



## American International University-Bangladesh (AIUB)

Department of Computer Science  
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Section: F  
Software Quality Assurance and Testing

### Web Based Smart Assistant Provider

A Report Submitted By:

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# Software Test Plan for Web Based Smart Assistant Provider

Version 1.0 approved

Prepared by  
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Date: 24/08/2023

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## Revision History

| Revision | Date       | Updated by             | Update Comments                  |
|----------|------------|------------------------|----------------------------------|
| 0.1      | 2023.07.30 | Salima Farha           | First Draft                      |
| 0.2      | 2023.07.30 | Chowdhury Nahrin Niger | Introduction Updated             |
| 0.3      | 2023.07.30 | Salima Farha           | System features Updated          |
| 0.4      | 2023.07.30 | Chowdhury Nahrin Niger | System Quality Attributes        |
| 0.5      | 2023.08.03 | Salima Farha           | System Interface                 |
| 0.6      | 2023.08.03 | Nasib Ull Huq Shohan   | Project Requirements             |
| 0.7      | 2023.08.05 | Nasib Ull Huq Shohan   | Testing Approach                 |
| 0.8      | 2023.08.09 | Salima Farha           | Test Cases/Test Items            |
| 0.9      | 2023.08.11 | Chowdhury Nahrin Niger | Test Deliverables                |
| 1.0      | 2023.08.14 | Nasib Ull Huq Shohan   | Responsibilities Update          |
| 1.1      | 2023.08.14 | Nasib Ull Huq Shohan   | Project Schedule Diagram         |
| 1.2      | 2023.08.16 | Chowdhury Nahrin Niger | Planning Risks and Contingencies |

## 1. TEST PLAN IDENTIFIER: [TPLAN\\_ASSISTANT\\_PROVIDER\\_V1.01](#)

## 2. REFERENCES

1. Software Testing and Quality Assurance – Theory and Practice - Kshirasagar Naik & Priyadarshi Tripathy
2. Software Quality Engineering: Testing, Quality Assurance and Quantifiable Improvement - Jeff Tian

## 3. INTRODUCTION

### Background to the Problem

For every tour and travel, there should be a tour plan or guide. When someone wants to travel, they want to get from one place to another safely and easily. Generally, in our country, tourists face various problems while visiting any tourist spot including ticket purchase, advance hotel reservation, or tour guide booking. But still, there are no good online helping resources in our country where people can easily get complete guidelines. This project will help in providing complete guidance to the customers to act as an assistant to make their journey easy, safe, and worry-free.

"Smart Assistance Provider" is a travel software that helps travel companies in booking, package customization, and itineraries for travel products such as hotels, flights, and transfers, and automates sales and financials to increase bookings and revenue. If the customer wants to visit a tourist spot or make their journey easy, safe, and worry-free, they must book a travel guide that includes a complete travel guide with someone else's responsibility. The quality of the guide is therefore very essential for satisfying customers. A good guide can boost the travel experience and add additional value. While a lesser guide does the opposite: leaving customers disappointed and dissatisfied.

### Solution to the Problem

1. Providing smart support to the customer is a smart marketing strategy. By using our system everyone has a clear knowledge of their desired tour and guide. We are including all tourist spots in our country. If someone wants to use our system then he has to register first or if someone wants to be a guide then he also registers for our system. Using our project anyone can reserve a hotel room, set up the desired destination guide, hire a tour guide, book bus/air tickets and check in restaurants.
2. This reduces costs because travel guidance demonstrations can be done without in-person meetings, and expensive presentations, in different time zones, without additional travel costs. Smart Support Provider will save you time and money. The main aim of this system is to provide complete facilities with many facilities for tourists to travel.
3. There are many travel websites on the internet. But many of them are lacking because some websites work only for a separate system like ticket booking, some work only for hotel reservations, etc. But our system will work for combined packages so that customers get all the benefits of a website. So, this system will make it easy for customers, where they can make reservations at a hotel, book plane/bus tickets, hire a guide for their desired tourist spots, and know all the information combined.

## 4. REQUIREMENT SPECIFICATION

### 4.1 System Features

#### 1. Registration

##### **Functional Requirements**

- 1.1 The system shall allow the new user to register with their personal information such as Email, Mobile Number, and Password.
- 1.2 The system shall allow the new user to create an account using social media logins.
- 1.3 User can set up their password that should be strong enough.
- 1.4 The system shall give an option to users to select if they agree on the terms and conditions of the system.
- 1.5 The system shall provide a sign-up option for the user.
- 1.6 The user has to verify their Mobile number or Email address by a random code, which will be generated by the system. The random code will be sent to the user's mobile number or email address.
- 1.7 The system shall allow the user to submit the verification code.
- 1.8 If the system records verify the code, the user account page will be displayed. If the records couldn't verify the code, the system will show an error message and an option to send the verification code again.

**Priority Level:** High.

**Precondition:** User must have valid email/phone number.

**Cross-reference:** N/A.

#### 2. System Login

##### **Functional Requirements**

- 2.1 The system shall allow the users to login with their given Email and Password.
- 2.2 If the Email and/or Password has been inserted wrong more than three times, the random verification code will be generated by the system to retry login.
- 2.3 If the number of login attempt exceeds its limit (5 times), the system shall block the user account login for one hour.
- 2.4 If the number of login attempt exceeds its limit (5 times), the system shall block the user account login for one hour.

**Priority Level:** High.

**Precondition:** User must provide a valid username and password.

**Cross-reference:** 1.1

#### 3. Set Up a Tour Destination

##### **Functional Requirements**

- 3.1 The system shall allow the users to be able to use the system to search for different tourist destinations.
- 3.2 The system shall allow the user to be able to search for any specific tour destination using the search box or select from the available destinations.
- 3.3 The system shall allow the user to click on any tour plan to see detailed information about the tour.
- 3.4 Detailed information will be presented in a well-structured table, which will contain Tour overview, Tour type, Tour duration, Available dates, Requirements, and others.

3.5 At the end, the system shall allow the user to start the reservation process by filling the reservation form.

**Priority Level:** Medium.

**Precondition:** User must be verified and logged into the system.

**Cross-reference:** 4.1, 2.1

#### 4. Tour Reservation Form

##### **Functional Requirements**

4.1 The system shall allow the user to fill out the reservation form to make reservations for any tour.

4.2 The system shall allow the user to confirm the reservation date and number of travelers.

4.3 The system shall show different options (If available) to the user.

4.4 The reservation cost will be automatically calculated by the system.

4.5 The system will show the total cost at the end.

4.6 The system shall allow the user to proceed to confirm their reservation.

**Priority Level:** High.

**Precondition:** User must select any specific tour plan for reservation.

**Cross-reference:** 3.5, 2.1

#### 5. Booking A Ticket

##### **Functional Requirements**

5.1 The system shall allow the users to be able to use the system to book bus/plane tickets for different destinations.

5.2 The system shall allow the user to able to select the Starting location, End location, Journey date, Return date (Optional) and Number of travelers and Class.

5.3 After completing the required information, the system shall show the search option for available bus/plane.

5.4 The system shall allow the user to click on any searched result to see detailed information.

5.5 Detailed information will be presented in a well-structured table, which will contain Bus/Plane details, Fare summary, Travel duration, and other information.

5.6 At the end, the system shall allow the user to start the reservation process by filling the reservation form.

**Priority Level:** Medium.

**Precondition:** User must be verified and logged into the system.

**Cross-reference:** 6.1. 2.1

#### 6. Ticket Booking Form

##### **Functional Requirements**

6.1 The system shall allow the user to fill the reservation form to make reservations for any ticket.

6.2 The system shall allow the user to confirm their Name, Email, and Phone number.

6.3 The user must select the number of tickets and class.

6.4 The system shall allow the user to proceed to make the payment.

**Priority Level:** High.

**Precondition:** User must select any specific searched result for reservation.

**Cross-reference:** 5.6, 2.1

## 7. Hiring A Guide

### **Functional Requirements**

- 7.1 The system shall allow the user to hire a guide for tourist spots.
- 7.2 Firstly, the user must be able to search for specific tourist spots to see available tour guides.
- 7.3 The system shall allow the user to see detailed information about the guide including their Name, Qualification, Experience, Fee by hour and other details as well.
- 7.4 The system allows the user to make reservation for the guide by filling the guide reservation form.
- 7.5 The user must confirm their Name, Email, and Phone number and select the tour date to make the reservation.

**Priority Level:** Medium.

**Precondition:** User must be verified and logged into the system.

**Cross-reference:** 2.1

## 8. Hotel Room Reservation

### **Functional Requirements**

- 8.1 The system shall allow the users to be able to use the system to search for different hotels for booking.
- 8.2 The system shall allow the user to be able to search for available hotels by selecting City/hotel/resort/area, Check-in date, Check-out date, Number of rooms and, Number of guests.
- 8.3 The system shall allow the user to click on any hotel to see detailed information about the hotel rooms and other details.
- 8.4 Detailed information will be presented in a well-structured table, which will contain the Hotel overview, Hotel location, Facilities, and other policies.
- 8.5 At the end, the system shall allow the user to start the reservation process by filling out the reservation form.

**Priority Level:** Medium.

**Precondition:** User must be verified and logged into the system.

**Cross-reference:** 9.1

## 9. Making Payment

### **Functional Requirements**

- 9.1 The system shall allow the user to be able to pay bills using different banking systems such as Credit/Debit cards, BKash, Rocket, and Nagad.
- 9.2 Finally, the system shall allow the user to confirm their reservation. And the system will generate an automatic invoice, which will be sent to the user.

**Priority Level:** High.

**Precondition:** Users must fill up the specific reservation form accordingly.

**Cross-reference:** 4.5, 6.4, 8.5

## 10. User Account

### **Functional Requirements**

- 10.1 The system shall allow the user to update their information such as Name, Email, Phone number, Address.
- 10.2 Users can update or check their reviews.
- 10.3 The system shall allow the user to track their reserved tour and hotel details.
- 10.4 The system also allows the user to add or remove a coupon for a discount.

- 10.5 The system shall allow the user to update their payment options.  
10.6 System shall allow the user to access available account security options.

**Priority Level:** Medium.

**Precondition:** The user must be logged in to the system.

**Cross-reference:** 2.1

## 11. Account Security

### Functional Requirements

- 11.1 The system shall allow the user to change or update their password.  
11.2 User may set up two-step verification for advanced security.

**Priority Level:** High.

**Precondition:** The user must be logged in to the system.

**Cross-reference:** 2.1

## 12. Settings & Privacy

### Functional Requirements

- 12.1 The system shall allow the user to update their location settings.  
12.2 User may lock their profile from other users.  
12.3 The system also allows the user to choose their preferred languages.  
12.4 System shall allow the user to delete or deactivate their profile/account.

**Priority Level:** High.

**Precondition:** The user must be logged in to the system.

**Cross-reference:** 2.1

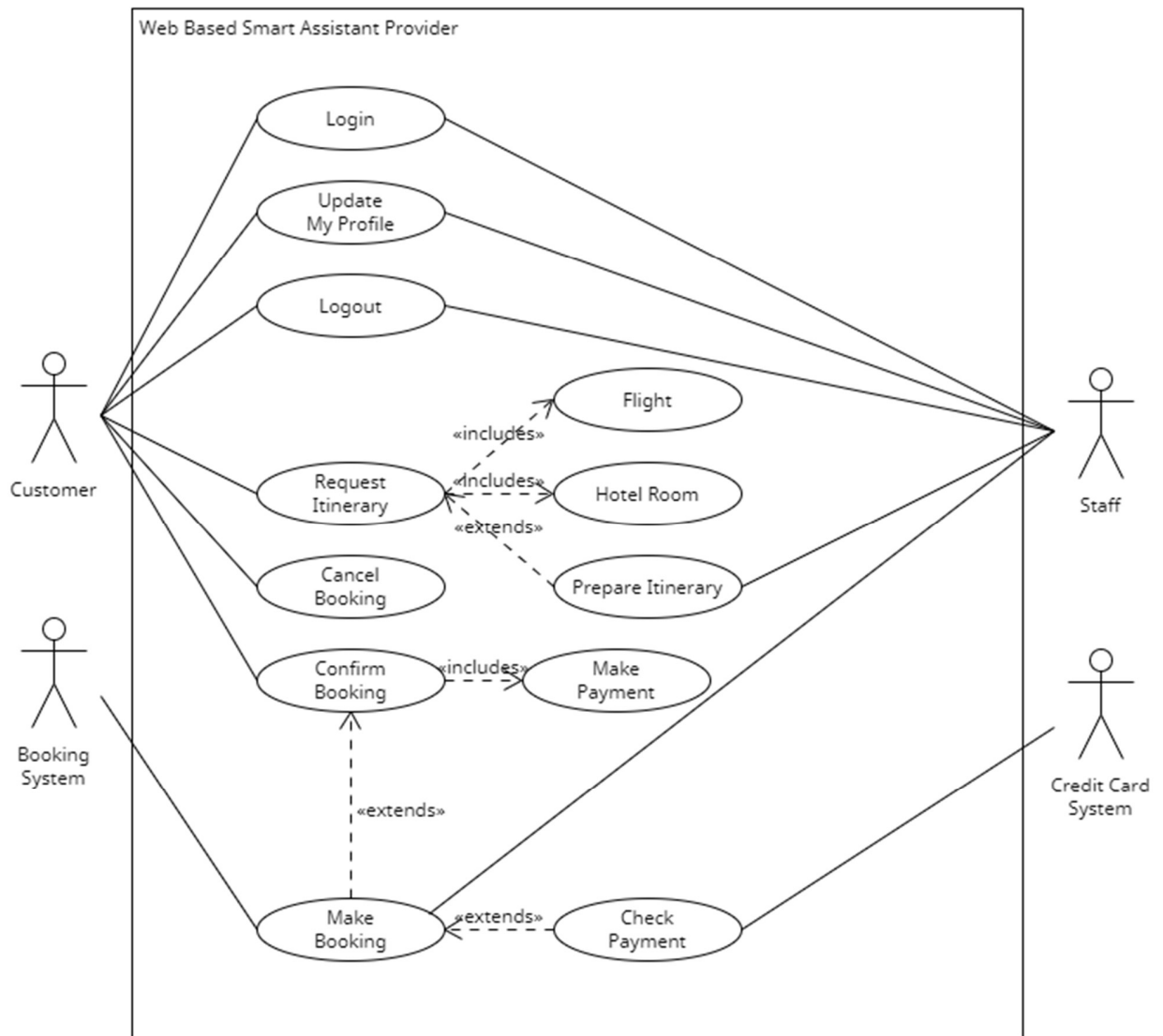
## 4.2 System Quality Attributes

- **Usability:** The attribute usability means the ease with which each user can use the system to accomplish certain tasks. Our system is designed in such a way that users will easily understand how to use the system. Users can easily view all the features and also users can easily book flights/hotels from our system. The features are simply designed and developed so that users can easily understand them by seeing them.
- **Security:** This attribute enables the system to control unauthorized persons to access the system. Users who have valid usernames and passwords can only log into the system. This attribute is important since security denotes the ability of the system to protect the data from unauthorized persons.
- **Reliability:** These attributes are defined as how a system is expected to perform its intended functions with required precision. We have implemented our system in such a way that user gets their intended function when they want to view flight/hotel schedules/fare, they can see them. No error gets generated. We have made sure that the user gets the correct output. Besides, our system also doesn't take much time to respond to users' actions.
- **Flexibility:** We have made our system flexible enough to modify. It is adaptable to other functionalities and easy to add code to the system and upgrade for new features.
- **Maintainability:** It means the effort required to locate and fix a bug and modification to any functionality. Our team members can fix the bug and can also add new features if any changes are made in the system.

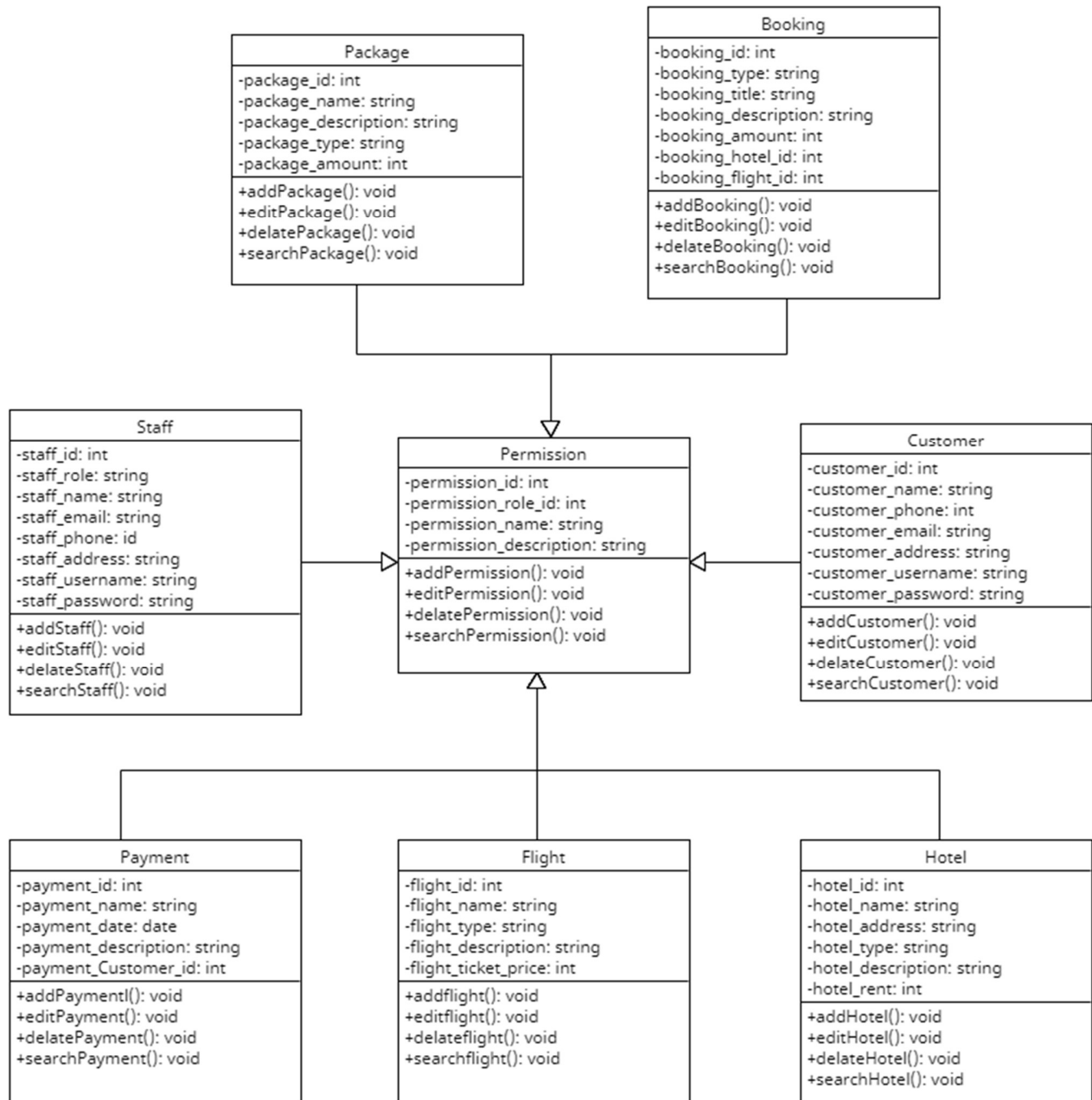


- **Testability:** It is the suitability for allowing the programmers to follow for program execution and for debugging. The testability of software depends on its modularity. Since we have developed our system module-wise, there was less chance of getting errors. Whenever we encountered bugs, we checked that module to fix the bug.

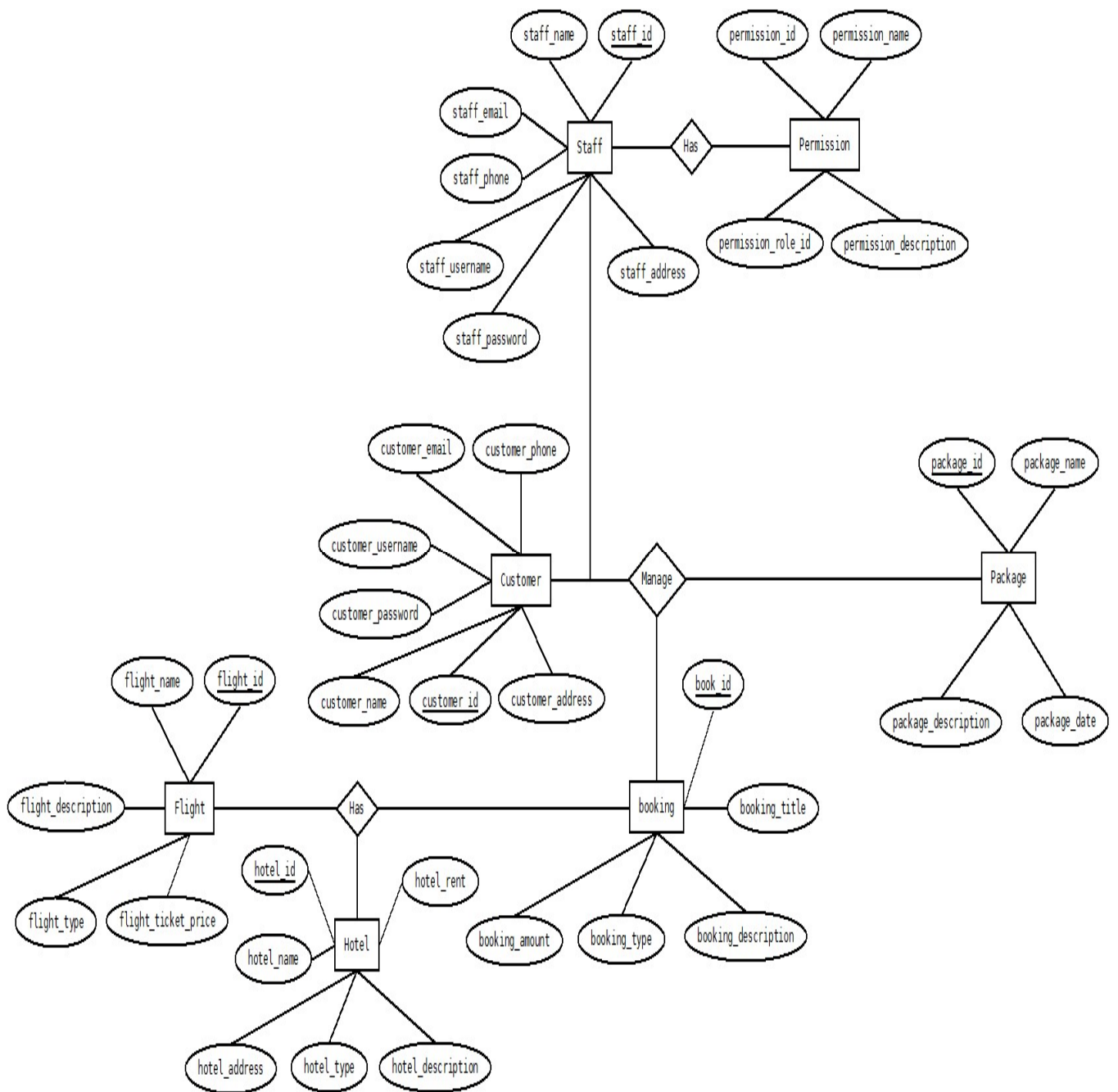
### 4.3 System Interface (UML Diagram)



**Figure: Web-Based Smart Assistant Provider's Use Case Diagram.**

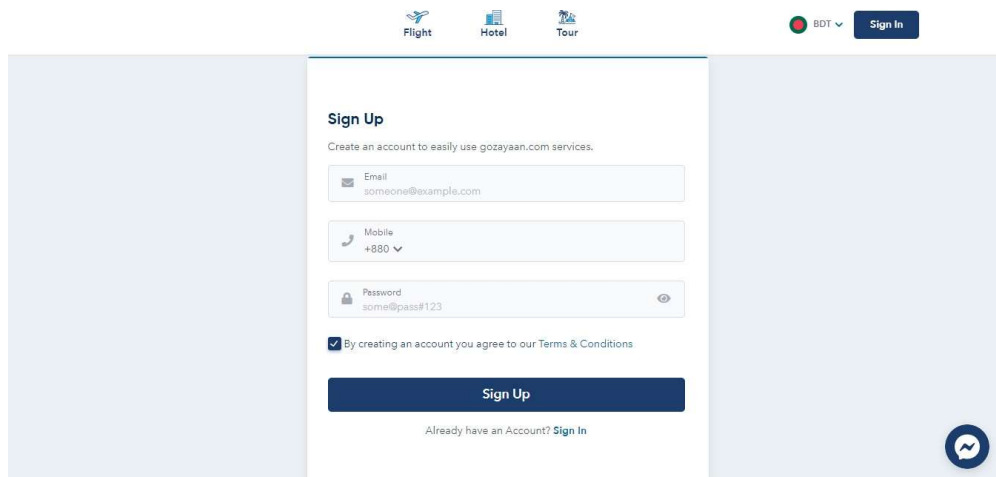


**Figure: Web-Based Smart Assistant Provider's Class Diagram.**



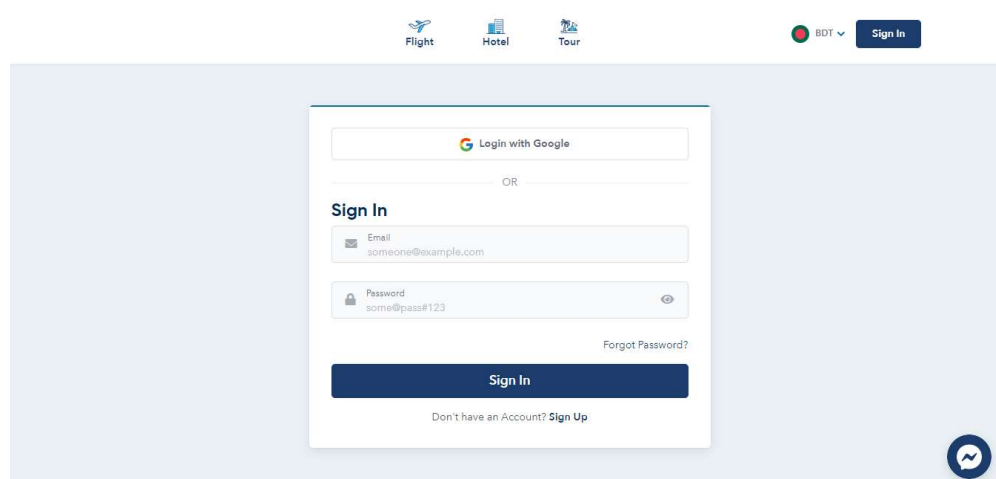
**Figure: Web-Based Smart Assistant Provider's ER Diagram.**

## 4.4 System Interface



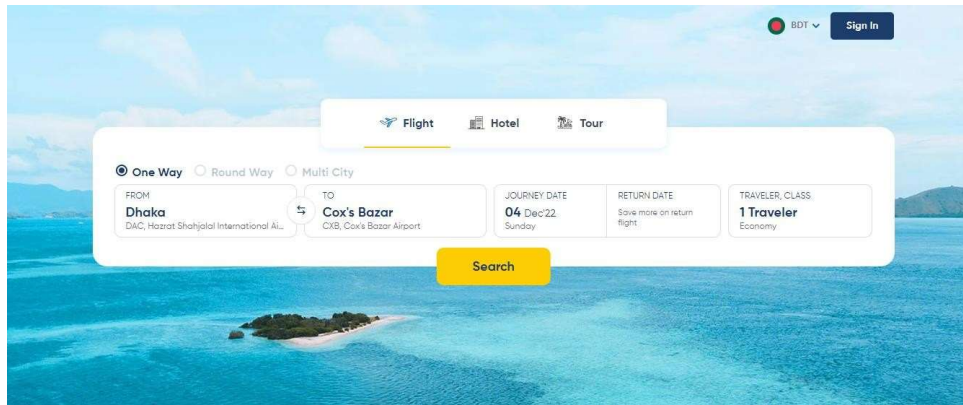
The screenshot shows the registration page of the GoZayaan.com system. At the top, there is a navigation bar with icons for 'Flight', 'Hotel', and 'Tour', a currency selector set to 'BDT', and a 'Sign In' button. The main content area is titled 'Sign Up' and includes the text 'Create an account to easily use gozayaan.com services.' Below this, there are three input fields: 'Email' (containing 'someone@example.com'), 'Mobile' (containing '+880'), and 'Password' (containing 'some@pass#123'). A checkbox is checked, indicating agreement to the 'Terms & Conditions'. A large blue 'Sign Up' button is positioned below the form. At the bottom of the form, there is a link: 'Already have an Account? Sign In'. A chat icon is visible in the bottom right corner of the page.

**Figure: Registration Page**



The screenshot shows the login page of the GoZayaan.com system. The navigation bar at the top is identical to the registration page. The main content area features a 'Login with Google' button at the top. Below it, there is an 'OR' separator. The 'Sign In' section contains two input fields: 'Email' (containing 'someone@example.com') and 'Password' (containing 'some@pass#123'). A 'Forgot Password?' link is located to the right of the password field. A large blue 'Sign In' button is at the bottom of the form. Below the button, there is a link: 'Don't have an Account? Sign Up'. A chat icon is visible in the bottom right corner of the page.

**Figure: Login Page**



BDT Sign In

Flight Hotel Tour

One Way Round Way Multi City

FROM Dhaka  
DAC, Hazrat Shahjalal International Airport

TO Cox's Bazar  
CXB, Cox's Bazar Airport

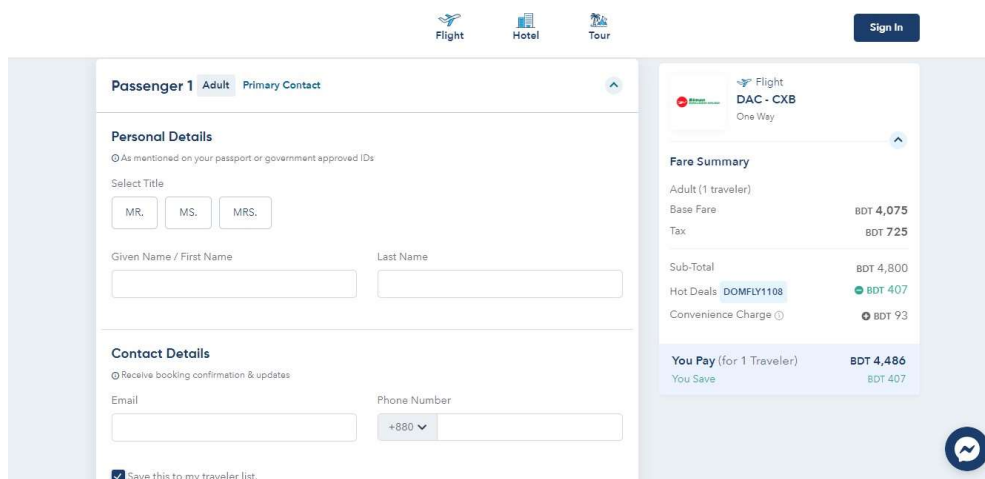
JOURNEY DATE 04 Dec'22  
Sunday

RETURN DATE Save more on return flight.

TRAVELER, CLASS 1 Traveler  
Economy

Search

Figure: Booking Ticket Page



Flight Hotel Tour Sign In

Passenger 1 Adult Primary Contact

Personal Details

As mentioned on your passport or government approved IDs

Select Title

MR. MS. MRS.

Given Name / First Name Last Name

Contact Details

Receive booking confirmation & updates

Email Phone Number +880

Save this to my traveler list.

Flight DAC - CXB One Way

Fare Summary

Adult (1 traveler)

Base Fare BDT 4,075

Tax BDT 725

Sub-Total BDT 4,800

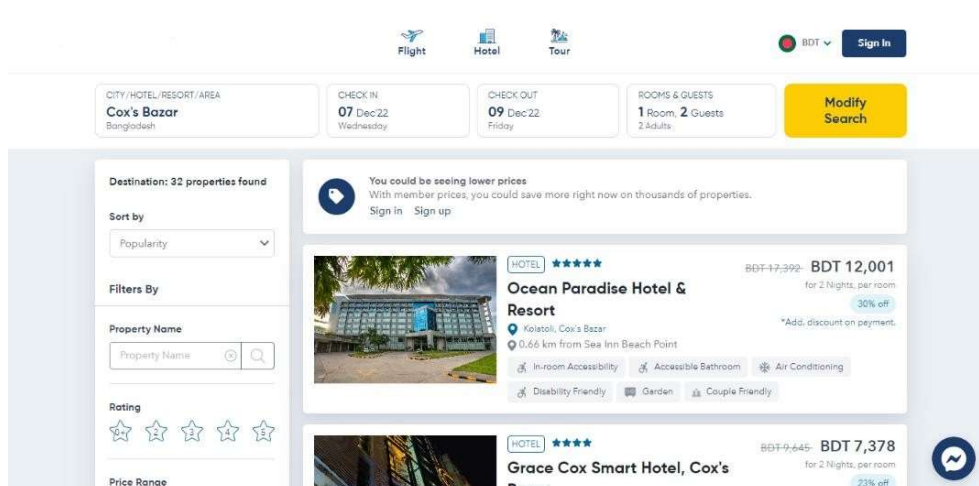
Hot Deals DOMFLY1108 BDT 407

Convenience Charge BDT 93

You Pay (for 1 Traveler) BDT 4,486

You Save BDT 407

Figure: Booking Ticket Form



Flight Hotel Tour BDT Sign In

CITY / HOTEL / RESORT / AREA Cox's Bazar Bangladesh

CHECK IN 07 Dec'22 Wednesday

CHECK OUT 09 Dec'22 Friday

ROOMS & GUESTS 1 Room, 2 Guests 2 Adults

Modify Search

Destination: 32 properties found

Sort by Popularity

Filters By

Property Name

Rating

Price Range

You could be seeing lower prices  
With member prices, you could save more right now on thousands of properties.  
Sign in Sign up

Ocean Paradise Hotel & Resort

Kolatoli, Cox's Bazar

0.66 km from Sea Inn Beach Point

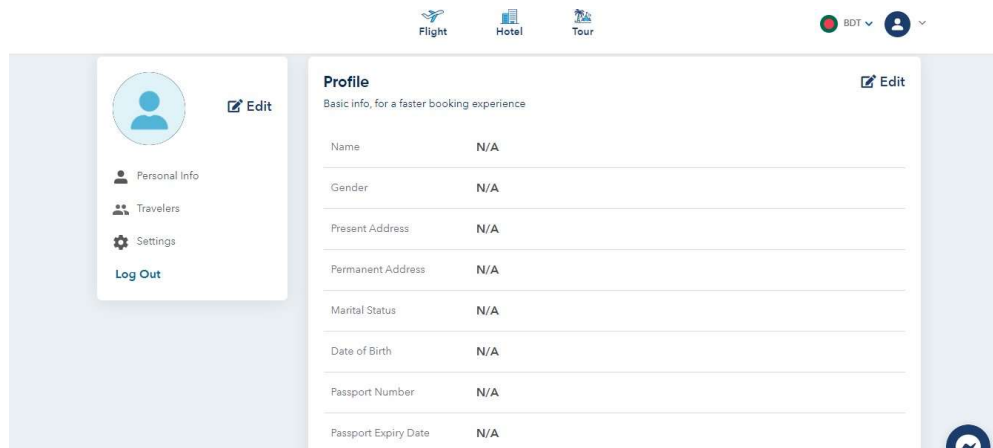
In-room Accessibility Accessible Bathroom Air Conditioning Disability Friendly Garden Couple Friendly

BDT 12,001 for 2 Nights, per room 30% off

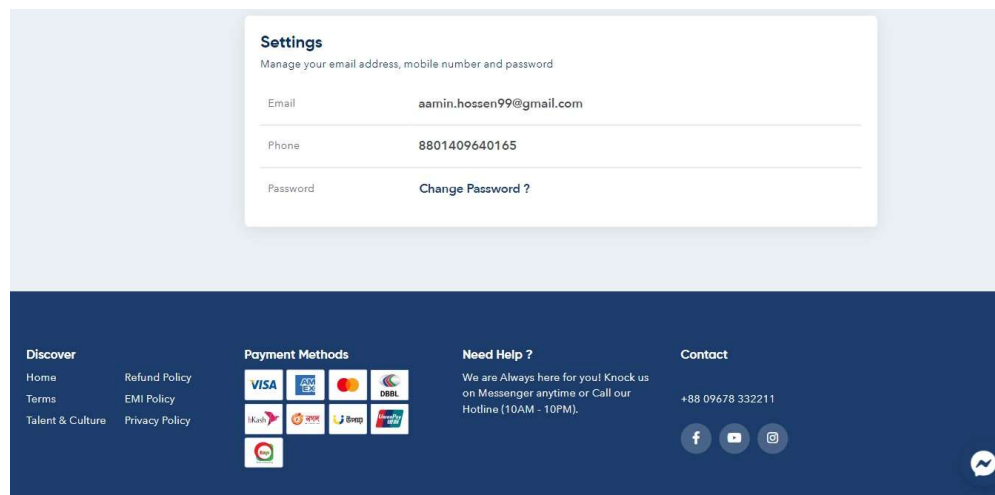
Grace Cox Smart Hotel, Cox's Bazar

BDT 7,378 for 2 Nights, per room 23% off

Figure: Hotel Room Reservation



**Figure: User Account**



**Figure: Settings & Privacy**

## 4.5 Project Requirements

**For our project development, the number of members needed → 5**

- Time needed → 3 months
- 1 month 4 weeks. So, we need  $3 \times 4 \rightarrow 12$  weeks
- In 1 week, we get 5 working days
- 1 working day, we get 8 hours
- So, Total working hours in per week →  $(5 \times 8) \rightarrow 40$  hours
- Now total working hour in 12 weeks →  $(12 \times 40) \rightarrow 480$  hours
- Developers Salary per hour → 1,250 BDT
- Developers Salary in 480 hours →  $(1250 \times 480) \rightarrow 6,00,000$  BDT
- Office Rent for 3 months →  $(20,000 \times 3) \rightarrow 60,000$  BDT
- Maintenance Cost in 1 week  $(5 \times 1000) \rightarrow 5,000$  BDT
- Maintenance Cost in 8 weeks  $(5000 \times 12) \rightarrow 60,000$  BDT
- Snacks cost for 1 person in 1 day → 150 BDT

- Snacks cost for 5 persons in 1 day → 750 BDT
- Snacks cost for 5 persons in 60 days → 45,000 BDT

| Expenses                         | Expenses Total Amount (BDT) |
|----------------------------------|-----------------------------|
| 5 Developers Salary              | 6,00,000                    |
| Office rent for 3 months         | 60,000                      |
| Maintenance Cost                 | 60,000                      |
| Electricity Cost                 | 6,000                       |
| Snacks Cost                      | 45,000                      |
| Miscellaneous Fee                | 12,000                      |
| Total Cost is                    | 7,83,000                    |
| For Profit 15% of the total cost | 1,17,450                    |
| Total Budget is                  | 9,00,450                    |

## 5. FEATURES NOT TO BE TESTED

Since we are testing from the customer's perspective, some features may be avoided or those areas will not be specifically addressed. With these criteria and some other features that will not be tested.

1. **Registration as a guide:** The registration system will not be tested as a guide, as we are only testing from the customer's perspective.
2. **Tour Customization:** Tour customization features will not be tested, as this feature will be updated in the next system update.
3. **Making Payment:** Payments will not be checked as some payment methods including BKash/Rocket are unavailable at this time.

## 6. TESTING APPROACH

### 6.1 Testing Levels

We will test our built-in features in two testing levels. These are 1. Unit Testing and 2. Integration Testing. The Unit Test and the Integration Test are the two primary layers of testing in software. Each level focuses on particular stages of the software development process and utilizes a different approach to guarantee software quality.

1. **Unit testing:** Testing individual parts or pieces of code separately is a practice known as unit testing. A unit may be a class, module, function, or method. Verifying that each unit of code operates as anticipated and adheres to its design guidelines is the aim of unit testing. This degree of testing aids in the early detection of flaws throughout the development process, making it simpler to recognize and address problems before they become more complicated. As

we build our system, we will run this test first which will include testing individual software modules for finding errors. This testing technique is employed by QA teams and software developers. The purpose of this test is to verify that each piece of software code works as intended. This will essentially be a white box test where no code is executed.

#### Key features and concepts of Unit Testing:

- **Isolation:** Unit tests are created with the intention of operating independently of the rest of the program. To keep the unit under test isolated, dependencies are frequently substituted by fake objects or stubs.
- **Test Cases:** Test cases are created to account for a variety of circumstances, such as boundary cases, legitimate inputs, and probable edge cases.
- **Automation:** Unit tests are often run automatically to enable speedy execution on a regular basis as the codebase changes.
- **Fast Execution:** Unit tests may often be performed by developers during the development process since they are typically quick to execute.
- **White-Box Testing:** The design of successful test cases for unit tests frequently depends on understanding the internal logic and structure of the code.
- **Code Coverage:** Metrics for measuring code coverage assist find regions that need more thorough testing by calculating the proportion of code lines or branches that are covered by unit tests.

2. **Integration testing:** The practice of examining how various parts or units of a software system interact with one another is known as integration testing. It is important to make sure that when a unit is merged, it operates as a whole and that data transfers between it and other units are accurate. When many units interact, problems including communication breakdowns, data discrepancies, and inconsistent user interfaces can occur. Integration testing aids in identifying these difficulties. After the unit testing, we will do the integration testing part. Integration Testing will be performed by the Test Manager and Development Team Leader with support from individual developers as needed. During this testing, we will ensure that each software component is logically integrated, holistically tested, and functional. This level of testing looks for issues with how different software components interact when they are combined.

#### Key features and concepts of Integration Testing:

- **Interaction Testing:** Integration tests are primarily concerned with examining how different modules, components, or services interact with one another.
- **Types of Integration:** Integration testing is conducted at many levels and includes:
  - **Big Bang Integration:** The system as a whole is tested once all components have been integrated simultaneously.
  - **Top-Down Integration:** Testing begins with the top-level modules, with lower-level modules being substituted by stubs or mocked components.
  - **Bottom-Up Integration:** Testing begins with lower-level modules, and higher-level modules are substituted by stubs or mocked components.
  - **Incremental Integration:** As the system is developed, testing is done on each stage.



- **API testing:** Integration tests frequently test APIs (Application Programming Interfaces) to make sure that information flow and communication between components function as planned.
- **End-to-End Testing:** In some circumstances, end-to-end tests may be seen as a type of integration testing, in which the complete system or application is tested to ensure that all components work together effectively.

Finally, it should be noted that a thorough software testing plan must include both unit testing and integration testing. As opposed to Integration Testing, which checks how well each component interacts when merged into a larger system, Unit Testing focuses on testing each component individually. As a result of the interdependence of these testing tiers, problems that arise at various phases of the development lifecycle may be found and fixed.

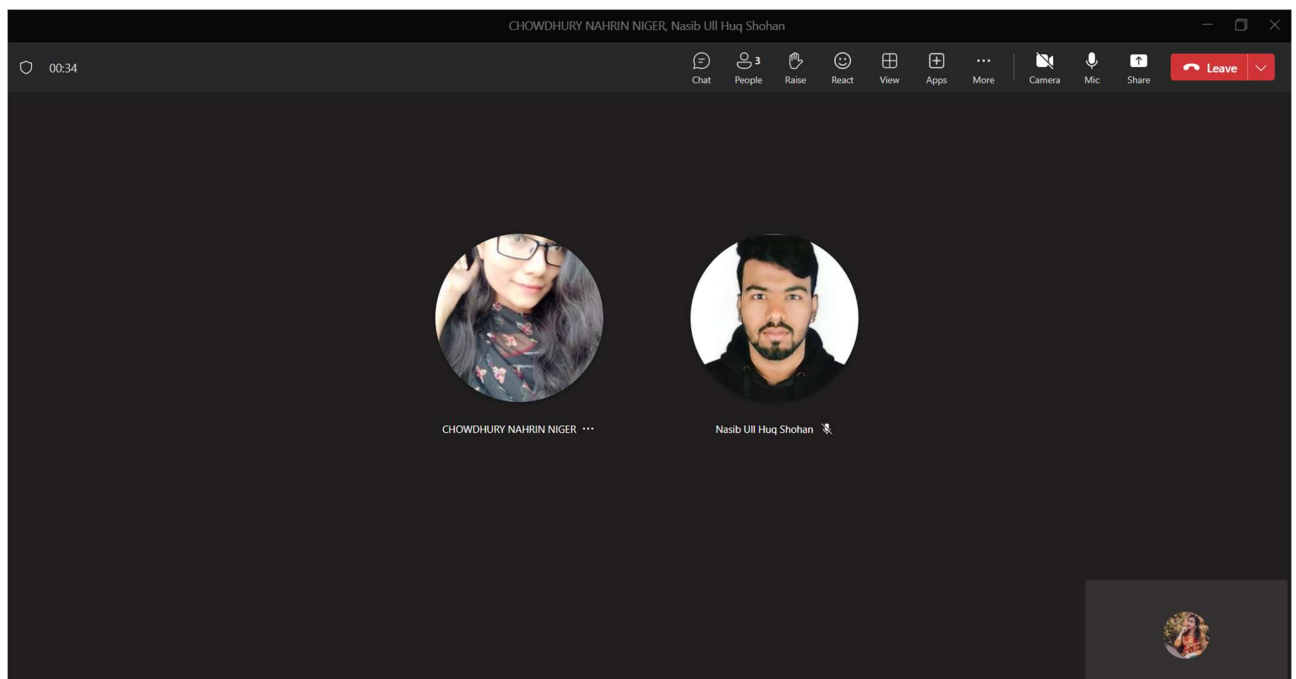
## 6.2 Test Tools

"Web Based Smart Assistant Provider" is a web-based application. Which will be a user-friendly application based on different requirements. The testing tools that will be used to test this software are,

- Visual Studio IDE (For writing testing code and execution)
- Selenium (Test framework)
- Web Browser (Google Chrome, Mozilla Firefox)

## 6.3 Meetings

In addition to helping our test participants share ideas, make decisions, establish bonds with one another on the team, and even feel less alone at work, we also provide a useful platform for a number of objectives. A system can only be effective if duties are correctly distributed among team members and are completed on time. A testing team must find the defects and flaws in the system in order for it to continue to function flawlessly and for the user to obtain a high-quality product. Thus, in order to guarantee the success of our project, our testing team plans a meeting for every week to test each module in order to track progress and spot defects. We also meet with the Developer Team once a week after that. Each month, we meet with the customer. On June 5th, 2023, we officially started our project work. We meet with the customer on the fifth day of each month. Additionally, starting on the start date, we meet with the project manager every two weeks. The QA team met with the development team and the project manager to discuss the system's development. Meetings are also planned in the event of urgent circumstances.



**Figure: Teams Meeting (Microsoft Teams).**

## 7. TEST CASES/TEST ITEMS

|   |                              |  |                |                    |
|---|------------------------------|--|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider  |                              | Test Designed by: Salima Farha                                 |                |                    |
| Test Case ID: FR_1  |                              | Test Designed date: 09/08/2023                                 |                |                    |
| Test Priority (Low, Medium, High): High   |                              | Test Executed by: Chowdhury Nahrin Nahar                       |                |                    |
| Module Name: System Registration Verification   |                              | Test Execution date: 16/08/2023                                |                |                    |
| Test Title: Verification of registration with valid mobile number or email address  |                              |  |                |                    |
| Description: Test system registration verification  |                              |  |                |                    |
| Precondition (If any): The user must have to provide the verification code  |                              |  |                |                    |
| Test Steps  | Test Data                    | Expected Results   | Actual Results | Status (Pass/Fail) |
| 1) Go to the system registration page.<br>2) Fill up the form with the required information.<br>3) Confirm verification code from user mobile number/email address.<br>4) Confirm registration. | Verification Code:<br>258741 | The user can register for the system without any difficulties. | As expected,   | Pass               |
| Post Condition: The system will automatically generate a verification code and send it to the user's phone/email. And the user has to provide the code while registering.                       |                              |  |                |                    |

|   |   |  |                |                    |
|---|---|--|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider  |   | Test Designed by: Salima Farha                             |                |                    |
| Test Case ID: FR_2  |   | Test Designed date: 09/08/2023                             |                |                    |
| Test Priority (Low, Medium, High): High   |   | Test Executed by: Chowdhury Nahrin Niger                   |                |                    |
| Module Name: System Login   |   | Test Execution date: 16/08/2023                            |                |                    |
| Test Title: System Login with valid email address and password  |   |  |                |                    |
| Description: Test system login  |   |  |                |                    |
| Precondition (If any): The user must have to provide the valid email address and password   |   |  |                |                    |
| Test Steps  | Test Data   | Expected Results   | Actual Results | Status (Pass/Fail) |
| 1) Go to the system registration page.<br>2) Fill up the form with the required information.<br>3) Confirm verification code from user mobile number/email address.<br>4) Confirm registration. | Email address: <a href="mailto:farhah@gmail.com">farhah@gmail.com</a><br>Password: @abc248123 | The user can login to the system without any difficulties. | As expected,   | Pass               |
| Post Condition: Email address and password will be validated with the database and successfully login to account. And the account login details will be stored in the database.                 |   |  |                |                    |

|  |                                  |   |                |                    |
|--|----------------------------------|---|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider   |                                  | Test Designed by: Salima Farha  |                |                    |
| Test Case ID: FR_3   |                                  | Test Designed date: 09/08/2023  |                |                    |
| Test Priority (Low, Medium, High): Medium  |                                  | Test Executed by: Nasib Ull Huq Shohan                                    |                |                    |
| Module Name: Set Up a Tour Destination   |                                  | Test Execution date: 16/08/2023   |                |                    |
| Test Title: Set up tour destination by searching or selecting from the list  |                                  |   |                |                    |
| Description: User shall able to search for a specific tour destination or select from the list.                                    |                                  |   |                |                    |
| Precondition (If any): The user must have to provide the searched keyword or select item   |                                  |   |                |                    |
| Test Steps   | Test Data                        | Expected Results  | Actual Results | Status (Pass/Fail) |
| 1) Go to the tour destination search page.<br>2) Type the searching keyword or select from the list.<br>3) Click on search button. | Searched Keyword:<br>Cox’s Bazar | The user can view the list of available tour destinations (If available). | As expected,   | Pass               |
| Post Condition: User must type the correct keyword for better output suggestion.   |                                  |   |                |                    |

|  |   |  |                |                    |
|--|---|--|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider   |   | Test Designed by: Salima Farha                         |                |                    |
| Test Case ID: FR_4   |   | Test Designed date: 09/08/2023                         |                |                    |
| Test Priority (Low, Medium, High): High  |   | Test Executed by: Nasib Ull Huq Shohan                 |                |                    |
| Module Name: Filling up Tour Reservation Form  |   | Test Execution date: 16/08/2023                        |                |                    |
| Test Title: Reservation of Tour Testing  |   |  |                |                    |
| Description: User shall able to reserve a specific tour destination.   |   |  |                |                    |
| Precondition (If any): The user must be signed in and select the specific tour destination.  |   |  |                |                    |
| Test Steps   | Test Data                                     | Expected Results                                       | Actual Results | Status (Pass/Fail) |
| 1) Go to the specific tour details page.<br>2) Fill up the form with the required information.<br>3) Click on the Continue button. | Journey Date:<br>08 Sep, 2023<br>Travelers: 2 | The user can start a reservation process for the tour. | As expected,   | Pass               |
| Post Condition: User must provide the correct information which will be stored in the system database.                             |   |  |                |                    |

|   |  |  |                |                    |
|---|--|--|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider  |  | Test Designed by: Salima Farha               |                |                    |
| Test Case ID: FR_5  |  | Test Designed date: 09/08/2023               |                |                    |
| Test Priority (Low, Medium, High): High   |  | Test Executed by: Nasib Ull Huq Shohan       |                |                    |
| Module Name: Booking a plane ticket   |  | Test Execution date: 16/08/2023              |                |                    |
| Test Title: System plane ticket booking testing.  |  |  |                |                    |
| Description: Test system login  |  |  |                |                    |
| Precondition (If any): The user must be signed into the system.   |  |  |                |                    |
| Test Steps  | Test Data  | Expected Results                             | Actual Results | Status (Pass/Fail) |
| 1) Go to the system flightbooking page.<br>2) Fill up the form with therequired information.<br>3) Click on Search button tocontinue the process.<br>4) Select from the searchresult.<br>5) Fill the customer details form and click on continue. | From: Dhaka<br>To: Cox’s Bazar<br>Journey Date: 08 Sep, 2023<br>Traveler: 2<br>Name: Salima Farha<br>Email: <a href="mailto:farhah@gmail.com">farhah@gmail.com</a><br>Phone: 01712345678 | The user can book their plane ticket easily. | As expected,   | Pass               |
| Post Condition: User must provide the correct information for reservation and these information will bestored in the system database.   |  |  |                |                    |

|   |                  |  |                |                    |
|---|------------------|--|----------------|--------------------|
| Project Name: Web Based Smart Assistant Provider  |                  | Test Designed by: Salima Farha         |                |                    |
| Test Case ID: FR_6  |                  | Test Designed date: 09/08/2023         |                |                    |
| Test Priority (Low, Medium, High): High   |                  | Test Executed by: Nasib Ull Huq Shohan |                |                    |
| Module Name: Add Coupon Code Testing  |                  | Test Execution date: 16/08/2023        |                |                    |
| Test Title: Verification of Adding Coupon code.   |                  |  |                |                    |
| Description: Test coupon code adding in user account  |                  |  |                |                    |
| Precondition (If any): User must be signed in and go to option of adding coupon codes.            |                  |  |                |                    |
| Test Steps  | Test Data        | Expected Results                       | Actual Results | Status (Pass/Fail) |
| 1) Go to User Coupon Code adding page.<br>2) Enter required information.<br>3) Click on “Submit.” | Coupon:<br>NEW20 | Coupon will add to user account.       | As expected,   | Pass               |
| Post Condition: Coupon has been verified with the database and assigned to the user account.      |                  |  |                |                    |

|  |  |  |                |                    |
|--|--|--|----------------|--------------------|
| Project Name: Transportation Vehicle Ordering System   |  | Test Designed by: Salima Farha                   |                |                    |
| Test Case ID: FR_7   |  | Test Designed date: 09/08/2023                   |                |                    |
| Test Priority (Low, Medium, High): Medium  |  | Test Executed by: Chowdhury Nahrin Niger         |                |                    |
| Module Name: Settings and Privacy  |  | Test Execution date: 16/08/2023                  |                |                    |
| Test Title: Verification of settings and privacy.  |  |  |                |                    |
| Description: Change the old password and set a strong password for privacy.  |  |  |                |                    |
| Precondition (If any): User must be signed in and click on settings and privacy  |  |  |                |                    |
| Test Steps   | Test Data                                | Expected Results                                 | Actual Results | Status (Pass/Fail) |
| 1. Click on “Settings and Privacy.”<br>2. Go to “Change password.”<br>3. Enter current password.<br>4. Enter new valid password.<br>5. Select “Confirm.” | Current pass: @1245<br>New Pass: @45122h | User's system password shall change successfully | As expected,   | Pass               |
| Post Condition: Current password must be verified with the system’s database and updated.  |  |  |                |                    |

## **8. ITEM PASS/FAIL CRITERIA**

Here, if the test phase is completed successfully and the expected result is 95% effective without any critical errors, then the test phase is considered successful. If a test step cannot be completed or is completed but the expected result is not obtained, or if the expected result cannot be verified from the record, the test step is considered failed and the requirement is not verified. For the software to pass the test, all paths must be thoroughly tested.

## **9. TEST DELIVERABLES**

- Test strategy
- Acceptance test plan
- System test plan
- Integration test planning
- Unit test plan
- Load test plan
- Beta test plan
- Test cases/suites
- Screen prototype
- Requirements Traceability Matrix (RTM)
- Error/Incident Reports and Summary
- Test execution report
- Release notes

## **10. STAFFING AND TRAINING NEEDS**

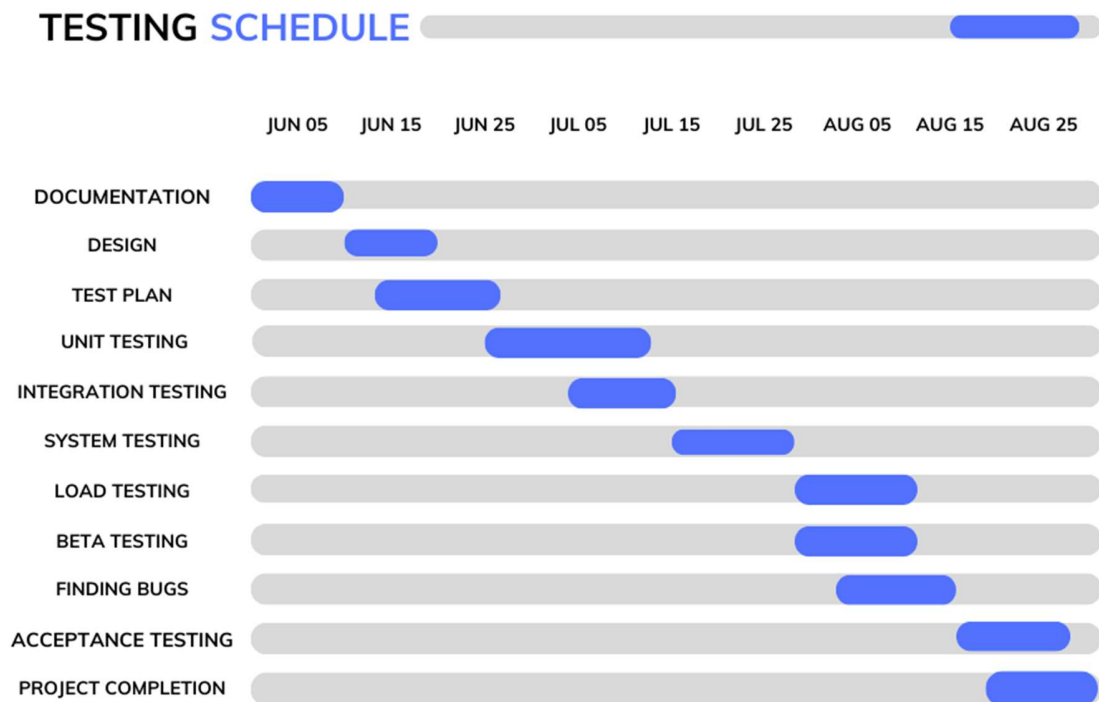
It is preferred that at least one full-time tester is on the project for the structure and deployment phases. To help with evaluation, a person should be hired part-time at the beginning of the project and then full-time after a month. The project Manager/Exam Manager will take charge if there is no separate candidate. The following preparation-related issues need to be addressed to conduct a thorough and appropriate study. For the time being, a decision has been taken to recruit staff for this project. Most of the team will probably participate in specific research activities, which are covered in more detail in the responsibilities section.

## 11. RESPONSIBILITIES

| RESPONSIBILITIES                 |           |           |                 |                  |               |
|----------------------------------|-----------|-----------|-----------------|------------------|---------------|
|                                  | <u>TM</u> | <u>PM</u> | <u>Dev Team</u> | <u>Test Team</u> | <u>Client</u> |
| Project proposal                 | ✓         | ✓         | ✓               | ✓                | ✓             |
| Requirement                      |           | ✓         | ✓               |                  |               |
| Planning                         | ✓         |           |                 | ✓                | ✓             |
| System design                    |           | ✓         |                 | ✓                | ✓             |
| Implementation                   | ✓         |           | ✓               |                  | ✓             |
| Test Case                        |           | ✓         | ✓               | ✓                |               |
| Test Case Implementation         |           |           | ✓               | ✓                | ✓             |
| Unit testing                     | ✓         |           | ✓               | ✓                |               |
| Integration testing              |           | ✓         |                 | ✓                |               |
| System testing                   |           | ✓         | ✓               |                  | ✓             |
| Load testing                     | ✓         |           | ✓               |                  |               |
| Beta testing                     | ✓         |           |                 | ✓                | ✓             |
| Acceptance Testing               |           | ✓         | ✓               |                  | ✓             |
| Report Bugs and make the summary | ✓         |           |                 | ✓                |               |
| Documentation                    | ✓         | ✓         |                 | ✓                |               |

## 12. TESTING SCHEDULE

Time has been allocated within the project plan for the following test activities. Specific dates and times for each activity are defined in the project planning timeline.



**Figure: Testing Schedule.**

## 13. PLANNING RISKS AND CONTINGENCIES

There may be some potential risks with a chance of happening that could result in development losses.

- Lack of personnel resources when testing is to begin.
- Delays in training on the application and/or tools.
- Late delivery of the hardware or tools.
- Coming to change requests frequently.
- Lack of availability of required hardware, software, data, or tools.
- Project schedules get slipped when project tasks and schedule release risks are not addressed properly.

Some specific tasks must be completed at certain times throughout various events. If these modifications are made, the following steps will be taken:

- The number of tests performed will be reduced to a certain amount.
- The development and test schedules will be extended by the necessary number of days. This rarely occurs, as most projects tend to have fixed delivery dates.
- The scope of the plan may be changed.
- The test team will work overtime.



## 14. APPROVALS

| <b>Designation</b>                  | <b>Status</b> |
|-------------------------------------|---------------|
| <b>Project Sponsor</b>              | Pass          |
| <b>Project Manager</b>              | Pass          |
| <b>Test Manager</b>                 | Pass          |
| <b>Development Team Manager</b>     | Pass          |
| <b>Sales Representative</b>         | Pass          |
| <b>Order Entry EDI Team Manager</b> | Pass          |