>	<b>13</b>
<b>Figure 8 Visiting places .....</b>	<b>14</b>
<b>Figure 9 Booking services.....</b>	<b>14</b>
<b>Figure 10 Location awareness.....</b>	<b>15</b>
<b>Figure 11 Emergency services.....</b>	<b>15</b>
<b>Figure 12 Online payment.....</b>	<b>16</b>
<b>Figure 13 Tourist review .....</b>	<b>16</b>
<b>Figure 14 Use case diagram .....</b>	<b>18</b>
<b>Figure 15 DFD for registration.....</b>	<b>28</b>
<b>Figure 16 DFD for processing online request.....</b>	<b>28</b>
<b>Figure 17 DFD for payment receive and update.....</b>	<b>29</b>
<b>Figure 18 Letter.....</b>	<b>30</b>
<b>Table 1 Priority of our system's features .....</b>	<b>19</b>
<b>Table 2 Glossary.....</b>	<b>27</b>

## Revision History

Name	Date	Reason For Changes	Version

## Document Approval

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Quality Software Corporation and <Customer> 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.

Signature	Signature
Date: <Date>	Date: <Date>
Name: <Name>	Name: <Name>
Customer: <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]  
Available at: <https://studentprojectguide.com/wp-content/uploads/2017/11/Travel-And-Tourism-Management-System-SRS.pdf>  
[Accessed 2022].
- Sachdev, R., n.d. *Tourism Management SRS*. [Online]  
Available at: <https://www.scribd.com/document/420352732/Tourism-Management-SRS>  
[Accessed 2022].

## 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

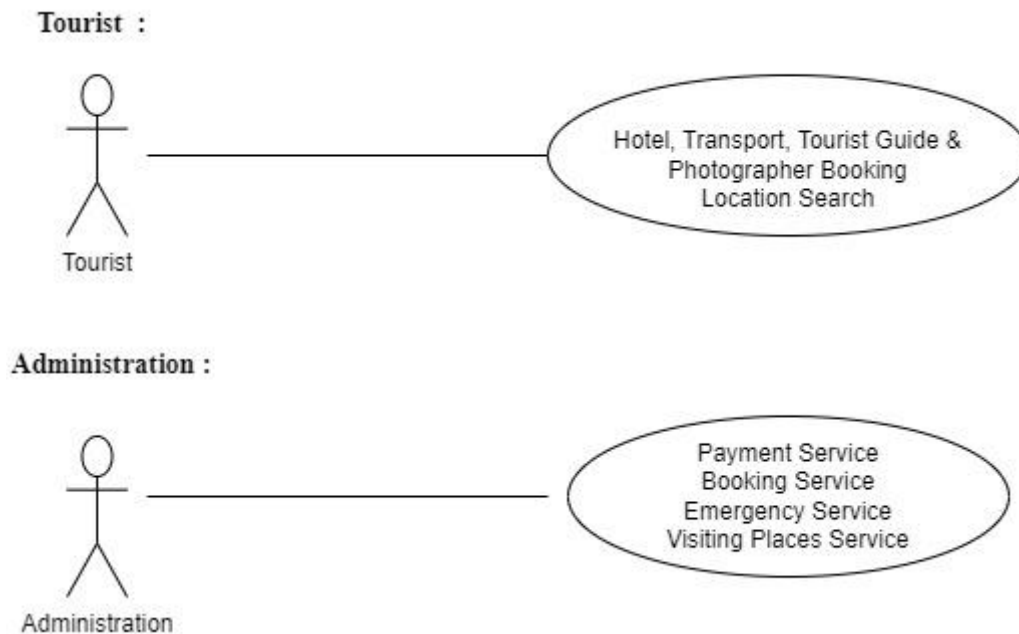


Figure 2 User Classes and Characteristics

## 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

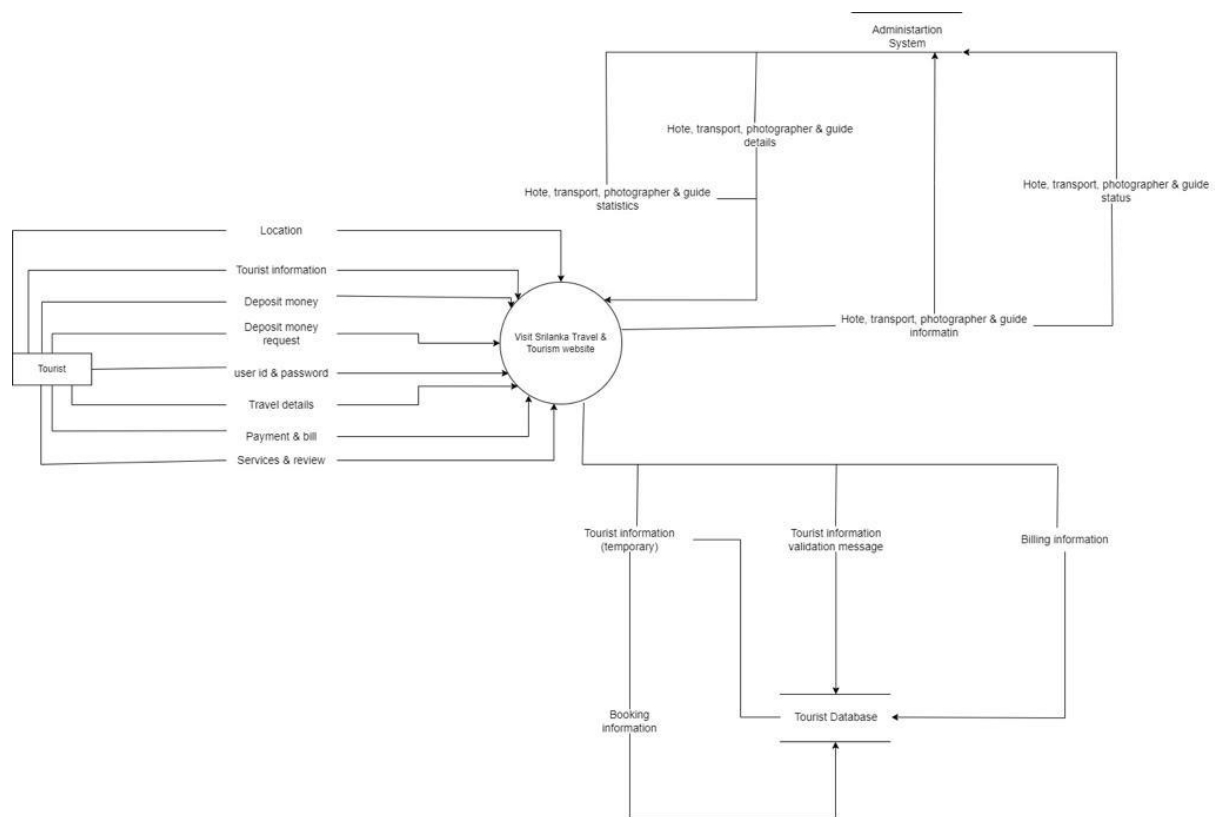


Figure 3 Context diagram

## **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.

## 4. External Interface Requirements

### 4.1 User Interfaces

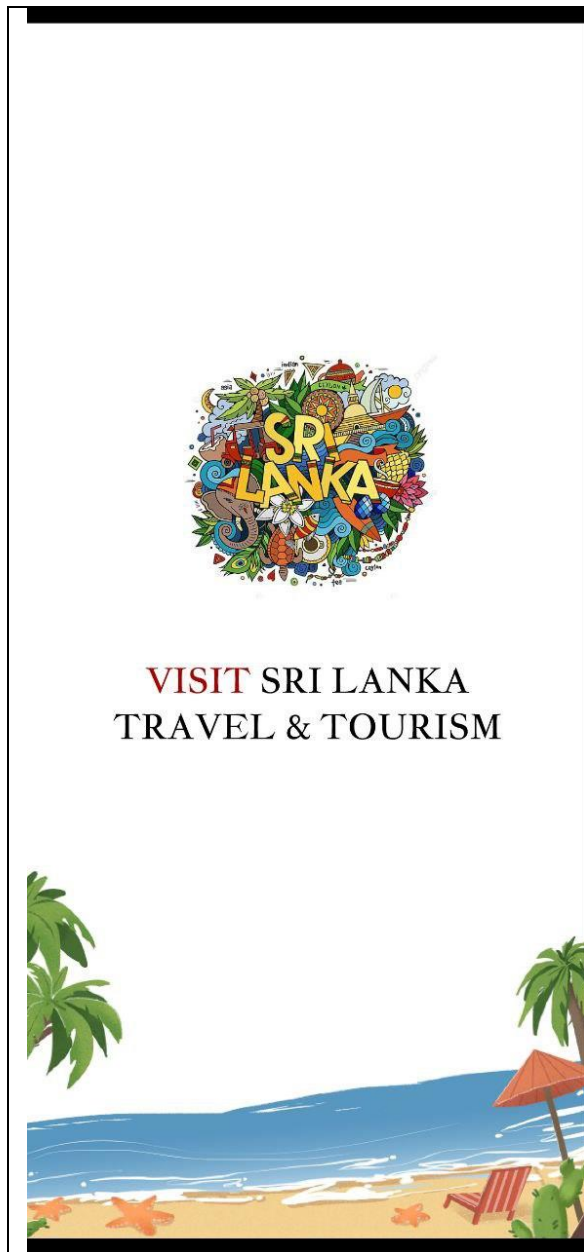


Figure 4 Visit Srilanka Travel & Tourism



Figure 5 Login page



First Name :

Last Name :

E-Mail :

Phone no :

Password :

Register

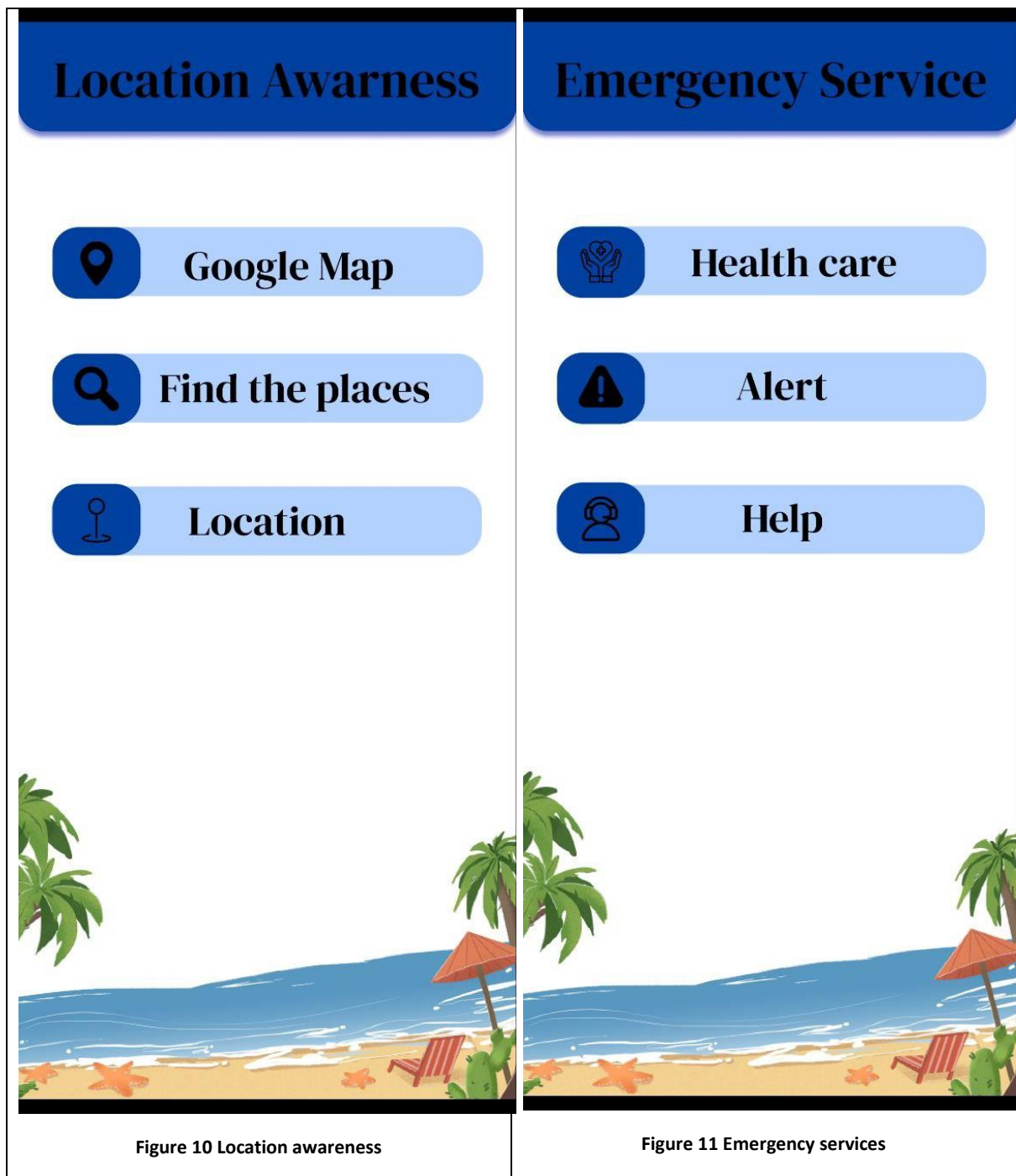
The register form is displayed on a mobile app interface. It features five light blue rounded rectangular input fields stacked vertically, each with a label followed by a colon. Below the input fields is a dark blue rounded rectangular button with the text 'Register' in white. The bottom of the screen shows a decorative beach scene with palm trees, a beach chair, and waves.

Figure 6 Register



Figure 7 Registration Success

Visiting places	Booking Services
<div data-bbox="248 427 774 499">Central</div> <div data-bbox="248 528 774 600">North Central</div> <div data-bbox="248 629 774 701">Northern</div> <div data-bbox="248 730 774 801">Eastern</div> <div data-bbox="248 831 774 902">North Western</div> <div data-bbox="248 931 774 1003">Southern</div> <div data-bbox="248 1032 774 1104">Uva</div> <div data-bbox="248 1133 774 1205">Sabaragamuwa</div> <div data-bbox="248 1234 774 1305">Western</div> <div data-bbox="442 1323 574 1440">  </div>	<div data-bbox="852 454 1377 539">  <div>Transport</div> </div> <div data-bbox="852 607 1377 692">  <div>Hotel</div> </div> <div data-bbox="852 763 1377 848">  <div>Guide</div> </div> <div data-bbox="852 920 1377 1005">  <div>Photographer</div> </div> <div data-bbox="810 1111 1410 1509">  </div>
Figure 8 Visiting places	Figure 9 Booking services



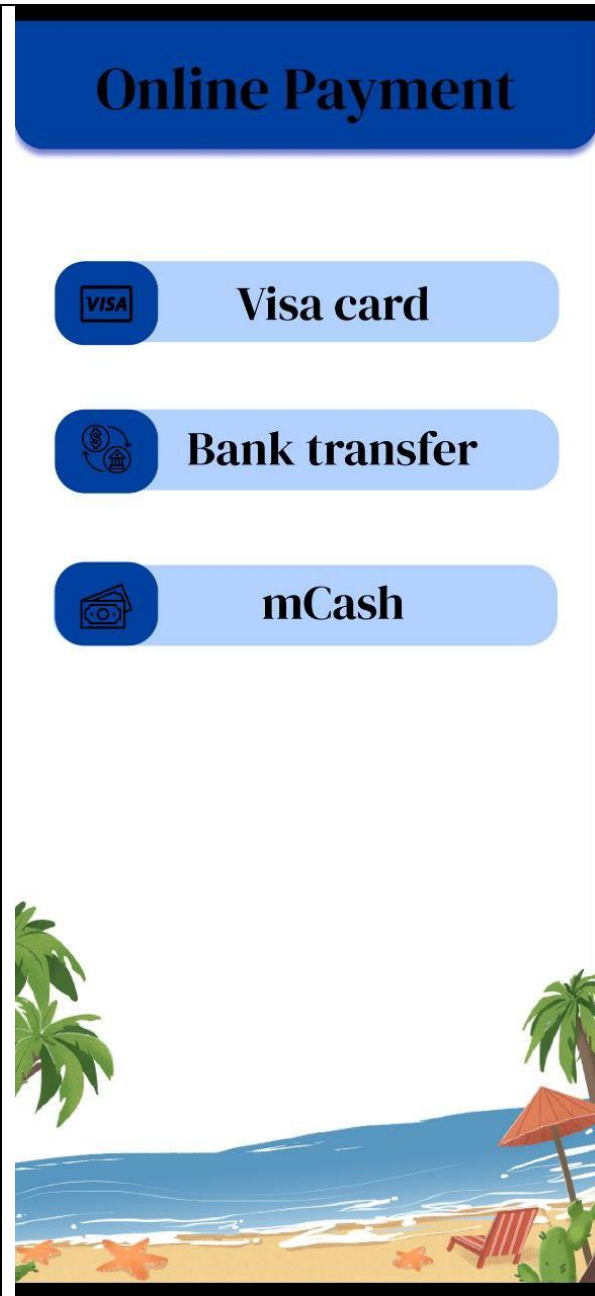


Figure 12 Online payment



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.

# 5. System Features

## 5.1 Use case diagram

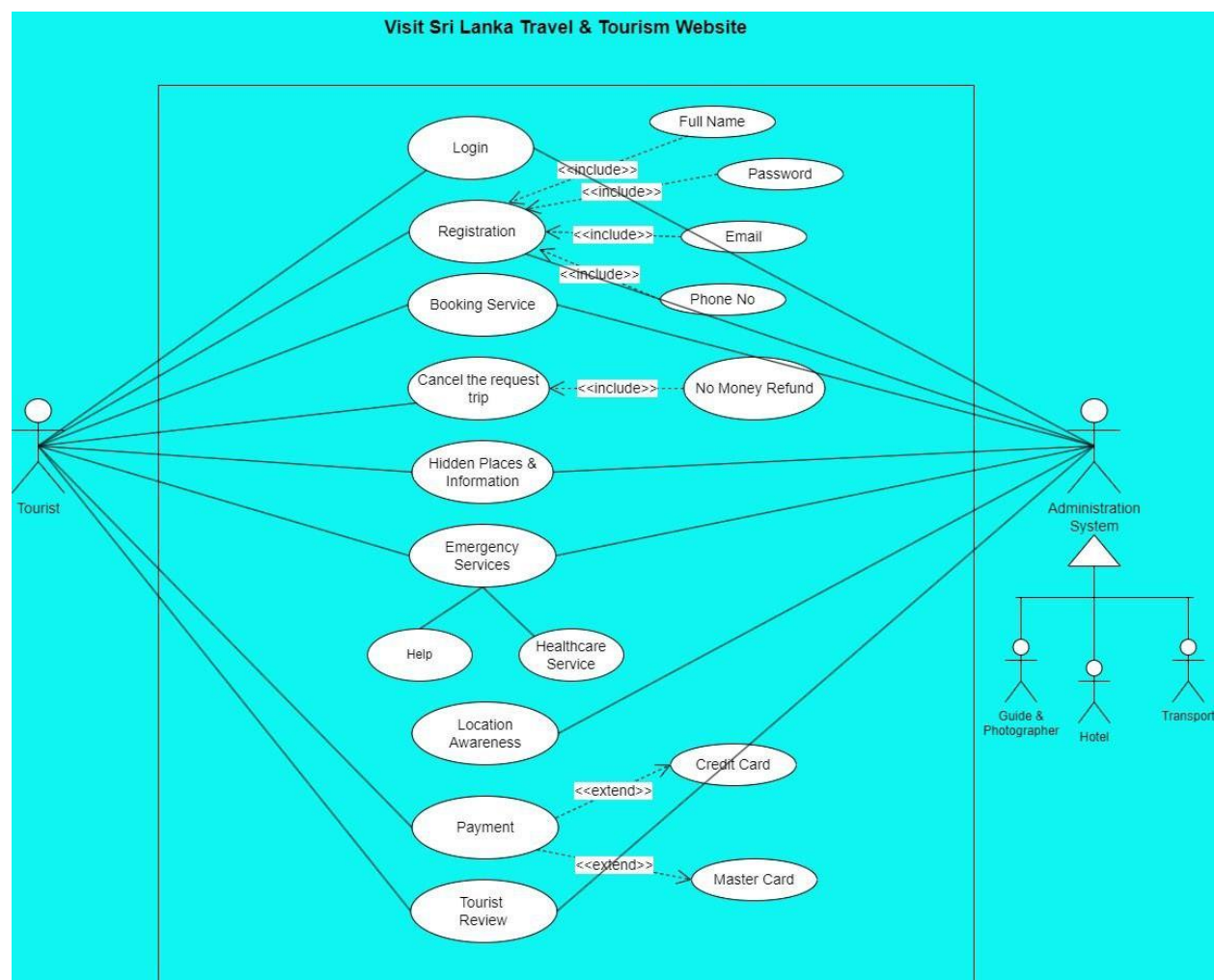


Figure 14 Use case diagram

## 5.2 Description and Priority

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

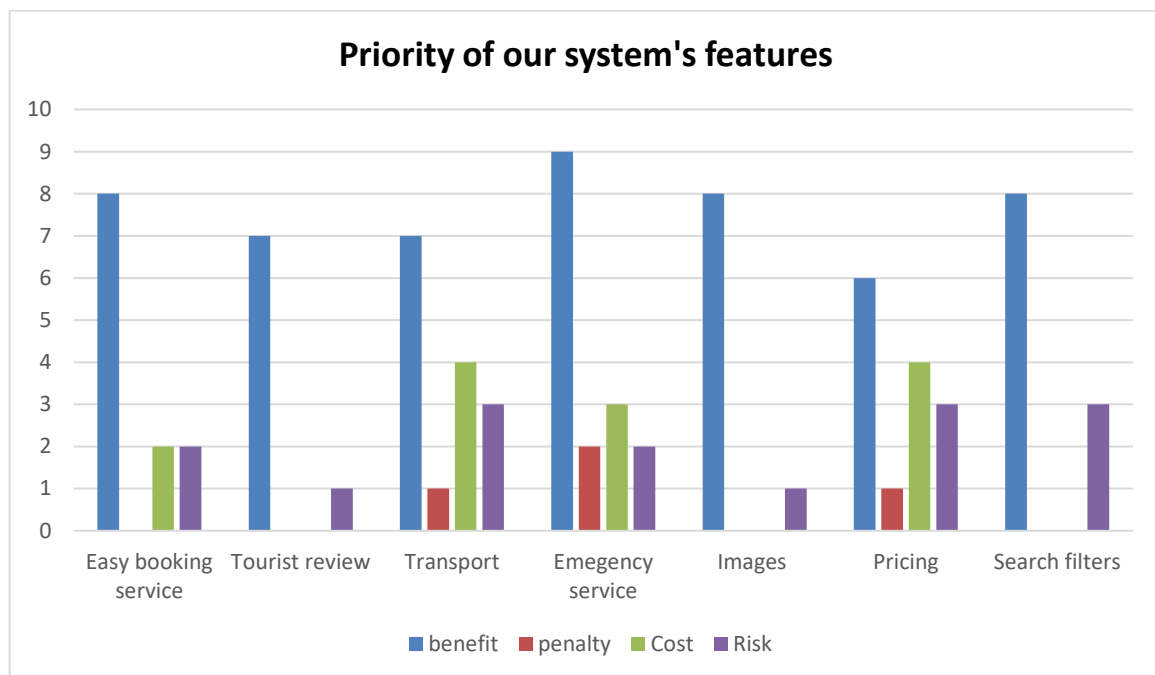


Table 1 Priority of our system's features

## 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 <i>principal author</i> , 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

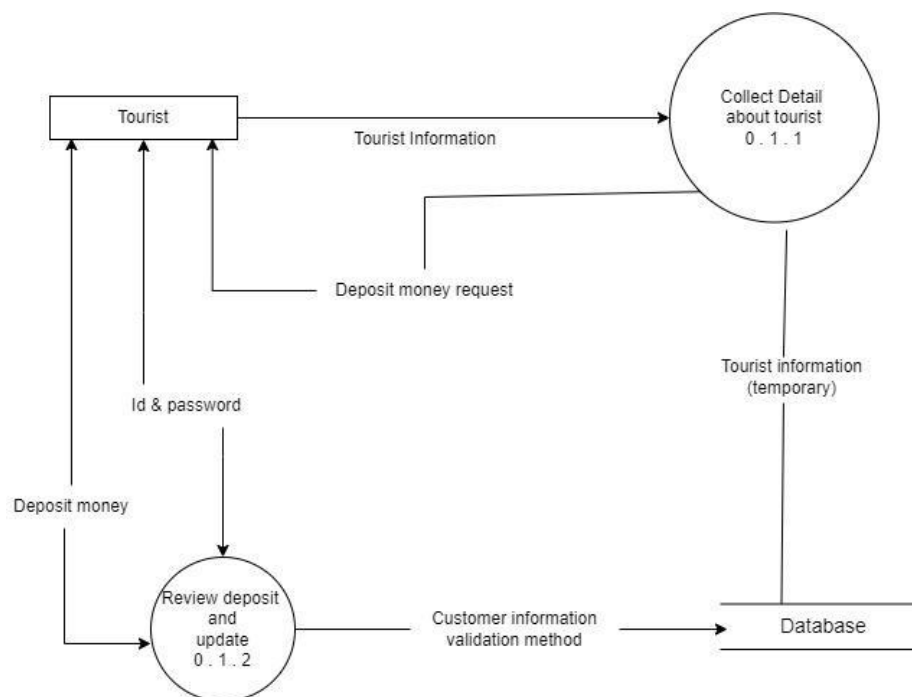


Figure 15 DFD for registration

### Level 2 DFD for processing online request

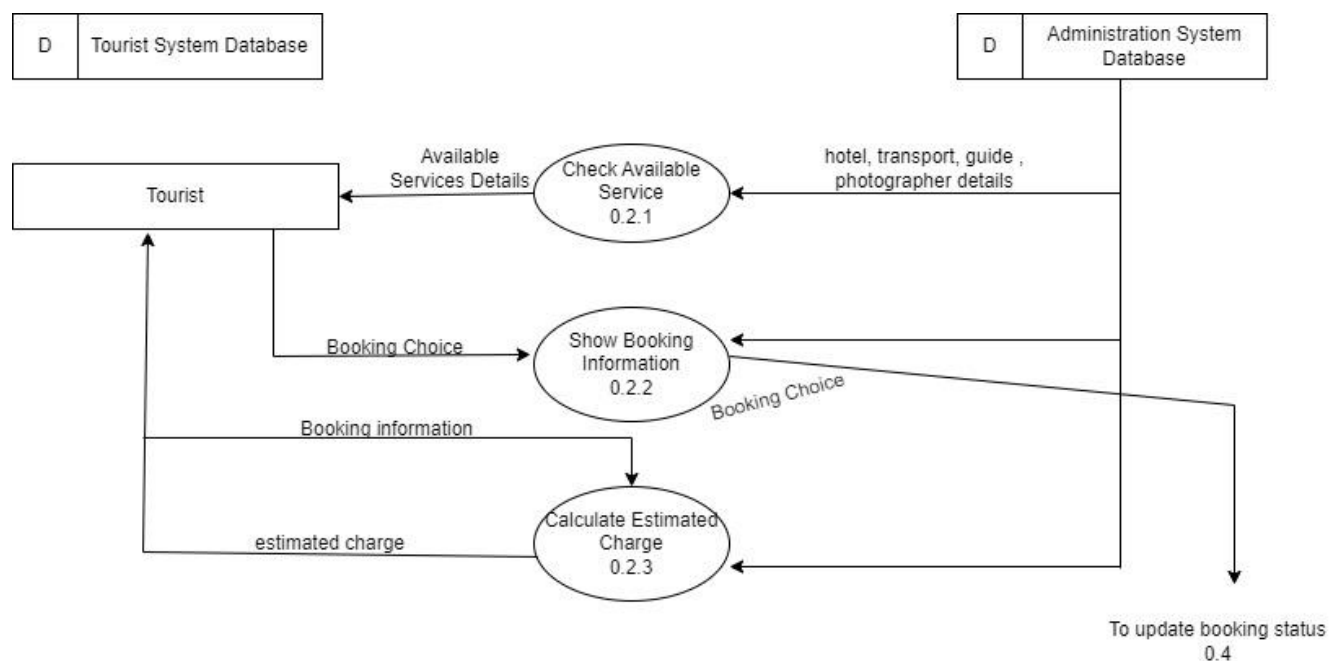


Figure 16 DFD for processing online request

## Level 2 DFD for payment receive and update

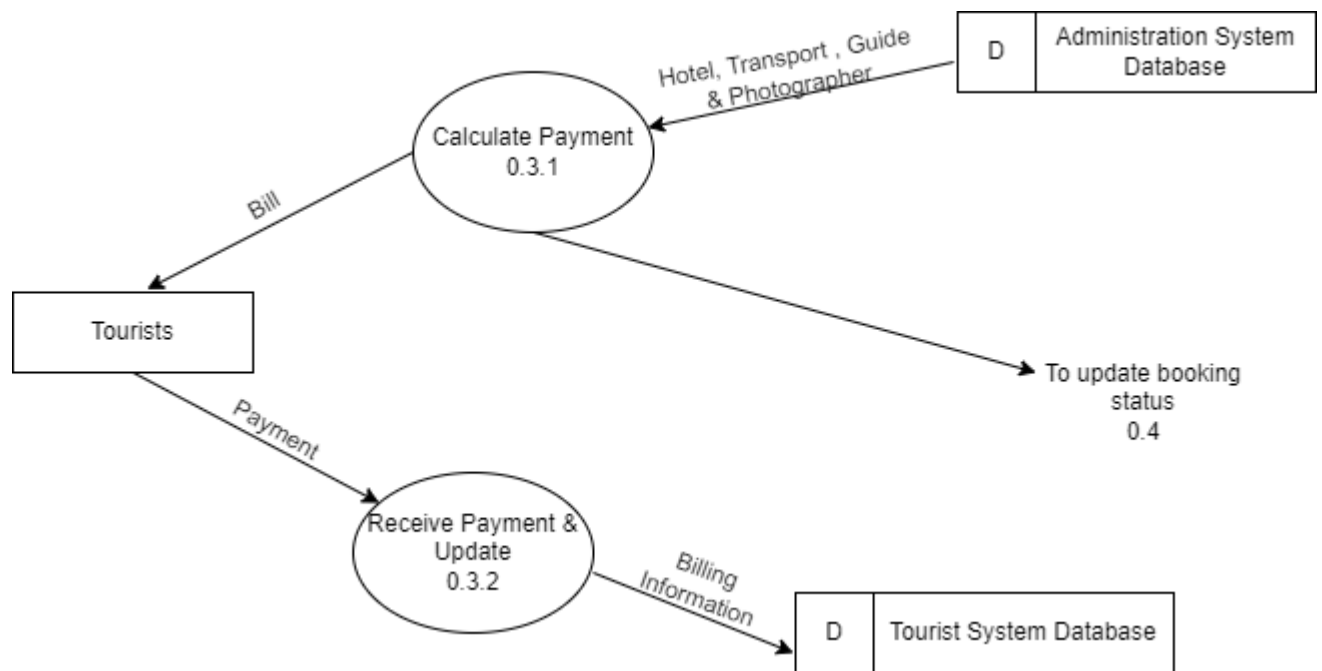


Figure 17 DFD for payment receive and update

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



+94 75 494 95 59



escapetoursandtravels@gmail.com



No.372/2, Government Quarters Road,  
Kallady, Batticaloa.



Date 30.10.2022

Dear Sir/ Madam,

### **Letter to confirm the discussion with the university students**

Four students who have enrolled in the bachelor of software engineering from Open University, Batticaloa, have requested to discuss the state of tourism with the core team of Escape Tours and Travels. Escape Tours and Travels is a sustainable travel pledge working on eco-tourism in the land of singing fish. We offer you unique experiences of tradition, culture, nature, adventure, and the long-lasting history of Sri Lanka.

As per the request, on the 22nd of October, we discussed with the students at our main office from 03.00 pm to 05.00 pm. The students asked a wide range of questions about the tourism sector, and we had a fruitful discussion with them. The main topics we discussed were mentioned below in the bullet points.

- SWOT analysis of the current tourism scenario
- Unique features that can be added to the website
- Current tourism market analysis
- Supply chain and stakeholder analysis
- Forecast for the future tourism development

Yours sincerely,

Shanjeevan A.  
Co-Founder | Director

Figure 18 Letter

A handwritten signature in black ink is positioned above a green rectangular stamp. The stamp contains the word "APPROVED" in white, bold, capital letters.