Software Requirements Specification

Version 1.0

<<Annotated Version>>

February 15, 2017

Website/ Web app for Ani Travels and Tours

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Submitted in partial fulfillment

Of the requirements of

CT 601Software Engineering

BCT III/I

Table of content

[1.0. Introduction 3](#_Toc475262846)

[1.1. Purpose 3](#_Toc475262847)

[1.2. Document Convention 3](#_Toc475262848)

[1.3. Intended Audience and Reading Suggestions 4](#_Toc475262849)

[1.4. Scope of Project 4](#_Toc475262850)

[1.5 References 5](#_Toc475262851)

[2. Overall Description 6](#_Toc475262852)

[2.1 Product Perspective 6](#_Toc475262853)

[2.2. Product Function 7](#_Toc475262854)

[2.3. User Classes and Characteristics 8](#_Toc475262855)

[2.4. Operating Environment 8](#_Toc475262856)

[2.5. Design and Implementation Constraints 9](#_Toc475262857)

[2.6. User Documentation 9](#_Toc475262858)

[2.7. Assumptions and Dependencies 9](#_Toc475262859)

[3.0. External Interface Requirements 9](#_Toc475262860)

[3.1 External Interface Requirements 9](#_Toc475262861)

[3.2. Software Requirement 10](#_Toc475262862)

[3.3 Communication Interface 10](#_Toc475262863)

[4. Domain Model 10](#_Toc475262864)

[5. System Features (Use Cases) 11](#_Toc475262865)

[5.1. Use cases 11](#_Toc475262866)

[5.1.1 Clients Use Cases 11](#_Toc475262867)

[5.1.2 Staffs use case 11](#_Toc475262868)

[6. Other Nonfunctional Requirements 12](#_Toc475262869)

[6.1 Performance Requirement 12](#_Toc475262870)

[6.2 Security 13](#_Toc475262871)

[6.3. Safety requirements 13](#_Toc475262872)

[Appendix A: Glossary 13](#_Toc475262873)

# 1.0. Introduction

## 1.1. Purpose

The purpose of this document is to present a detailed description of the Web Site/ Web app System for Travels and Tours Company. Here we choose a company named Ani Travels And Tours. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

## 1.2. Document Convention

<<Any comments inside double brackets such as these are *not* part of this SRS but are comments upon this SRS example to help the reader understand the point being made.

This SRS document is prepared as recommended practice By IEEE as per the Standard 830:1998.

This document contains almost all sections to be called as a complete SRS as per IEEE standard.

Refer to the SRS Template for details on the purpose and rules for each section of this document.

This work is based upon the submissions of the February 2017 CT 601. The students who submitted these team projects are Badal Aryal, Santosh Adhikari, Aabishkar Sapkota and Anil Khanal. >>

## 1.3. Intended Audience and Reading Suggestions

This SRS has been prepared for the staffs as well as the developers who work in web domain to prepare the projects related to travel and tourism industry in web. This projects is important because it enables the staffs to realize their problem in their industry and help to interact with large number of audience as well as the developers to specify the specification in their websites/ web app which is a software and it also says many things about their industry as well as their company. At last, we want to tell that it not only identifies their problem but also help to mitigate them. And it also enables the user to learn about the company as well as different places of Nepal.

At last we want say that this SRS is developed for the developers who are working in this project as well as for the project manager for this project.

## 1.4. Scope of Project

This software system will be a Website/Web app System for a local Travels and Tours consultancy in our society. This system will be designed to maximize the efficiency of tourism industry. As we know that Nepal is a perfect place for tourism and we also know that Tourism Industry needs a lot of interaction with the customers so it needs a lot of automation so that there is a lot of opportunity for Software to automate the industry. Realizing that we decide to make a Website/Web app for this company that offers the tourist the profiles of places he is interested in visiting and his online booking of the airline as well as bus ticket to the different places in Nepal.

More specifically, this system is designed to allow the staffs to manage the information about the places and display the information to the customers and communicate with each other in a public website. The software will facilitate communication between staffs, customers both foreign and local people, via E-Mail and different social media platform like Facebook, Twitter by Preformatted reply forms are used in every stage of the webpage updating process through the system to provide interaction between every entity involved in tourism industry. The location of these forms is configurable via the application’s maintenance options. The system also contains a relational database containing a list of places, customers and Staffs Working in Ani Travels and Tours.

## 1.5 References

1. Object Oriented Modeling and Design with UML-Michael Blaha, James Rambaugh.  
2. Software Engineering, Seventh Edition, Ian Sommerville.  
3. IBM Red Books.  
4. IBM TGMC Sample Synopsis.  
5. IBM – www.ibm.in/developerworks .

6.Java - www.sun.com  
7. Wikipedia - *www.wikipedia.com*  
8.Database Management Systems - Navathe.9. Complete Reference - J2EE - Keogh.

10*. Software Requirements Specification document for <Project> -* IEEE Std. 830:1998

# 2. Overall Description

## 2.1 Product Perspective

This software system will be a Website/Web app System for a local Travels and Tours consultancy in our society. This system will be designed to maximize the efficiency of tourism industry. As we know that Nepal is a perfect place for tourism and we also know that Tourism Industry needs a lot of interaction with the customers so it needs a lot of automation so that there is a lot of opportunity for Software to automate the industry. Realizing that we decide to make a Website/Web app for this company that offers the tourist the profiles of places he is interested in visiting and his online booking of the airline as well as bus ticket to the different places in Nepal.

From the perspective of customers it serves as an effective tools for the search of information about different places and from the perspective of Staffs working here it helps to interact with customers and grow their business as well by automating it.

 Fig 1.1- Detailed block-diagram of different entity of our Website/WebApp

## 2.2. Product Function

It serves as an effective tool for the search of information about different places and from the perspective of Staffs working here it helps to interact with customers and grow their business as well by automating it.

**Initial Step-By-Step Description**

Before this use case can be initiated, the Reader has already accessed the Online Resources of

This website or he can do the following things from this website.

1. The customers chooses to search by author name, category, or keyword.
2. The system displays the choices to the Customers.
3. The customers selects the places desired.
4. The system presents the abstract of the places to the reader.
5. The Reader chooses to download the article/pictures.
6. The system provides the requested article.
7. The customers can choose to login on his account and send feedback to staffs.
8. The customers can connect to his Facebook/ Twitter account and receive the news feed.
9. The staffs can do the following functions as system admin

Rewrite

Review

Active Article

Submit

Publish

## 

## 2.3. User Classes and Characteristics

The Reader is expected to be Internet literate and be able to use a search engine. The main screen of the Online Website will have the search function and a link to “Places/ Activity Information.”

The Staffs, customers and Reviewer are expected to be Internet literate and to be able to use email with attachments.

The Editor is expected to be Windows literate and to be able to use button, pull-down

Design and Implementation Constraints menus, and similar tools.

The detailed look of these pages is discussed in section 3.2 below.

## 2.4. Operating Environment

This website/webapp runs on web so we need internet to access it and to get info about it. We have shared our links to another. This websites server is only on Nepal so it runs smoothly on Nepal but slow on another country. This website can act as a ads in another websites as well so users can access it through websites as well. It is programmed using PHP so it is flexible to use in any browser. In it, we use mobile module so the user can easily access it by using mobile devices also.

## 2.5. Design and Implementation Constraints

This is the first website of this organization so we are unware what the customers want from this organization. This limits our performance as a developer. It is created entirely on PHP so it is not flexible in some cases as well as in some devices. The database used here is MYSQL which is another constraint in its performance.

## 2.6. User Documentation

In this website, we provide help for each component present in a website. We even provide manual on how to use website on a page. We tried to make it as simple as possible by using certain symbols on different places of website. We even tried to make it look as good as possible.

## 2.7. Assumptions and Dependencies

The Online Websites/Webapp will be on a server with high speed Internet capability. The physical machine to be used will be determined by the Historical Society. The software developed here assumes the use of a tool such as Tomcat for connection between the Web pages and the database. The speed of the client’s connection will depend on the hardware used rather than characteristics of this system.

The webpage manager will run on the staff’s PC and will contain an Access database. Access is already installed on this computer and is a Windows operating system.

# 3.0. External Interface Requirements

## 3.1 External Interface Requirements

The only link to an external system is the link to the Ani Travels Society (ATS) Database to verify the membership of a clients. The Developer believes that a society member is much more likely to be an effective reviewer and has imposed a membership requirement for a Reviewer. The ATS Database fields of interest to the Web Visiting Systems is member’s name, membership (ID) number, and email address (an optional field for the HS Database).

The *Assign Reviewer* use case sends the Reviewer ID to the ATS Database and a Boolean is returned denoting membership status. The *Update Reviewer* use case requests a list of member names, membership numbers and (optional) email addresses when adding a new Reviewer. It returns a Boolean for membership status when updating a Reviewer.

## 3.2. Software Requirement

**Client on Internet**  
Web Browser, Operating System (any)  
**Client on Intranet**  
Web Browser, Operating System (any)  
**Web Server**  
WASCE, Operating System (any)  
**Data Base Server**  
DB2, Operating System (any)  
**Development End**  
RAD (J2EE, Java, Java Bean, Servlets, HTML, XML, AJAX), DB2, OS (Windows),  
WebSphere (Web Server)

## 3.3 Communication Interface

1. Client (customer) on Internet will be using HTTP/HTTPS protocol.  
2. Staffs (admin) on Internet will be using HTTP/HTTPS protocol.

# 4. Domain Model

Here we chose a travels and tour consultancy named as “Ani Travels and Tours” situated in Talchikhel, Lalitpur which is related to the Tourism Industry. As we know that Tourism Industry needs a lot of interaction with the customers so it needs a lot of automation so that there is a lot of opportunity for Software to automate the industry. Realizing that we decide to make a website for this company that offers the tourist the profiles of places he is interested in visiting and his online booking of the airline as well as bus ticket to the different places in Nepal.

Here we choose a tourism industry as our domain model because we think software can play a major role in automating the industry and it also helps to identify the problem related to industry and helps to tackle them.

# 5. System Features (Use Cases)

This software system will be a Website/Web app System for a local Travels and Tours consultancy in our society. This system will be designed to maximize the efficiency of tourism industry. As we know that Nepal is a perfect place for tourism and we also know that Tourism Industry needs a lot of interaction with the customers so it needs a lot of automation so that there is a lot of opportunity for Software to automate the industry. Realizing that we decide to make a Website/Web app for this company that offers the tourist the profiles of places he is interested in visiting and his online booking of the airline as well as bus ticket to the different places in Nepal.

## 5.1. Use cases

### 5.1.1 Clients Use Cases

**5.1.1.1 Sign In** The client has to Sign In in order to begin his work.  
**5.1.1.2 View profile** Every registered client has his/her own profile containing personal details.  
**5.1.1.3 Update profile** The client has the option to update his/her own profile.  
**5.1.1.4 Create Booking** The Client can create his/her own booking record of tickets.  
**5.1.1.5 Update Booking record** The Clients can update his/her health record.  
**5.1.1.7 Select places** The Clients can select places based on various criteria.  
**5.1.1.8 Take a confirmation** The patient can request for an confirmation to a particular staffs.  
**5.1.1.9 Interact with staffs** The patient can interact with Staffs .  
**5.1.1.10 File complaint** The Clients can file complaint on Staffs to admin.  
**5.1.1.11 Withdraw complaint** The Clients has option to withdraw his/her complaint .  
**5.1.1.12 View thread** The Client can view already created thread in a discussion forum.  
**5.1.1.13 Create thread**  The Clients can create a new thread in a discussion forum.  
**5.1.1.14 Create new post** The Clients can create a new post in a newly created or already present thread.  
**5.1.1.15 Send Message** The Clients can send private message to Staffs and admin.  
**5.1.1.16 Receive mail** The Clients can receive mail.  
**5.1.1.17 Search** The Clients can search for a particular item in website by entering the keyword.

### 5.1.2 Staffs use case

**5.1.2.1. Sign in** The Staffs has to Sign In in order to start begin his work.  
**5.1.2.2. View profile** Every registered Staffs has his/her own profile containing personal and professional details.  
**5.1.2.3 Update profile** The Staffs has the option to update his/her own profile.  
**5.1.2.4 Create travel record** The Staffs can create travel record of a patient.  
**5.1.2.5 Update travels record** The Staffs can make necessary changes to travel record.  
**5.1.2.6 Acknowledge an appointment** The Staffs can accept/rejects the request of client for an appointment.  
**5.1.2.7 Select a Clients** The doctor selects a patient for further interaction.  
**5.1.2.8 Recommend places** The Staffs can recommend the places for Clients.  
**5.1.2.9 View complaints** The staffs views the feedback of the admin to the complaints issued to a Staffs.  
**5.1.2.10 View thread** The Staffs can view already created thread in a discussion forum.  
**5.1.2.11 Create thread** The Staffs can create a new thread in a discussion forum.  
**5.1.2.12Post thread** The Staffs can post a new created or already present thread.  
**5.1.2.13 Send message** The Staffs can send private messages to patients and admin.  
**5.1.2.14 Receive mail** The Staffs can receive mail.  
**5.1.2.15 Search** The Staffs can search for a particular item in website by entering the keyword.

# 6. Other Nonfunctional Requirements

## 6.1 Performance Requirement

The logical structure of the data to be stored in the internal Tickets Manager database is given below.

Clients

Admin

Tickets

Staffs

Books

sent to

Writes\s

has

The performance requirement should be fast so that database server and the main servers must be synchronized with each other to deliver effective service.

## 6.2 Security

The server on which the Online Tickets resides will have its own security to prevent unauthorized *write*/*delete* access. There is no restriction on *read* access. The use of email by an Staffs or Clients is on the client systems and thus is external to the system.

The PC on which the Booking Manager resides will have its own security. Only the admin will have physical access to the machine and the program on it. There is no special protection built into this system other than to provide the admin with *write* access to the Online Tickets to carry out payment.

## 6.3. Safety requirements

The server on which peoples’ info is protected by following the rules to suppress hacking, data loss about personal details of clients, payment methods, tickets etc. The server has enhanced firewall System. In addition to these it is welly protected by Kaspersky Internet Security as well as Anti-Virus Software to prevent any kind of data loss.

# Appendix A: Glossary

|  |  |
| --- | --- |
| Acronyms/Aberration | Definition |
| Client | Persons who are the customers to our travel agency including Tourist and guides |
| Staffs | The working employee on our travel agency. |
| ATS | Ani Travel Society of our travel agency which includes Staffs, Stakeholder and a representative from customers as well as admin. |
| Admin | The main Administrative staff who looks after our agency’s work |
| Developers | The people who develops and looks after its website/webapp. |
| Servers | The Computers or Programs which provide info to/from websites. |
| HTTP | Hyper Text Transfer Protocol |
| HTML | Hyper Text Markup Language |
| PHP | Hypertext Preprocessor |