

# Software Requirements Specification

for

## A Letter from Bangladesh

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5 December 2020

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# Chapter 1

## Introduction

### 1.1 Purpose

The purpose of this Web Application is to strengthen the international tourism market of Bangladesh by offering tourists easy and hassle-free travel experience through the Web providing students as part time tourist guide. The product is intended for use in both at the local market and also the international market. It is also intended to create student employment and give students the opportunity to develop their communications skill.

The plan of process is simple. We are designing a web application, where students would have their respective portfolio as tour guide and tourist from abroad would be able to select them based on the area or locality they want to visit.

The objective is, the tourism infrastructure gets developed and produce more currency so that the tourism industry as a whole can leave an impact on the GDP.

### 1.2 Document Conventions

The software documentation specification are described as follows:

- Written in Times New Roman.
- Heading style: Bold,Times New Roman,Font size:14.
- Regular text style:Italic,Times New Roman,Font size:12.

### 1.3 Intended Audience and Reading Suggestions

**1.3.1 Intended Audience:** The intended audience for this document is developers, Bangladesh Tourism Board, various tourism agencies and testers. The rest of the document will describe the overall description, requirements and features of the product. It is advised to proceed according to this order.

As evident that the website of the Tourism Board and the Parjatan Corporation are not attracting much tourist views. That means we are failing to represent “Beautiful Bangladesh” in front of the world. Through, our project we intend to attract the tourists with interactive design and portraying the natural sights.

**1.3.2 Reading Suggestion:** The document should be read in numerical order to properly understand the intended purpose of this software

## 1.4 Product Scope

The software is a Web Application for local and international tourists. It is mainly intended to streamline tourism and boost the tourism economy of our country.

The goal is to design our system utilizing the students of our country to work as a part time tourist guide and tourist marketing. The entire process will be maintained through our system.

The main outcome that we measure, is that the young students through classified and modern marketing would be able to attract more tourist. Their proper service as tourist guide would leave an impact in the tourist's mind. As a whole, the tourism management system would be developed.

## 1.5 References

1. <http://tourismboard.gov.bd/>

This is the official website of Bangladesh Tourism Board.

2. <http://www.parjatan.gov.bd/>

This is the official website of Bangladesh Parjatan Corporation.

## Chapter 2

# Overall Description

### 2.1 Product Perspective

Our research identifies that twenty years has elapsed of Bangladesh's tourism industry, yet we still see it in a nascent position in comparison to our neighboring countries. Only 3 lacs foreign tourists came to Bangladesh in 2010, of which more than 70 percent came for business and official purposes. The contribution of the earning from tourism to the country's GDP is less than 1 percent. The sector got recognition as an industry in 1999. But it never received attention from the government to become a vibrant industry. We also analyzed hotel revenues and restaurant revenues as a fraction of total retail sales. None of them matters to be too costly, rather the expense in this aspect is far too less to compared to those abroad.

Then we realized the main issue is lack of well-designed policy in the tourism industry. The lack of development of the tourism industry of Bangladesh can be attributed to multiple reasons like less-prioritization of tourism by all previous governments, lack of budgetary allocation and scarcity of trained people in the industry. There is also a lack of publicity and marketing activities.

Now, in approach to our solution, we intend to develop an application system which is going to be a media of communication and a proper marketplace of natural serene, and definitely the students are going to be the "man-power". Students from different universities and colleges around the country, will have their respective portfolio on the app. Students can apply in three sectors- i) tourist guide ii) site/spot marketing, iii) spot management team. The tourist guide will have their portfolio verified through tourism experts and professional trackers, based on their location. The student marketing sector will work to reach more tourist both over the internet and search engines. The site management team is going to work on field to enhance the tourism spot. Tourist from around the globe can connect to the app which will be advertised on different sites and social media. After they reach the app, they can communicate with the guides they find most relevant. International payment methods will be used as a medium of transaction between the tourists and the guides.

### 2.2 Product Functions

The product provides with the following functionalities:

- Give the users a search bar to quickly search about any significant tourist site and additional attractions.
- Includes a site directory that includes an attractive collection of popular tourists' spots and give the user a visually pleasing experience while using the application.
- Provide the user an intuitive and comfortable experience.

## 2.3 User Classes and Characteristics

The user classes for this project will be regular citizens. A user should not require advanced knowledge to use the product. The product must be usable by any English knowing individual. User Classes:

- Reservation
- Site Directory
- Guide Directory

## 2.4 Operating Environment

The main details about it's operating environment is:

- It will be based primarily based on Windows OS.
- The software would be installer based.
- It would include web features like real-time guide selection.
- The software would be deployed in the server and accessed through desktop.
- Future platforms include IOS and Android.

## 2.5 Design and Implementation Constraints

The software is intended for desktop environment only. So, users will not be able to access it using mobile or other platforms. Users should also have to use a modern web browser. Browsers that are too old will not be able to show the content properly. As per hardware, users should have a pc or laptop that has at least 2 GB or more RAM to properly use the software.

## 2.6 User Documentation

The software will include a help menu that includes necessary instructions about how to use the software. Specifically:

- Instructions about how to use the service.
- F.A.Q's(Frequently asked questions)
- Customer support information such as helplines,email addresses.
- Information about the software and the company.

## 2.7 Assumptions and Dependencies

The software process intended to use in case of "A LETTER FROM BANGLADESH" is the "Reuse Oriented Software Process". From the reference mention as earlier, we have already observed the Government Portfolio : <http://tourismboard.gov.bd/>

We intend to use the documentation, contents and features from this website as the site has got less traffic. we would like to create an impact on the government tourism industry.

## Chapter 3

# External Interface Requirements

### 3.1 User Interfaces

This software will consist of several pages with one home page and some other additional pages. In the upper side of the home page, there will be slide show of some attractive pictures from different sites of Bangladesh. On the lower portion, there will be some pictures and detailed information of some popular and attractive places of Bangladesh.

There will be a button all time on one corner of the screen, saying “Make a plan”. If the tourist wants to visit, then he can click on that and start making his plan as shown in the left pic below. But first, he has to fill up a form giving his information. There will also be a option for others who want to work with us as “Tour Guide”.

They will be a button named “Want to join as Guide”. They will click on that button which will take them to another page, where they will fill up a form.

There will also be a button named “Admins”, through which admins can log in and check all the informations and monitor the overall system.

### 3.2 Hardware Interfaces

This app will be basically designed for windows-based desktop PCs. This app will take little space on computer memory. This app requires internet connection as it is an internet-based app.

### 3.3 Software Interfaces

FRONT-END SOFTWARE: JFrame BACK-END SOFTWARE: JSP, JDBC, Xampp, html

To build this software, we will use the above components. The main IDE will be IntelliJ Idea IDE. We will use Xampp to create the database and the tables required. Html will be used to redirect the users to their wanted page. The given data of the users will be stored in the database automatically. Administrators can view, entry or edit data through login for the home page using their username and password if necessary.

### 3.4 Communications Interfaces

This software will be associated with e-mail in order to communicate with the tourists. Also, there will be data transfer and communication as the data given by the tourist needs to be collected and stored on our database.



## 3.5 Functional Requirements

The functional requirements has been mentioned specifically for every feature under Chapter 4.

## Chapter 4

# System Features

### 4.1 Optimized Searching

#### 4.1.1 Description and Priority

The interface must contain a search bar resulting into the closest keyword possible in the “site directory” along with drop down for relative “quick searches” and “most searched tags”. The search page must also display the “most searched” and “top visited” list as well. This is a must-have feature for the software and is so set to HIGH PRIORITY.

#### 4.1.2 Stimulus/Response Sequences

A few stimuli for the user action during the access of this feature is listed as follows:

1. Drop Down List: A quick list for the relative searches displayed in a drop down while searching.
2. “No Results Found” is to be displayed when the entry doesn’t match any keyword.
3. Search result is to displayed in a “Scroll Down” page layout with site thumbnails and short description.

#### 4.1.3 Functional Requirements

The functional requirements are listed below as per the requirements of this particular feature:

- As an User (Tourist)
  - I can view the sites that have been most visited.
  - I can see the seasonal attractions of every place.
  - So that, I can plan my own trip and choose which guide I want.

### 4.2 Site Directory

#### 4.2.1 Description and Priority

The interface must include an attractive collection of popular tourists’ spots. It should give the user a visually pleasing experience while using the site.

This is a must-have feature for the software and is so set to HIGH PRIORITY.

### 4.2.2 Stimulus/Response Sequences

A few stimuli for the user action during the access of this feature is listed as follows;

1. Photobook: Show an extensive number of photos and videos of popular spots.
2. Festivities: Detailed guide about seasonal and major festivities.
3. Reviews: Describe the experience of our previous customers.

### 4.2.3 Functional Requirements

The functional requirements are listed below as the per the requirements of this particular feature:

- As an User (Tourist)
  - I will be able to see different pictures and videos of various popular spots.
  - I can see the detailed guide about seasonal and major festivities on various locations.
  - I can share my thought and and experience as a previous customer.

## 4.3 Database

### 4.3.1 Description and Priority

The software must include 3 databases. Two of them will contain information about the guides and spot. The other will contain information about bookings.

This is a must-have feature for the software and is so set to HIGH PRIORITY.

### 4.3.2 Stimulus/Response Sequences

A few stimuli for the user action during the access of this feature is listed as follows:

1. Book: Allows the user to book a guide.
2. Apply: Allows a student to apply for a job as a guide.

### 4.3.3 Functional Requirements

The functional requirements are listed below as the per the requirements of this particular feature:

- As an User (Tourist)
  - I will be able to books a guide.
- As a Tour Guide
  - I can apply for a job as a guide as I am a student.
  - I can create my own profile.
  - I will be able to provide update about when I will be available.

- As an Admin

I will have full access to the system.

I can monitor when a guide will be available or not.

I can also see when how many tourists have registered and planned their trip.

I may have full access to the database also.

## Chapter 5

# Other Non Functional Requirements

### 5.1 Performance Requirements

Our web app should be able to respond without any delay. Whenever an user searches for any location of any information he should get an instance response. The system should be able to handle large amount of data and should also perform all required functions under all circumstances without any retardation. The website should be very much user friendly and also should handle a vast amount of views at any given time.

### 5.2 Safety Requirements

Every tour guide will be assigned with an ID or the membership number to get access of their own profile and update the status of their availability or any other specifications or requirements. All their personal information will be secured and there is no perceived risks for any external party or to the property.

### 5.3 Security Requirements

Viewers will only be able to view the site but won't be able to modify anything. The data security will be ensured and the necessary information of the tour guides will remain secured. Only systems admins will remain complete control over the system.

### 5.4 Software Quality Attributes

Our web app will instantly show the results to any queries to all the viewers and the database will be well organized to store the huge amount of data about the places and the guides. And also to store data entered by the tourists.

### 5.5 Business Rules

The students are getting a part time job and besides they will also get to know about the culture and tradition of the places from where the tourists belong.

# Appendices

Appendix A

Glossary