
Software Requirements Specification

for

TourPlanner

Prepared by Team IndexOutOfBoundsException

Fall 22, SAD theory, Section-C

Second of January, 2023

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the Web Publishing System. 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 Conventions

We are using the standard template for making this **SRS Paper** which is commonly used.

1.3 Project Scope

The main purpose of this project is to help tourist. This project will provide a tourist complete guideline to make a tour. This project will help a tourist when the tourist is making plan of a tour to end of the tour. Mainly, this project will minimize the **external hassle** of a tourist. We will provide **search and browse tours, Booking a tour, Customer individual accounts, a secure payment system, tour itineraries, tour reviews and ratings, customer support and mobile compatibility**. We will provide a chat-bot feature for immediate customer support. Our project will fully dynamic. First, we will consider regional space then we will extend it globally. This project will provide Hotel booking, Bus ticket Booking and also online advertisement. We will follow the **Upselling and cross-selling** and **Build a strong community** Strategy.

1.4 Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of this project. It describes the informal requirements and is used to establish a context for the overall description and specification in the next chapter.

The third chapter, System Features, this section will describe all features and how it will work.

The fourth chapter, External interfaces, this section will describe what will be the user interface, what will be the hardware interface, software interface and all of this function will be connected internally.

The Fifth chapter, UML Diagram, this section shows the connectivity of project internal functions. All diagrams are attached in this section.

The Sixth chapter, Nonfunctional requirements, this section will describe the performance, safety, security and quality of this project.

The seventh chapter contains the development planning and roadmap which will be followed by the developer team

And the last one will describe the external part.

1.5 References

Template → https://exinfm.com/training/M2C3/srs_template.doc

Website → <https://www.geeksforgeeks.org/software-requirement-specification-srs-format/>

2. Overall Description

2.1 Product Perspective

- The end users can enjoy the best deal of tour planner by choosing "Tour Package" according to their choice.
- The user can also book suitable hotels including transport facilities via "Tour Planner" and reserve their seats for a tour plan which they choose or like.
- Users can share their feedback as a comment, which will show on the website.
- Free book reading is available for users to enjoy their free time.
- In addition, "Tour planner" software system provides real-time weather information and maps and chatbots to keep users certain.

Although it is a continuation of the Tour and Travel Management System, it offers a number of very distinctive features that are also relevant to daily life. We developed the "Tour Planner" system to provide a search platform where users may choose their tour destinations depending on their preferences. This system also provides information about tours, such as cities, provinces, and tourist hotspots. In contrast to the local tour and travel management system market, tourists can also obtain maps, navigation systems, and weather information using "Tour Planner".

2.2 Product Features

The main features are, weather forecasting, news blog, bus ticket booking, hotel room booking, travel package booking & free books for reading. We are giving a graphical representation for weather forecasting which will help the user to catch the info within a moment. Beside these we are providing popular destinations based on every current situation.

2.3 Operating Environment

Our software is compatible for almost every type of internet browsing able devices, for example computer, smart phone, smart watch, tablet. Our system is fully responsive for every device. This system can be accessed by the following OS: Windows, Linux, MacOS, Android version 5.3 or upper, IOS version 4.0.1 or upper.

3. System Features

Here is the main feature list of TourPlanner, these all features will be implemented firstly and then there will be added some static pages, for example about info, contract info, more about us and some footer for each page.

3.1 Weather Forecasting

- 3.1.1 For weather forecasting we are providing 6 days weather information to the user for each 3 hours, it will show the temperature, feels like temperature, humidity, wind speed, sky status, sun rise and sun set info
- 3.1.2 We are giving a graphical view to the user so that they can understand the weather condition with just a look, no need to spend time to understand the situation of the selected place.

3.2 Bus Ticket Booking

Users can book bus tickets from our application for almost every tourist spot from Dhaka right now & we are planning to provide it from other places as well.

3.3 Hotel booking

Users can book hotel rooms from our system for every tourist place in Bangladesh.

3.4 Package booking

Tour package, that will include bus ticket, hotel room, sightseeing, food and all other facilities.

3.5 Blog News

There will be a section that contains a blog card with the information of tourist spots, users can see the real time verified update of any place there. Only an admin can write a blog but a general user can view and make comments there.

3.6 Free Books

We are providing pdf books with the world's largest free book library. Users can search and read books from our site but they will not be able to download any book.

4. External Interface Requirements

4.1 User Interfaces

For UI design we are following the 3 golden rules:

Rule 1: Prioritize consistency and usability

This rule really combines two other, overlapping rules from Shneiderman's list. A web page or app should have a uniform design throughout, from the prompts and menus to the overall appearance. Consistent commands should be expected, and designs should be accessible and usable by as many people as possible.

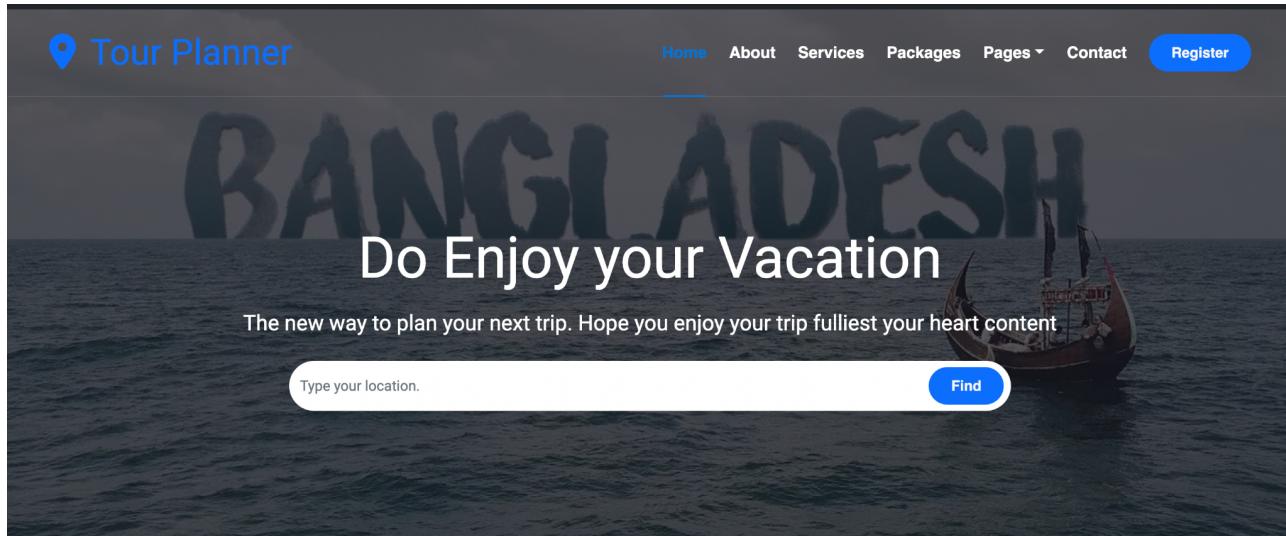
Rule 2: Make the interaction comfortable and clear

Make sure the page contains nothing that could lead a user astray. Provide detailed feedback when users take activities so they may determine whether the action was successful. This rule's objective is to provide consumers a sense of closure and relief so they know they don't need to think about contingency plans.

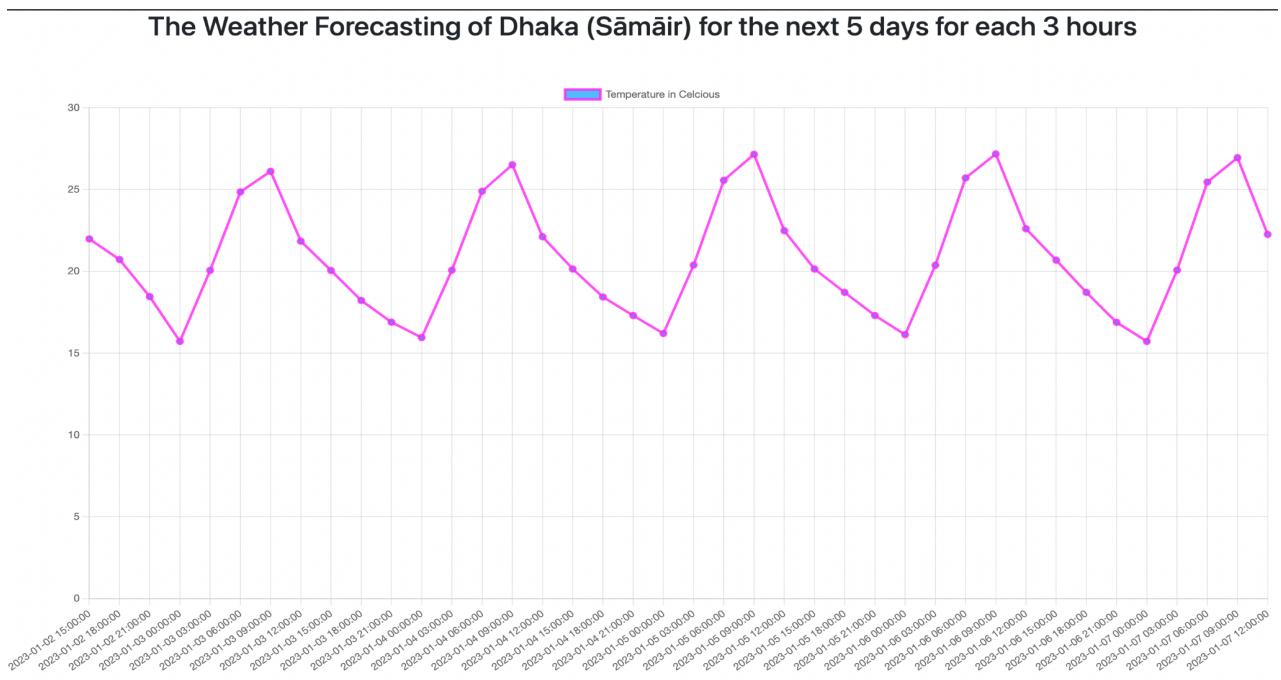
Rule 3: Prevent errors

Actions should be as reversible as feasible in case an error is made. Particularly when the units of reversibility change between a single action, a data input activity, or a whole series of actions, easy action reversibility can reduce user anxiety, encourage exploration of novel possibilities, and save users time.

Here are the sample of our UI design



for search the weather of any place



Graphical View of Weather Forecasting

Trending Blogs



Vacation to Tanguar Haor

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum

[Comment](#)

Hasibul Rupok
really nice place

Bipul Lal
not at all

Hasibul Rupok
dummy comment



Sajek Valley update

Sajek Tripuri Valley is one of the most popular tourist spots in Bangladesh situated among the hills of the Kasalong range of mountains in Sajek union

[Comment](#)

Muntasir Ayan
demo comment

Bipul Lal
first time i visited there on 2017

Hasibul Rupok
one of my fav place



Saint Martain Island Update

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum

[Comment](#)

Muntasir Ayan
demo comment

Bipul Lal
cool place

Hasibul Rupok
dummy 3

Blog Section

Search Your Hottel Here

[Find](#)

Hottel Tajmahal

Coxs Bazar, Kolatali

Reating: 5 ★

Ziya Guest In

Coxs Bazar, Amtoli

Reating: 3 ★

Hotel Sea Shine

Coxs Bazar, mainroad

Reating: 4 ★

Long Beach Hotel

Coxs Bazar, kolatali

Reating: 4 ★

Hotel Search Section

Awsome Package



cox bazar 3 day(s) 2 person

\$200.00
★★★★★

Visite the largest beach of the world with us by spending minimum cost.

[Read More](#) [Book Now](#)



bandarban 3 day(s) 2 person

\$180.00
★★★★★

Lore ipsum dolor sit amet, consectetur adipisicing elit. Porro, illo? lorem10

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sajek vally 4 day(s) 3 person

\$250.00
★★★★★

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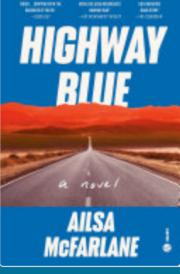
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Package Card View

Book Finder

Search

Search Result



Highway Blue
Author: Ailsa McFarlane
Publisher: National Geographic Books

[Read Book](#)



BLUE HIGHWAYS Revisited
Author: Edgar I. Ailor
Publisher: University of Missouri Press

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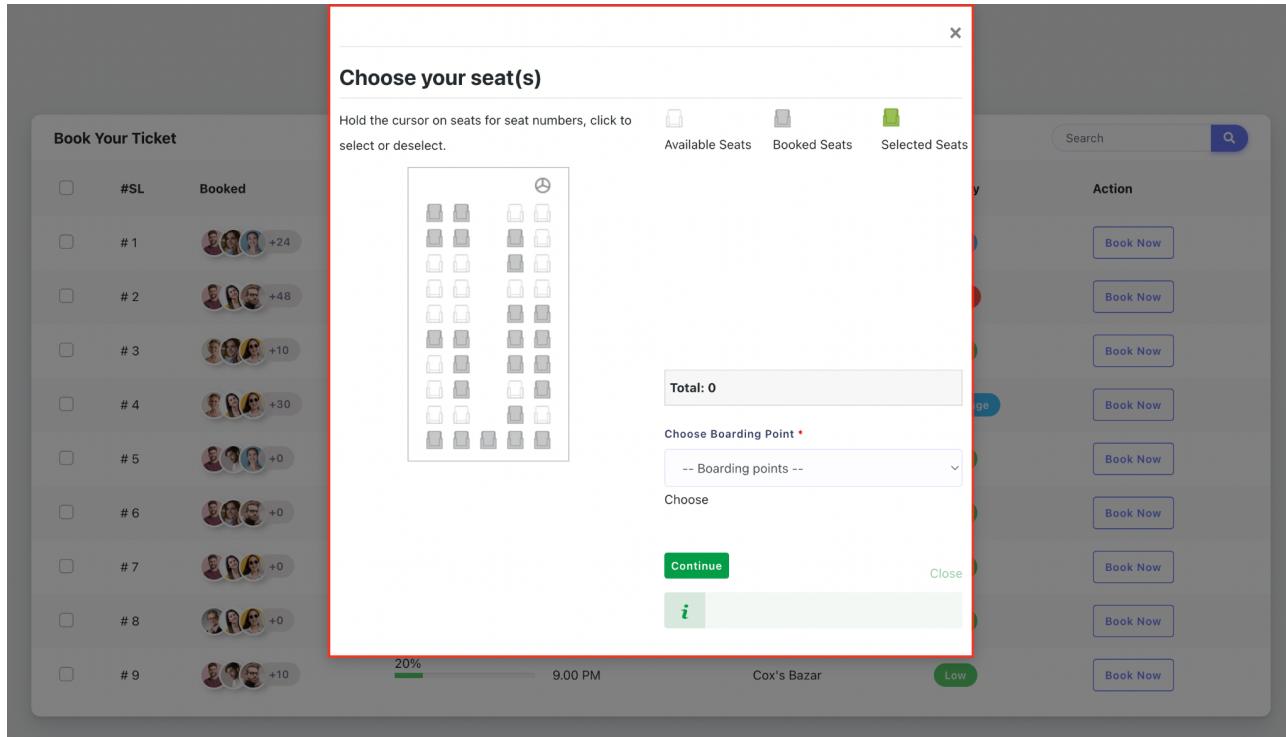


Blue Highways
Author: William Least Heat-Moon
Publisher: Macmillan Reference USA



Blue Highway
Author: Diane Tullson
Publisher: Markam Ont · Fitzhenry &

Book Search & Search Result



Bus Ticket Booking

4.2 Software Interfaces

For this application, we are using MySQL database and php as server site language. This system has a lot of independence(mainly on API), it will use the latitude and longitude API based on city name, weather forecasting API based on location, google book API, bus API for ticket booking, hotel API for hotel booking, gmail API, AmarPay payment gateway.

4.3 Communications Interfaces

For communication we are using Gmail API for email communication and Bulk SMS Gateway for short message service over sim card.

Beside this it requires HTTPS protocols. In our system, the user's data will be fully encrypted by using the SHA-1 algorithm.

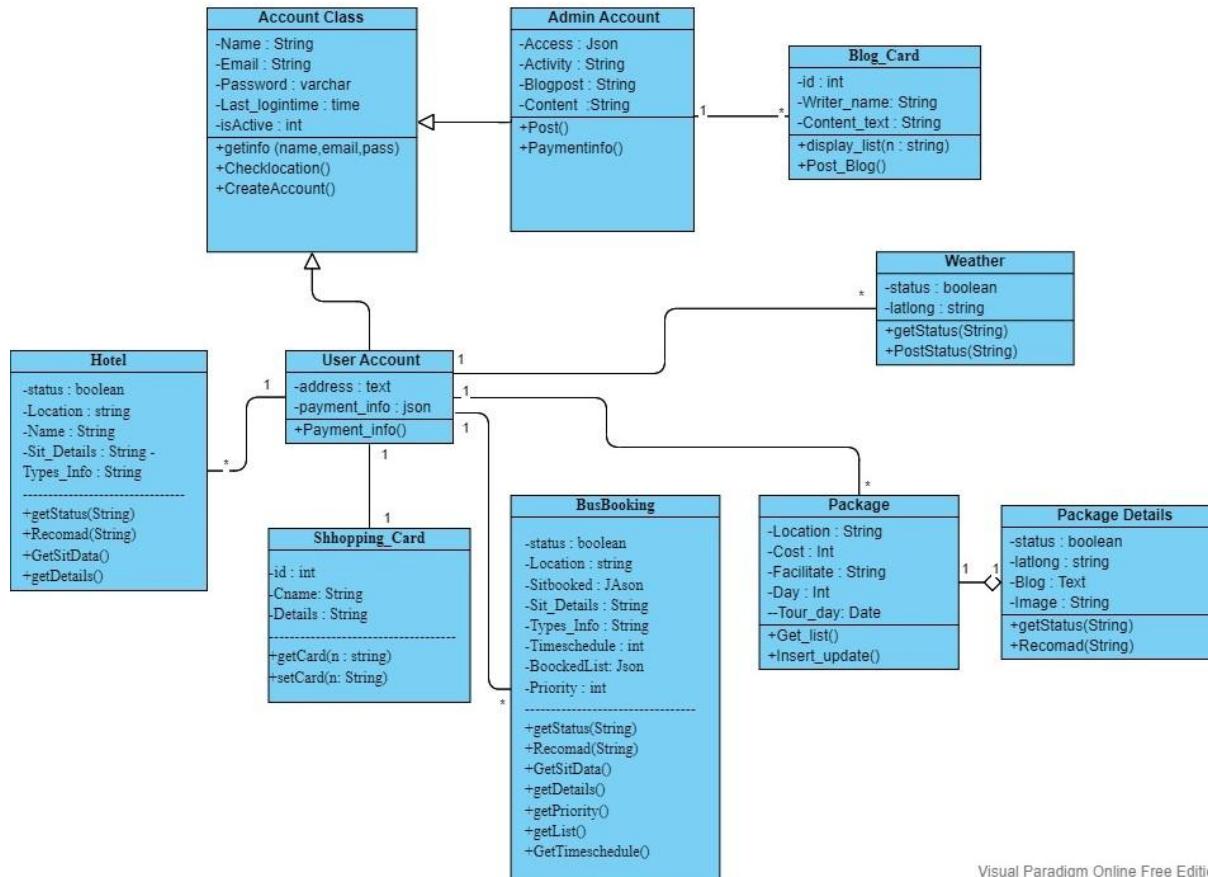
5. UML Diagram

5.1 Class Diagram

A collection of classes, interfaces, affiliations, collaborations, and restrictions are portrayed in a class diagram. It also is referred to as a "structural diagram."

Class diagrams are static diagrams. It represents the application's static view. Class diagrams are used to create executable code for software applications as well as for visualizing, explaining, and documenting diverse elements of systems.

The characteristics and functions of a class are described in a class diagram, along with the restrictions placed on the system. Because they are the only UML diagrams that can be directly mapped with object-oriented languages, class diagrams are frequently used in the modeling of object-oriented systems.

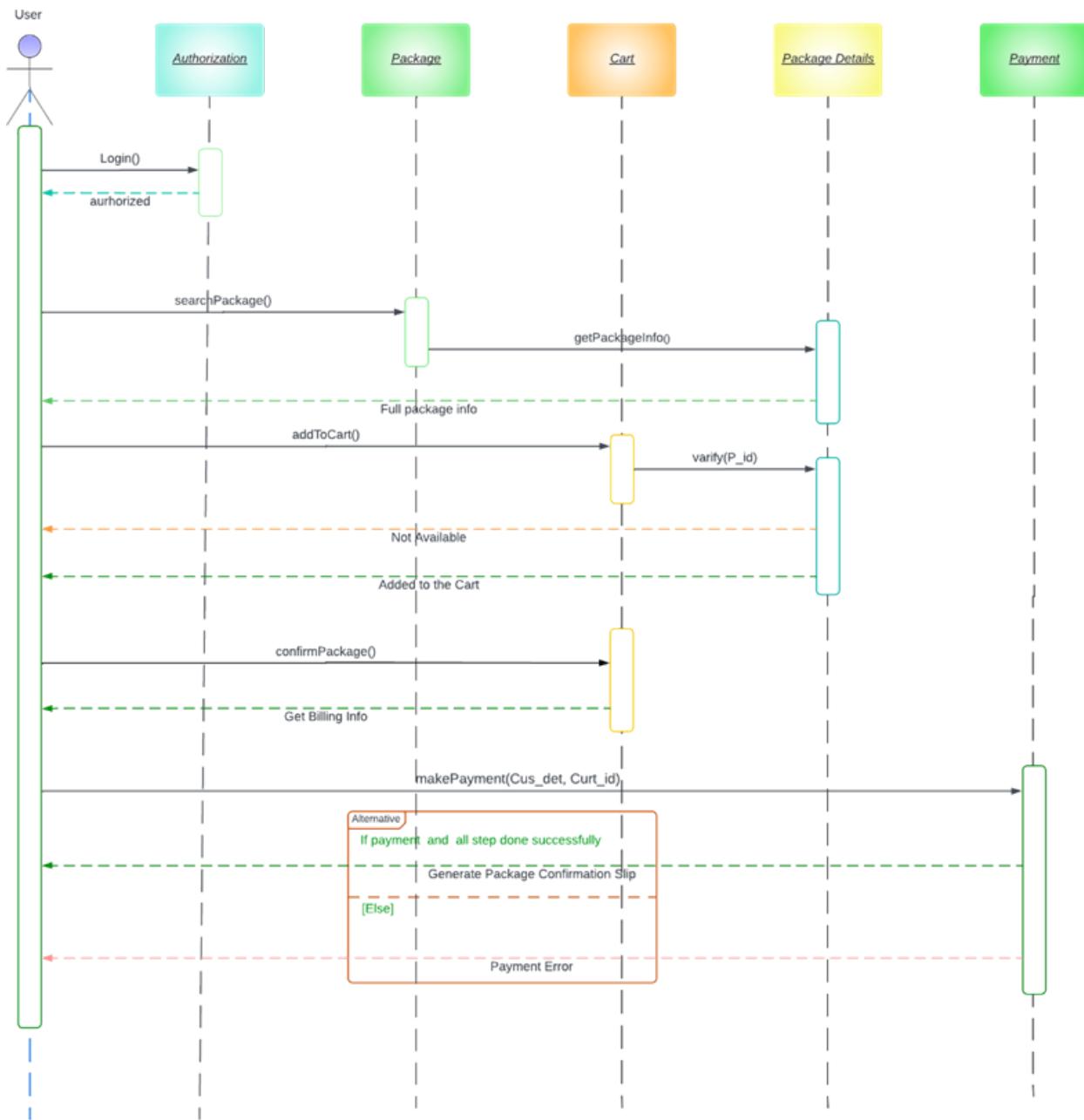


Visual Paradigm Online Free Edition

5.2 Sequence Diagram

Sequence diagrams depict interactions between classes as a series of messages sent over time. They are also known as event diagrams. A sequence diagram is an effective tool for visualizing and validating various runtime scenarios. These can assist forecast how a system will act and identify responsibilities that a class may need to have while modeling a new system.

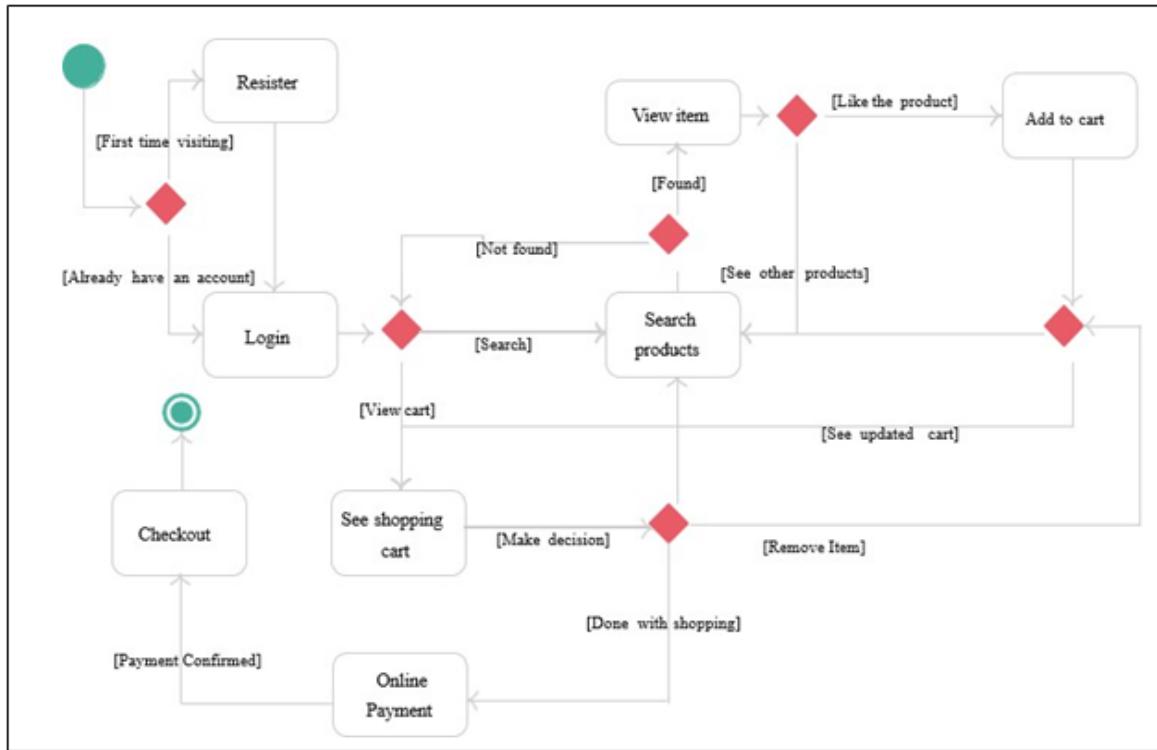
It illustrates the explicit sequence of messages sent between objects during a specific interaction. Because sequence diagrams highlight the time-based ordering of activity among a group of objects, they are extremely useful for comprehending real-time specifications and complicated use cases.



5.3 State Diagram

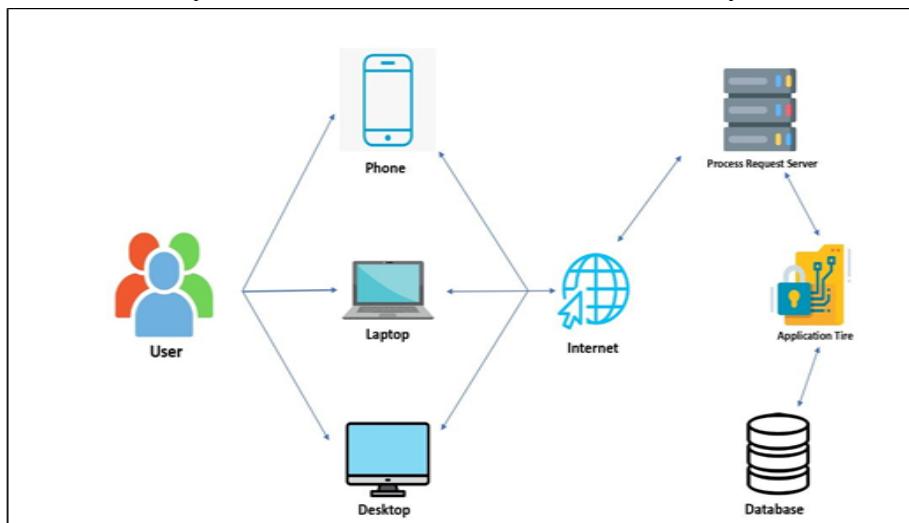
Specifically, a state diagram describes the behavior of a single object in response to a series of events in a system. Sometimes it's also known as a Harel state chart or a state machine diagram. This UML diagram models the dynamic flow of control from state to state of a particular object within a system. The behavioral state machine diagram shows the different states that a

single instance of a class passes through during its life in response to events, along with responses and actions.



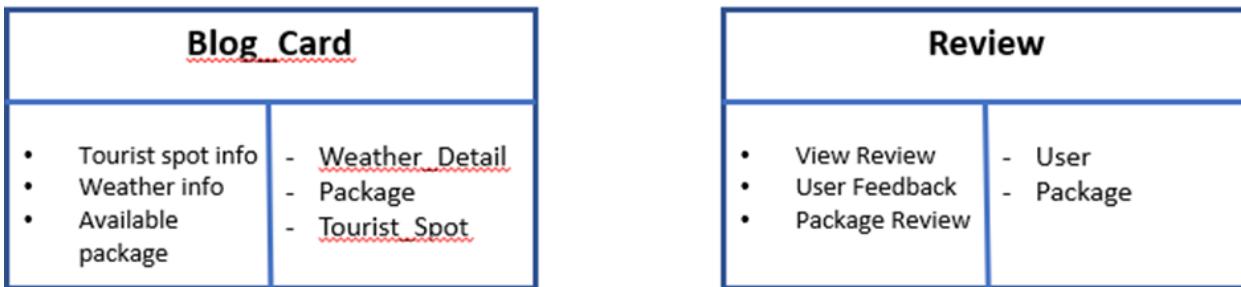
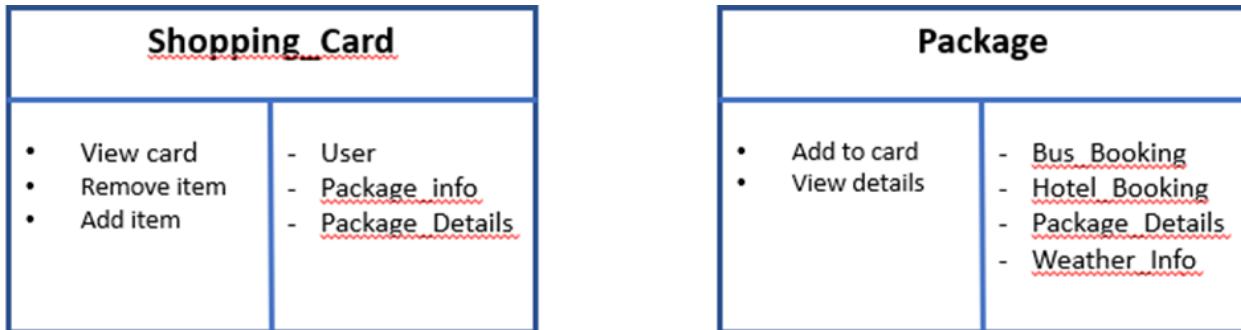
5.4 Deployment Diagram

A UML deployment diagram is a diagram that shows the configuration of run-time processing nodes and the components that live on them. Deployment diagrams are a kind of structured diagram used in modeling the physical aspects of a system or a platform. It shows how the end-users are accessing the system and how the system is serving the service. It only covers the basic structured view of the system without going into details.



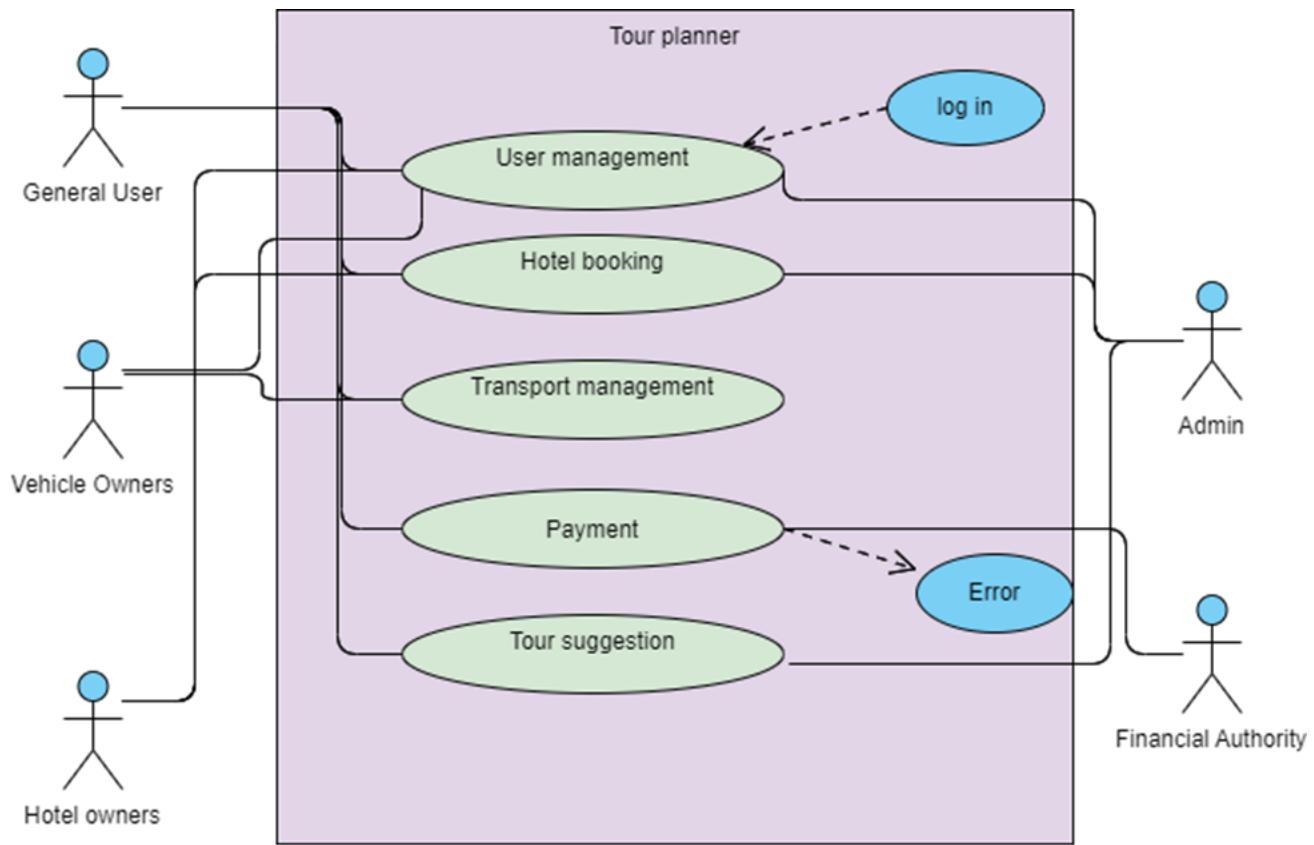
5.5 CRC Diagram

CRC Diagram – Class Responsibility Collaboration Diagram It represents each class's responsibilities and with which class it collaborates to complete its responsibilities.

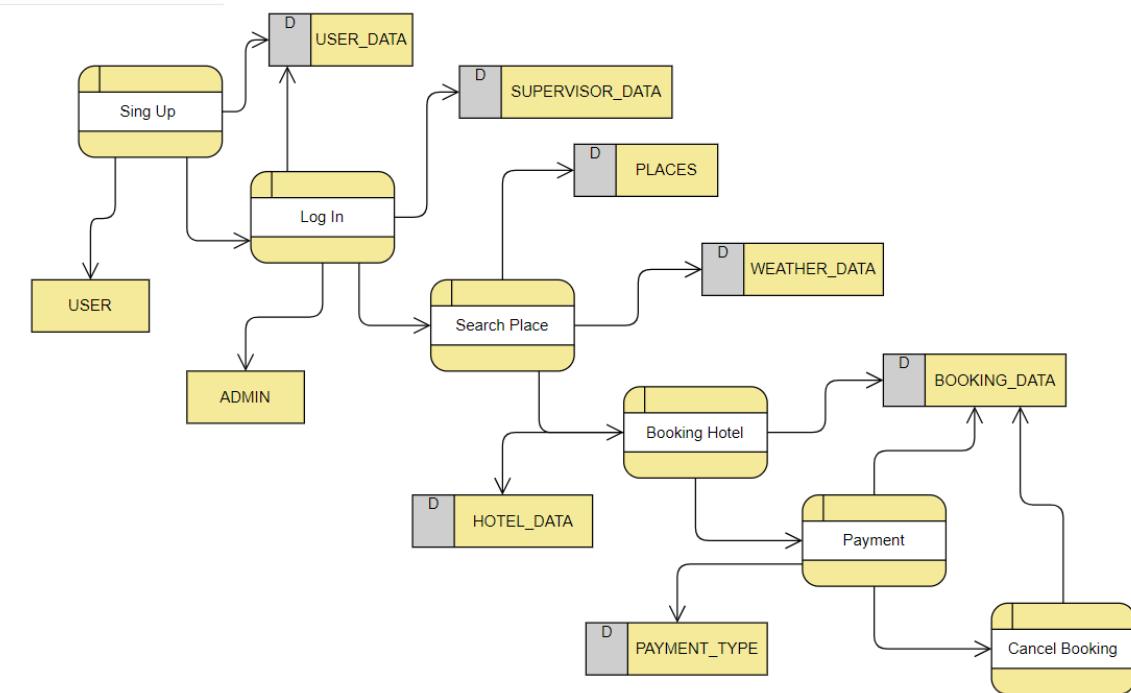


5.6 Use Case Diagram

According to Wikipedia, In software and systems engineering, a use case is a list of actions or event steps typically defining the interactions between a role and a system to achieve a goal. The actor can be a human or other external system.

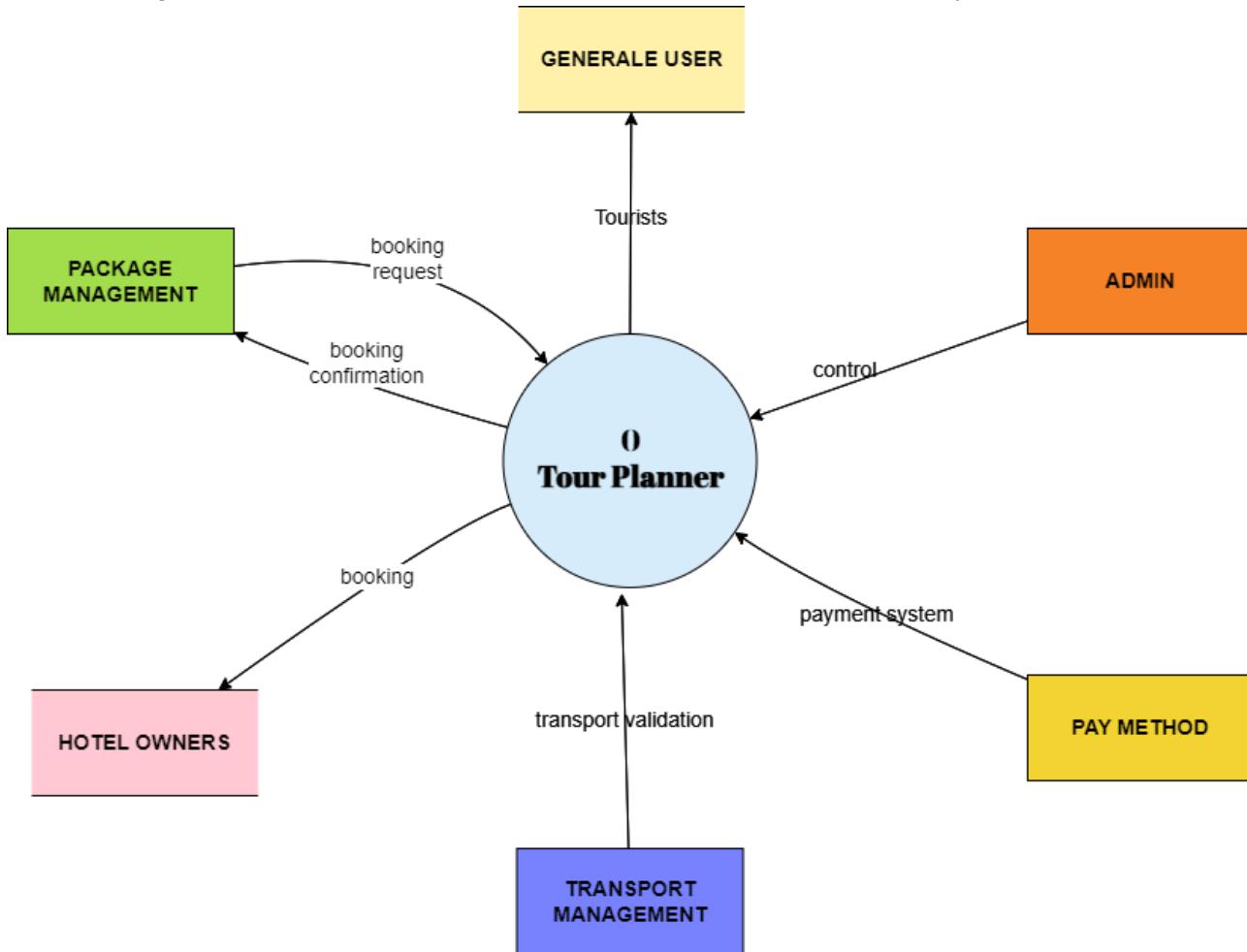


5.7 Data Flow Diagram



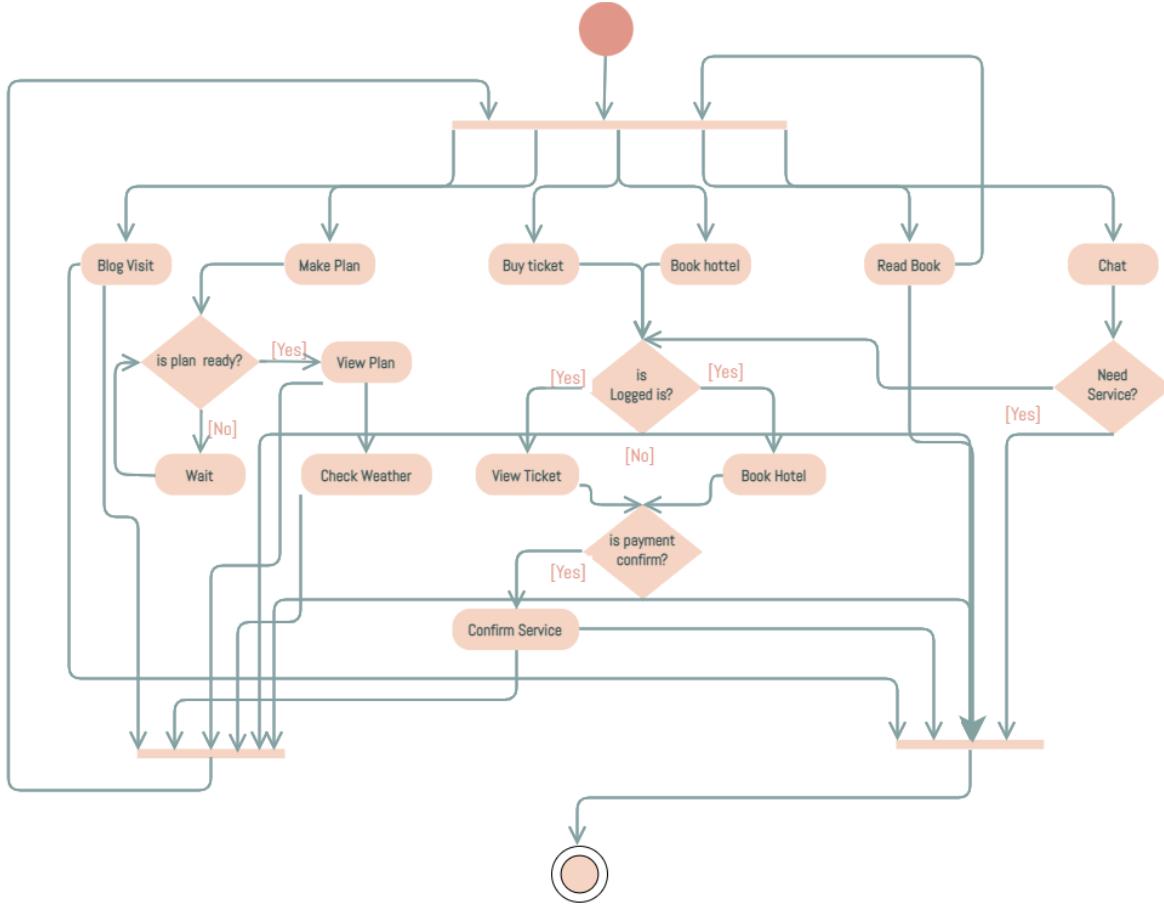
5.8 Context Diagram

A context diagram outlines how external entities interact with an internal software system.

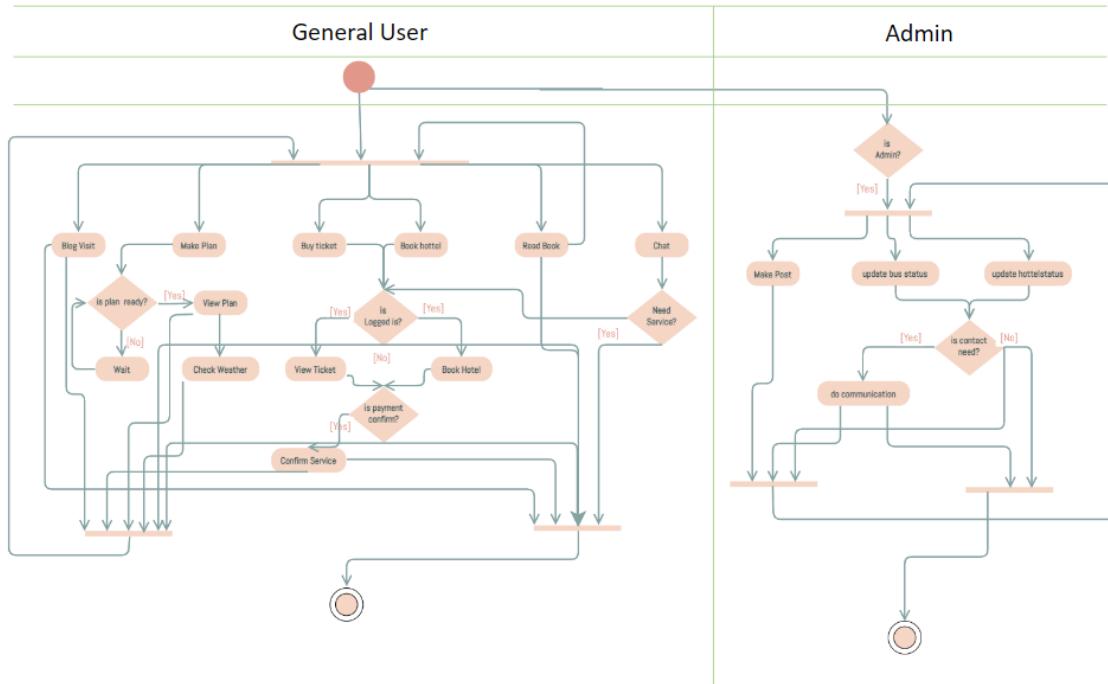


5.9 Activity Diagram

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.

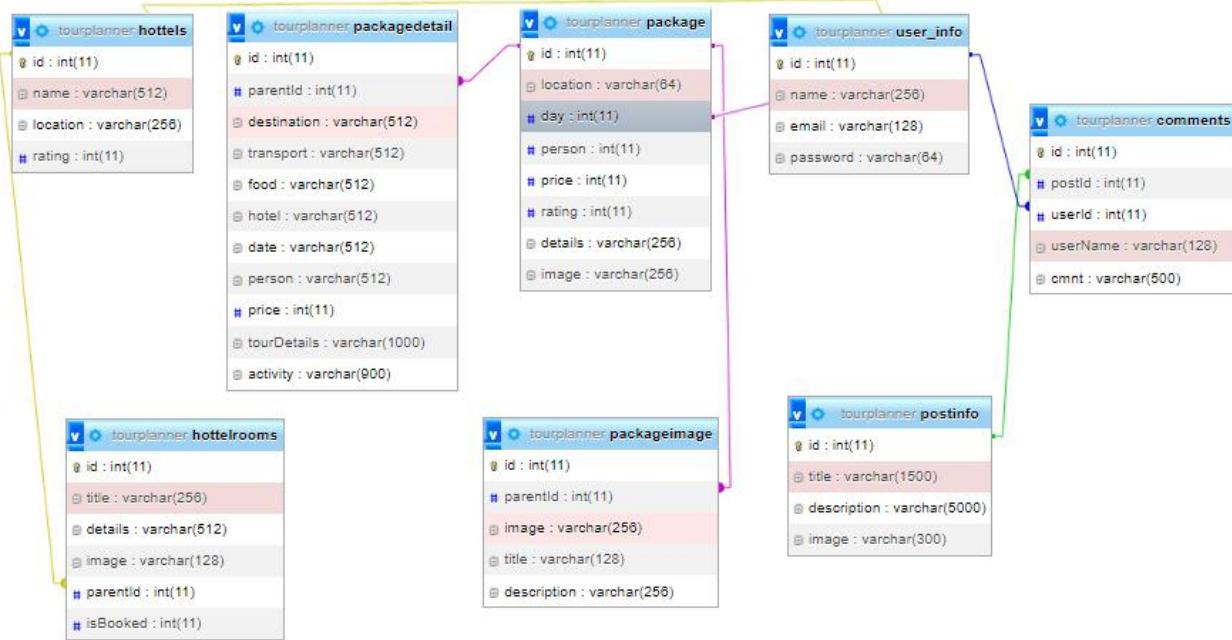


5.10 Swimlane Diagram



5.11 Database Design

Here this diagram shows the database tables and the relationship between them.



6. Other Nonfunctional Requirements

6.1 Performance Requirements

Speed of response, execution time, storage capacity

6.1.1 Speed of Response:

The system must have a very decent and smooth response to interactions. Otherwise, it may not be appealing and comfortable for users to use, so we use raw code.

6.1.2 Execution Time:

The system must execute all functions very quickly in order to ensure that urgent tasks are notified and attended as soon as possible.

6.1.3 Database:

The system must have a well structured database in order to be able to retrieve information related to events and tasks with good speed, and the DB must be future scalable.

6.2 Safety Requirements

The recovery technique recovers a previous copy of the database that was backed up to archival storage and repairs any substantial damage to a large chunk of the database caused by catastrophic failure, such as a disk crash. It also redoing the actions to recreate a more recent state.

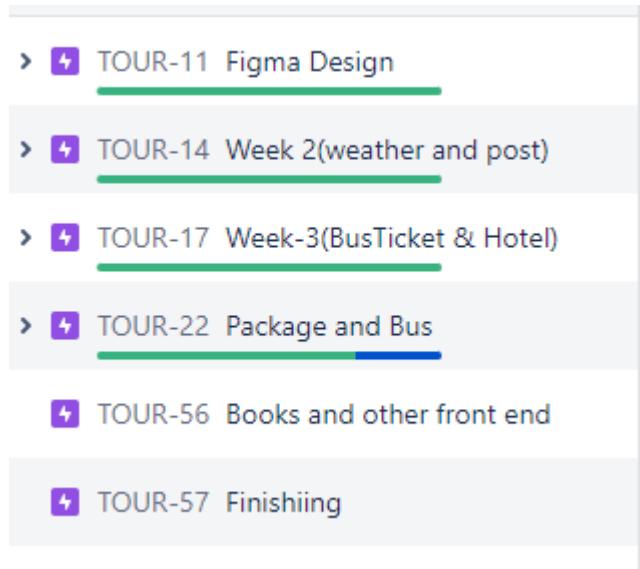
6.3 Security Requirements

Database partners must be chosen very carefully as the security system needs special access to the database, thus increasing the risk associated with it.

7. Planning and Roadmap

7.1 Sprint Cycle

This Sprint Cycle is based on per week, it will be followed by the whole team to developed this application, so the target is to develop it within 6 weeks as shown in the list.



7.2 Workflow

<p>▼ ⚡ TOUR-14 Week 2(weather and post)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> TOUR-44 Use latitude an... DONE <input checked="" type="checkbox"/> TOUR-45 Use weather a... DONE <input checked="" type="checkbox"/> TOUR-46 Database desi... DONE <input checked="" type="checkbox"/> TOUR-47 Make post fro... DONE <input checked="" type="checkbox"/> TOUR-48 view post from... DONE <input checked="" type="checkbox"/> TOUR-53 Front end desi... DONE <input checked="" type="checkbox"/> TOUR-54 Front end desi... DONE 	<p>▼ ⚡ TOUR-17 Week-3(BusTicket & Hotel)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> TOUR-49 Database design fo... DONE <input checked="" type="checkbox"/> TOUR-50 Bus ticket manage... DONE <input checked="" type="checkbox"/> TOUR-51 Design database fo... DONE <input checked="" type="checkbox"/> TOUR-52 connect hotel data... DONE
<p>▼ ⚡ TOUR-22 Package and Bus</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> TOUR-40 package desi... DONE <input checked="" type="checkbox"/> TOUR-41 email send aft... DONE <input checked="" type="checkbox"/> TOUR-42 database conn... DONE <input checked="" type="checkbox"/> TOUR-55 Remaining... IN PROGRESS 	+

8. Other Requirements

Appendix A: Glossary

Term	Definition
Admin	Those people or persons who will handle the website.
CRC	Class-responsibility-collaboration diagram
Database	Collection of all the information monitored by this system.

Visitor	Person who visits this application
Historical Society Database	The existing membership database (also HS database).
Member	A member of the Historical Society listed in the HS database.
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Those who will use this application. such as: user, admin, hotel owner, bus owner etc.
User	Visitor or Tourist.

Appendix B: Issues List

There are many potential issues faced when creating this application. Some of the most common issues include:

Technical difficulties: This project requires a lot of APIs, so our target is to find the available free API firstly, if we can not manage a free API only then we will go for paid API, so finding free API is a bit hard and requires more time and generate more errors, we need to handle these things.

User experience: User experience varying user to user. It is difficult to update something along with user experiences.