Software Requirement Specification Document for Star Point tourism's web application

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Table 1: Document version history

Version	Date	Reason for Change
1.0	25-May-2021	SRS First version's specifications are defined.
1.1	2-May-2021	Added use case for User and Admin. Identified remaining functional requirements. Identified hardware constraints
1.3	5-May-2021	Non-Functional Requirements updated. Removed additional unnecessary user interface design constraints.

GitHub: https://github.com/viola911/tourism-application

Contents

Abstract

The topic of this project is a tourism web application that helps clients experience new adventures without spending massive amounts of money. The problem that will be solved consists of time management, importance of client reviews and avoiding duplicate entries.The challenge is to create an application that provides satisfaction for the customers, help in the growth of the company and to keep the application as simple as can be.The web application that will solve the problem will be based on mySQL to save the company's data the client's data in the database automatically.The challenge is to keep the application as simple as can be. The development process consists of the research in the market, understanding the stakeholder's role, and accessing the destination. The proposed solution is a web application that will help in growing the tourism industry and help customers experience the thrill of travelling to different destinations with cheap prices.

1 Introduction

1.1 Document Purpose

The purpose of this application is to connect with the consumers,to work overall on our CRM (customer relationship management), and to provide special offers, discounts and information about the famous monuments in Egypt and in the provided foreign countries.

1.2 Document Scope

The product will include reviews, reservations, information about trips and storing data of the clients in the database automatically. The product will not allow clients to customize their trips; only the offered ones.

1.3 Business Context

The tourism company will save time for itself and for the client as well by using this web application. The admins and the managers will able to organize the data in the database automatically, delete and add new offers on the web application. The clients will be notified about the offers, and their reservations.

2 Similar Systems

2.1 Academic

In the recent state development of tourism in Bali, tourism transactions and promotions are already based on E-Tourism using web media and mobile applications. Making it easier for tourists to access information and services related to ticketing, transportation, accommodation and even travel packages. Retrieved from Datya, A.I. (2019). Implementasi Elemen User Interactive (UI) Dan User Experience (UI) Dalam Perancangan Antarmuka Sistem Informasi E-Tourism Di Bali Berbasis Web.

2.2 Business Applications

There are many similar systems and web applications used in Egypt to solve the problems stated above.One of the used systems is Airbnb,

Airbnb is an online marketplace that connects people who want to rent out their homes with people who are looking for accommodations in that locale. It currently covers more than 100,000 cities and 220 countries worldwide. The researchers contributed in letting the hosts set their own price for travelling or for renting apartments.Airbnb made Additional Services that includes sightseeings, restaurants.However there are disadvantages of this application. Airbnb imposes a number of additional fees in which guests pay a service fee of 0% to 20% on top of the reservation fee to cover Airbnb's customer support. Also there's a lack Of privacy as it can be limited if you are in a home with the host.Inside Airbnb (IA) collects data from places and reviews as posted by users of Airbnb.com. Visitors can download data collected by IA for several locations around the globe.The problem is the use of unverified open datasets.

3 System Description

3.1 Problem Statement

Tourism companies provide help to customers who want to travel without the hassle of searching for accommodation, transportation, currency exchange offices, and tour guides. However the problems tourism companies face is wasted time in finding available rooms through telephone sales, websites and front desk office. The second problem is duplicate entries as some employees may make mistakes when they take the data from the customers. The third problem is not having client reviews which decreases the integrity of the tourism company. The solution of those problems can be solved by providing online help for our company and our customers.Moreover this software will decrease social media advertisements as they are expensive ,increase positive reviews for the company as clients tend to trust other people's opinions when it comes to dealing with agencies. Also it will help organize the database of the company as the software will automatically save the client's data in the database of the company which avoids duplicate entries.

3.2 System Overview

The system has a client server architecture. The overall system is described by navigating the website. the interface is designed to serve tourists the full show schedule in table form with hotel names, locations and transportation times. the personalized schedules will be displayed on a new table for better visualization.

3.3 System Scope

The scope of the web application will only be for reserving vaccational and entertaining trips.The app will not be used for work or residential purposes.

3.4 System Context

The External components of the app are banks, hotels, and online payment methods to get offers and for money transfer.

3.5 Objectives

Creating a web application for customers and employees to work on for efficient and faster services. Customers can freely pick their destination, time to stay and room easier than before instead of wasting time communicating with the employees whether it's in the company or the hotel or transportation office.

3.6 User Characteristics

Customer : The one who uses the system. For which the system is created. Manager : The one who manages the system, provide details to the customers. Administrator : The one who operates the system , modifies ,add or delete the customer records in databases.

3.7 User Stories

As a user I expect the app to be an easy and accurate way to book trips. Give me enough details without scams. I also expect an easier way to communicate with managers, make sure they receive the messages right away and replay to my messages instantly. The importance of this application to me as a user is to have a great experience and discover the hidden places in the world.

4 Functional Requirements

4.1 System Functions

Customer Module: There are two types of users. Visitors to the site and Tourists. The user module has the following sub divisions.Search All visitors to the system can search for tourist centers in Egypt, as per specific location, district, category and season. They can get information about different recreational facilities available at each Tourist center and information about facility providers, quality and cost. Registration The tourist who wishes to avail of the facilities has to register with the system giving all the details.They have to provide a user id and password. The registration process, user login process, security checking regard to these is taken care of in this module. Online Booking In this module tourists can book online the following facilities:hotels, restaurants, and available transportation two weeks in advance. They can also make online payment of bills for booking. They can also cancel the booking and get the payment back after deduction booking charges. Feed back Options to give feed back by the users are coming under this sub module.

5 Interface Requirements

This section describes how the software interfaces with other software products or users for input or output. Examples of such interfaces include library routines, token streams, shared memory, data streams, and so forth.

5.1 User Interfaces

Use some software for primitive plan of your project. Describes how this product interfaces with the user.

5.1.1 GUI

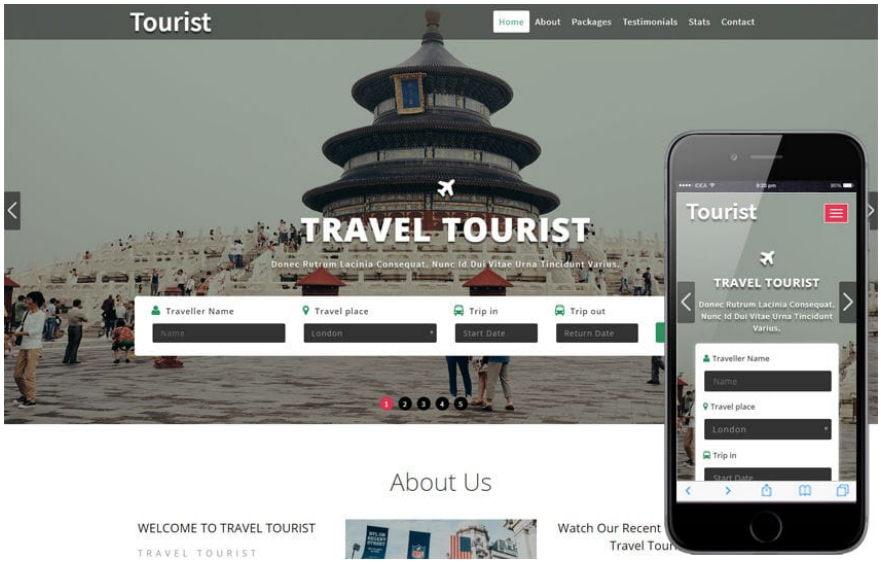

Figure 1: A mock up to the system

6 Non-functional Requirements

Non-functional Requirements Example:

6.1 Security

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

- SOFTWARE REQUIREMENTS:
- Operating System : Windows
- Technology : Java and J2EE
- Web Technologies : Html, JavaScript, CSS
- IDE : My Eclipse
- Web Server : Tomcat
- Database : MySql5.0
- Java Version : J2SDK1.5

6.2 Accessibility

The web application will be accessible for everyone.

6.3 Availability

All software upgrades, patches and fixes should be done without shutting down the application. There should be disaster recovery environment to handle natural disasters.

- Users can depend on the system to be up .
- Users can access the system 99% of the time without failure during working days (Sunday to Thursday)
- Users can access the system 80% of the time without failure during (Friday and Saturday) as routine system maintenance should be scheduled over the weekends.
- Any scheduled system maintenance should not take more than three hours.

6.4 Performance

- The home page's load time should not be more than one second for end users.
- All web pages should load in 3 seconds or less.
- To achieve performance score over than 80 on Google's PageSpeed Insights tests.

7 Data Design

7.1 Data Description

The user data will be saved in an SQL database.The original format of the data is word files, and excel sheets.

7.2 Database design description

Describe the initial database design (provide database schema diagram) and/or description of other data storage items. (According to your Project)

8 Preliminary Object-Oriented Domain Analysis

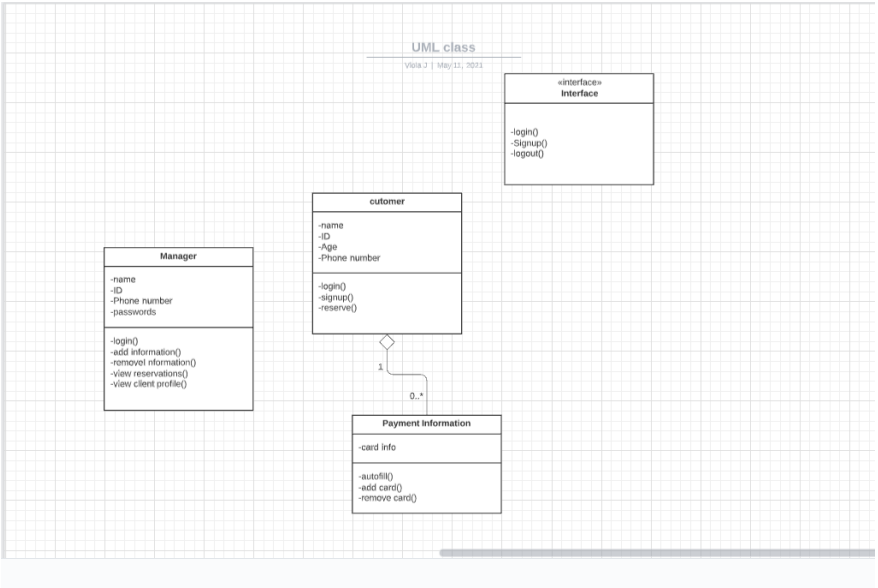

Figure 2: Class diagram

8.1 Class descriptions

This section presents a more detailed description of each class identified during the Object Oriented domain analysis. Add a preliminary class diagram and describe each class in the following structure:

Table 2: Class Name - Customer

Abstract or Concrete: Concrete class
Attributes Name,ID,Age,Phone number
Operations login, signup,reserve

9 Project Plan

This section provides the project plan, including the major tasks to be accomplished, their inter-dependencies, and their tentative start/stop dates. The plan also includes information on hardware, software, and resource requirements. Use `https://trello.com/` to create a time plan showing tasks and which team member is assigned to it of your project.
Provide a table to describe the plan including the project's task and who is responsible for this task. Table 3 shows a simple example.

The project plan may be accompanied by one or more PERT or GANTT charts such as the chart shown in Figure 3.

Table 3: Project name time plan

Id	Task	Start Date	Number of Days	Team Member
1	Requirements Gathering	12/10/2020	10	X, Y
2	Work on GUI	12/21/2020	15	Z, Y
3	Pre-Processing	12/21/2020	5	X
4	Feature Extraction	12/26/2020	5	X, Z, Y
5	Classification	12/31/2020	10	Z
6	Writing Paper	01/05/2021	30	X, Z, Y
7	Experiments	01/10/2021	20	X, Z, Y

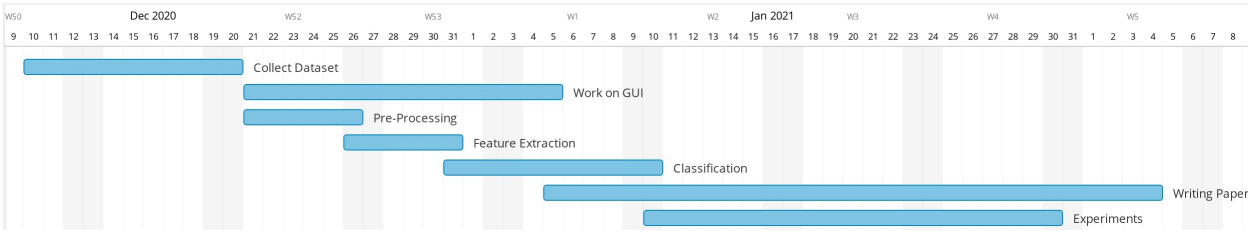

Figure 3: Project name GANTT Chart

10 Appendices

Specifies other useful information for understanding the requirements. All SRS documents should include at least the following two appendices:

10.1 Definitions, Acronyms, Abbreviations

Provides definitions of unfamiliar definitions, terms, and acronyms.

10.2 Supportive Documents

Include in this section examples of any collected documents such as paper work samples, Communications with the client, etc.