



Software requirement specification document for content management project for tourism agency

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1 Introduction

1.1 Purpose of this document

The purpose of this document is to present a detailed description of a Tourism Company content management web application. It shall explain the purpose and features of the system, the interfaces of the system, what the system shall do, the constraints under which it shall operate and how the system shall react to external stimuli. This document is intended for both the stakeholders and the developers of the system

1.2 Scope of this document

This Software Requirements Specification is to create a fully functional web application for viewing and booking travelling packages which include hotel and services. This shall target users like travellers with little to no experience in booking procedures, it would also help the company organize the workload and deal with it more efficiently since paperwork will be close to none.

1.3 Overview

The web application is created to allow clients to view and book packages and to track their date. Also if users would like to check for a certain hotel's availability within a time frame which the user chooses. Furthermore, The web application lets the support center operator deal with guests and users enquiries about the trips, packages and hotels reservations. The Ministry of Tourism offers set of regulations and constraints on the managing the tourism process like having permit to the employees to enter the airport and meet the guests also, having experience certificate to interact with guests. The tour guide must have language certificate to be able to perform the explaining the history of the memorials and museums in Egypt [5].

1.4 Business Context

Speedo Tours is an organization with license no. 782 from the Egyptian ministry of tourism and is building an excellent name in the field of tourism. the most important aspect of tourism is a good customer service . At Speedo Tours they offer professional service with a unique flair and a touch of the traditional hospitality for which the Egyptian people are known by. They treat all our guests as VIP and strive to make their visit to Egypt a remarkable and memorable one. Since 2011 the tourism in Egypt was unstable as the number of tourists visiting the country has drastically declined, mainly in response to international travel alerts and warnings by many Western governments [2]. Speedo Tours was and still trying to promote Egypt as a touring hot spot and a must see place and helps this by promoting packages and the best deals to different hotels in Egypt and different hot spots during the visit. Also, Speedo tours focuses on also domestic tourism by offering budget hotels as primary findings reveal that the budget hotel location, cleanliness, maintenance, comfort level, hotel staff service, value for money room rates and food and beverage values are among the significant factors that influence domestic tourist satisfaction[4].

2 General Description

2.1 Product Functions

1. Guests shall view existing packages and hotels with their services.
2. Guests shall book in any hotel or package and track the reservation by registering and becoming a user.
3. User and Guest should send an enquiry regarding his experience with the website or regarding his reservation and it's status in the support center page.
4. User shall see reviews on packages and hotels.
5. Support Operator shall reply to messages and enquiries from guests and users.
6. Support Operator shall send news wire to subscribed emails on the system
7. Admin shall edit every page's content including the text and images to be able to add, remove and edit packages and hotel's services.

8. Admin shall create and add pages to the website along with gallery of images and text content.

2.2 Similar System Information

Many Tourism Companies offer great experience in managing and financing the tourism industry and making Egypt a better place to travel. These agencies motivate the new generation to implement their skills in this field. One of the leading tourism agencies in Egypt is Travco. Travco seeks to improve the tourism industry by finding new strategies to improve the travel process and making sure the guest enjoys his/her stay in our country. Our system shall be similar to that of Travco's [6]. Also another leading agency is Flash Tours which poses one of the fine transportation and programs for guests in lower Egypt [3]. Our system is intended to be standalone system not be used as a component in a bigger project.

2.3 User Characteristics

1. Guest/User:
 - Must have basic knowledge of using web browsers and navigating through web applications.
2. Support Center Operator:
 - Must have basic knowledge of using web browsers and forum threads.
3. Admin:
 - Must have a basic understanding of the layout of the website.

2.4 User Problem Statement

Being able to correctly reserve the desired package/hotel without risking conflict or loss of data due to it being stored on paper forms, And being able to reserve without being present at the reservation office.

2.5 User Objectives

Guests/Users successfully book desired packages/hotels and track it's progress remotely, And being able to submit queries/comments on the reserved package/hotel.

2.6 General Constraints

A user must have a reliable internet connection to be able to access the web application. A user must have a bank account with sufficient credit to book the package/hotel. An admin must be aware of the business context and it's process. The support center operator must reply within a certain time interval to ensure customer satisfaction.

3 Functional Requirements

3.1 User

3.1.1 FR 1

Function Name	Register
Description	This function shall register the client into the system by filling his/her data into the database
Input	Name , Email , Password , Telephone
Action	Add user to the database
Output	Home Page, Acceptance message or error message
Precondition	All fields are filled correctly
Post-condition	Redirect to the home page and update the database with a new record
Dependencies	None

3.1.2 FR 2

Function Name	Log in
Description	The client shall log in into the system through this function
Input	Email , Password
Action	Verify that the user exist in the database then retrieve user from the database
Output	Home Page, Acceptance message or error message
Precondition	All fields are filled correctly
Post-condition	Redirect to the home page
Dependencies	FR1

3.1.3 FR 3

Function Name	Booking hotel
Description	This function shall book a hotel for the logged in user using his credentials
Input	Bank account number,Hotel, number of rooms , number of persons,date
Action	Assign the reservation with the logged in user's credentials
Output	Acceptance message or error message
Precondition	The hotel shall have available rooms
Post-condition	The system saves the reservation in the database
Dependencies	FR2

3.1.4 FR 4

Function Name	Booking package
Description	This function shall book a package for the logged in user using his credentials
Input	Bank account number,Package, number of rooms , number of persons
Action	Assign the reservation with the logged in user's credentials
Output	Acceptance message or error message
Precondition	The package should have available places
Post-condition	The system saves the reservation in the database
Dependencies	FR2

3.1.5 FR 5

Function Name	Subscribe to news wire
Description	This function should save the guest or user email to receive news
Input	Email
Action	Saves the email in the database and prompts a confirmation message
Output	Confirmation or error message
Precondition	Check if Email field is empty
Post-condition	The system saves the email in the database
Dependencies	None

3.1.6 FR 6

Function Name	Send inquiry
Description	This function shall let the user to write an inquiry about a package or a hotel reservation and the inquiry is sent to the support operator
Input	Name,Email,Message
Action	Sends the message to the support operator and saves it in the database
Output	Confirmation or error message
Precondition	None
Post-condition	None
Dependencies	FR2

3.1.7 FR 7

Function Name	Review Hotel
Description	This function shall add a review of a hotel
Input	Review,Hotel
Action	The system saves the review in the database
Output	Confirmation or error message
Precondition	None
Post-condition	Post the review to the hotel's page
Dependencies	FR2

3.1.8 FR 8

Function Name	Review Package
Description	This function shall add a review on a certain package
Input	Review,Package
Action	The system saves the review in the database
Output	Confirmation or error message
Precondition	None
Post-condition	Post the review to the package's page
Dependencies	FR2

3.1.9 FR 9

Function Name	Check Availability
Description	This function shall check the availability of the hotel or package
Input	Hotel Or Package
Action	Checks all available dates for the selected hotel
Output	Shows number of available places
Precondition	The function checks for the available rooms in the hotels within the time frame selected through the data collected in the database
Post-condition	Prompts user if the selected time frame is available in the hotel
Dependencies	None

3.1.10 FR 10

Function Name	Reply to enquires
Description	This function shall send the reply of the inquiry to the user
Input	Reply,Email
Action	Send the reply to the designated email
Output	Confirmation or error message
Precondition	None
Post-condition	None
Dependencies	FR2

3.1.11 FR 11

Function Name	Send News-wire
Description	This function shall send the news to the Guests
Input	Guest's email
Action	sends news to the guest
Output	Confirmation or error message
Precondition	None
Post-condition	None
Dependencies	FR2

3.1.12 FR 12

Function Name	Send Comment
Description	This function shall make the admin add a comment on a package or a hotel
Input	comment,package or hotel
Action	Check comment if empty then The system saves the comment in the database
Output	Conformation or error message
Precondition	None
Post-condition	Shows the comment on the package or hotel
Dependencies	FR2

3.1.13 FR 13

Function Name	Add Package
Description	This function shall make the admin add a new package
Input	Hotel,package,date-in,date-out,cruise,price,visits,tour guide,days,nights,transport
Action	The system saves the fields in the database
Output	Confirmation or error message and shows the added package on the website
Precondition	None
Post-condition	Show the package on the website in the package page
Dependencies	FR2

3.1.14 FR 14

Function Name	Edit Package
Description	This function shall edit the package details
Input	package
Action	Updates the database entry with the inserted data in the fields
Output	Conformation or error message
Precondition	None
Post-condition	The Updated fields are shown on the package's page
Dependencies	FR2

3.1.15 FR 15

Function Name	Remove Package
Description	This function shall remove the package from the database with its related fields
Input	Package
Action	The Package is removed from all the tables in the database and the package is removed from the website
Output	Confirmation or error message
Precondition	None
Post-condition	Removes the package from the packages page
Dependencies	FR2

3.1.16 FR 16

Function Name	Suspend Package
Description	this function shall allow the admin to suspend the package if it has no available places or canceled by the agency
Input	Package
Action	The package is turned to view only and won't accept reservations
Output	Confirmation or error message
Precondition	None
Post-condition	The system updates the package
Dependencies	None

3.1.17 FR 17

Function Name	Edit Text
Description	This function shall edit the text in any page
Input	Text
Action	Updates the text field in the page with the newly filled field
Output	Confirmation or error message
Precondition	None
Post-condition	The system shows the edits on the website
Dependencies	FR2

3.1.18 FR 18

Function Name	Create Article
Description	This function shall create an article in about us page
Input	text of article
Action	Adds an article in the about us page with the filled text
Output	Confirmation or error message
Precondition	None
Post-condition	The system posts the article to the about us page
Dependencies	FR2

3.1.19 FR 19

Function Name	Upload Gallery
Description	This function shall post the uploaded gallery to the package or hotel page
Input	list of images
Action	Uploads the selected images to the database
Output	Confirmation or error message
Precondition	None
Post-condition	The system posts the gallery to the hotel or package page
Dependencies	FR2

3.1.20 FR 20

Function Name	Add Hotel
Description	This function shall add a hotel to the database with its data
Input	Hotel name, list of services , number of rooms, location of hotel
Action	The system saves hotel and its data into the database
Output	Conformation or error message
Precondition	None
Post-condition	Posts the hotel with its data to the system interface
Dependencies	FR2

3.1.21 FR 21

Function Name	Remove Hotel
Description	This function shall remove the desired hotel
Input	Hotel
Action	remove the hotel and its data from the database
Output	Conformation or error message
Precondition	None
Post-condition	The hotel is removed from the list of hotels available in the hotels page
Dependencies	FR2

3.1.22 FR 22

Function Name	Show Reserves
Description	This function shall show the reserves of the guest in his/her profile page
Input	None
Action	Selects all the reserves made by the guest
Output	None
Precondition	The guest must have a reserved hotel or package
Post-condition	Shows the reserves of the guest in the profile page either a package reserve or hotel reserve
Dependencies	FR2

3.1.23 FR 23

Function Name	Show Reviews
Description	This function is a polymorphic function that shows the reviews of hotel or package in their perspective page. It also shows all the reviews made by the guest in his/her profile page
Input	None
Action	retrieve the reviews of the object from the database
Output	None
Precondition	None
Post-condition	Shows the reviews of the guest in the profile page either a package review or hotel review
Dependencies	FR2

4 Interface Requirements

The user shall choose from various hotels and packages offered by the company and select/book package for his desired trip, Then the user shall track the package/booking status through the web application's interface and be able to communicate with the employees from the company in case of inconvenience.

4.1 User Interfaces

4.1.1 GUI



Figure 1: Home Page

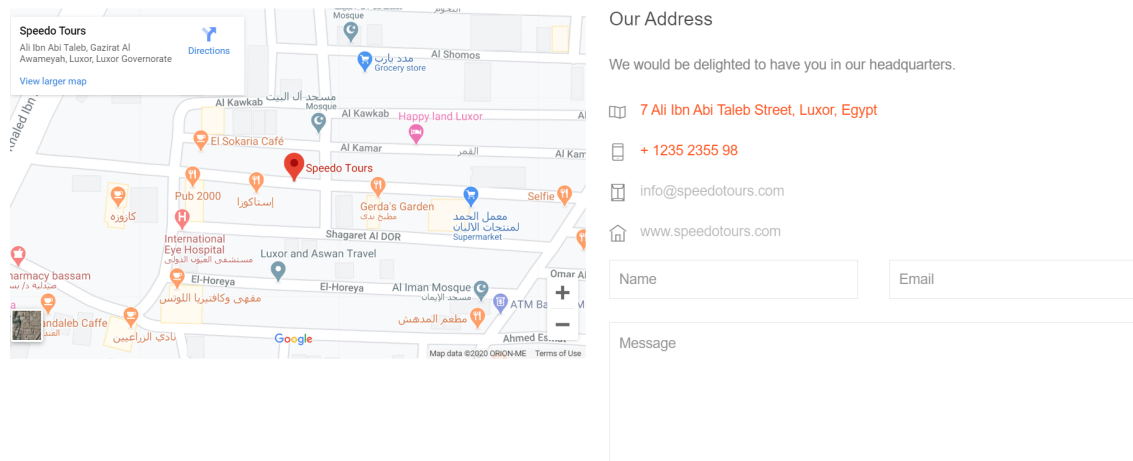


Figure 2: Contact Page

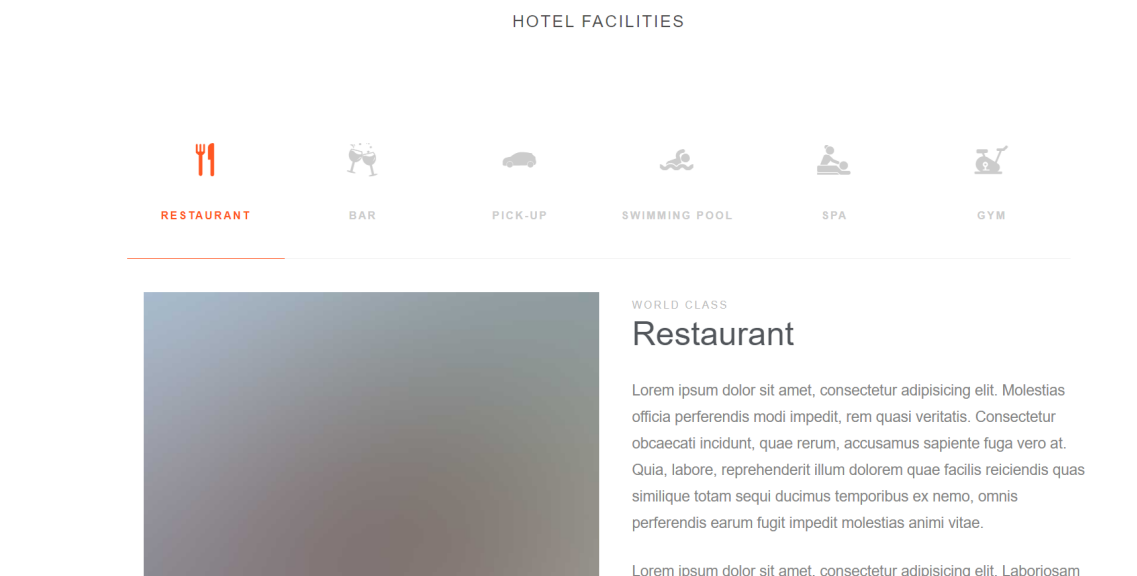


Figure 3: Hotel Facilities section in home page

4.1.2 GitHub link[1]

4.1.3 API

1. Email messages
2. Facebook login

4.2 Communications Interfaces

The communication interface is one of the most important requirements of our software as it will need a connection to the internet or a local host connection.

5 Performance Requirements

Requires adequate internet connection speed.

6 Design Constraints

Any smart device that include any operating system and must have connection with the internet to deal with the real-time data transfer.

7 Other non-functional attributes

7.1 Security

The system will be secured by encrypting the username , password and the bank account of the client.

7.2 Reliability

The system shall be designed to be error free and taking in consideration to secure the sensitive data of the client such as bank account number and also the system shall send confirmation on every booking or action the user makes.

7.3 Maintainability

The system ensures ease of maintainability through the implementation of MVC design pattern. It should be easy to maintain to minimize the amount of changes that would be done to the code.

7.4 Portability

The web application shall work on:

- Google Chrome
- Firefox
- Opera (GX and Mini)
- Safari
- Internet Explorer (Edge)
- Generic browser of android operating system

8 Preliminary Object-Oriented Domain Analysis

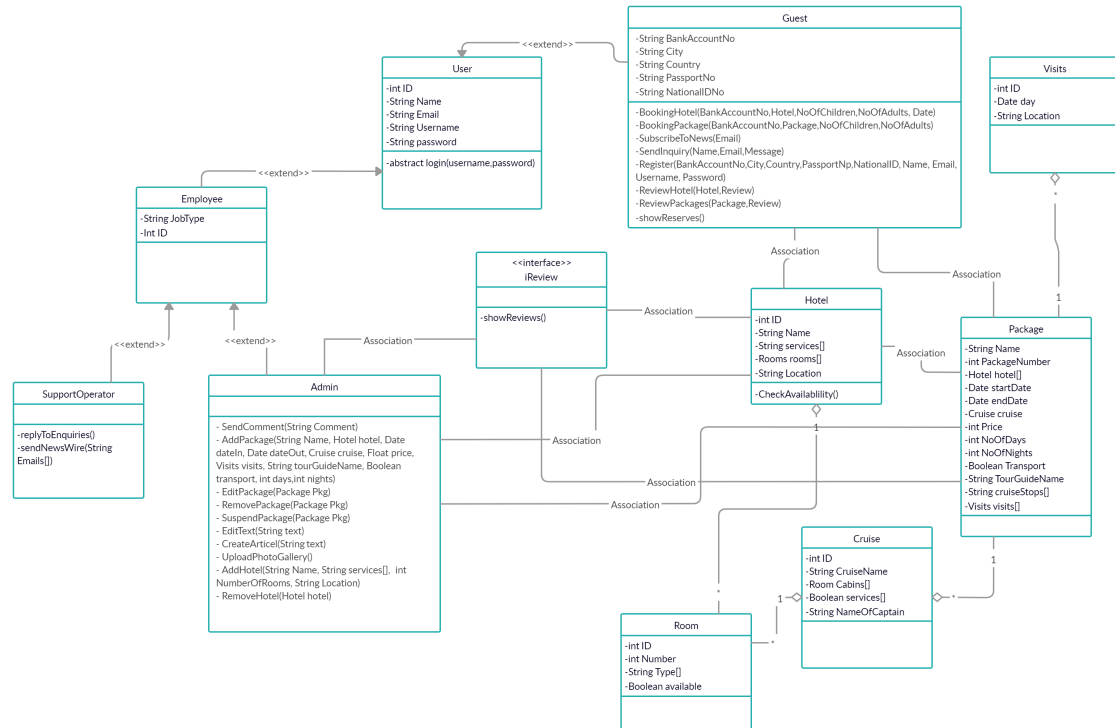


Figure 4: Class Diagram

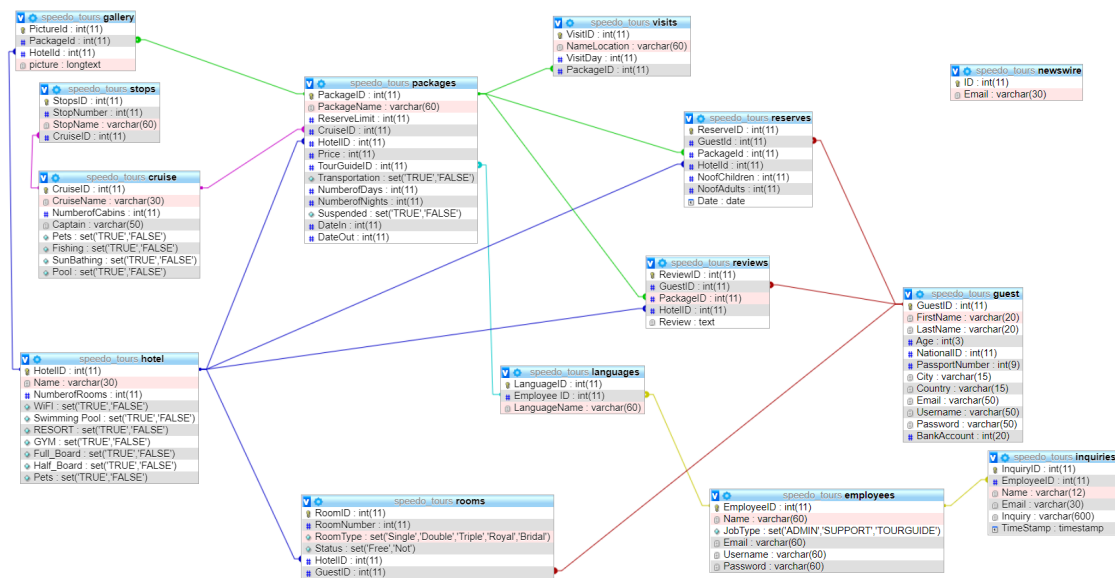


Figure 5: Database Diagram

9 Operational Scenarios

9.1 Scenarios

9.1.1 Scenario 1: User reserves package/hotel

The user shall choose the number and type of rooms and choose the suitable time - in case of a hotel reservation as packages have fixed dates - then the user shall enter personal information to confirm the reservation.

9.1.2 Scenario 2: Admin interaction with offers/packages

The admin shall add offers/packages when desired, edit the offer in case of any changes, suspend the offer if encountered with difficulties with the associated parties with the package and finally remove an offer if it needed.

9.1.3 Scenario 3: Admin interface with the web application contents

The admin shall edit the gallery of photos displayed on the main page, update the sections of featured hotels and best hotels and update the blog.

9.1.4 Scenario 4: Support Operator interface

The support operator shall receive enquiries regarding certain hotels or packages and shall respond to them. Also, the operator shall be responsible to sending the latest news to the subscribed members of the news wire.

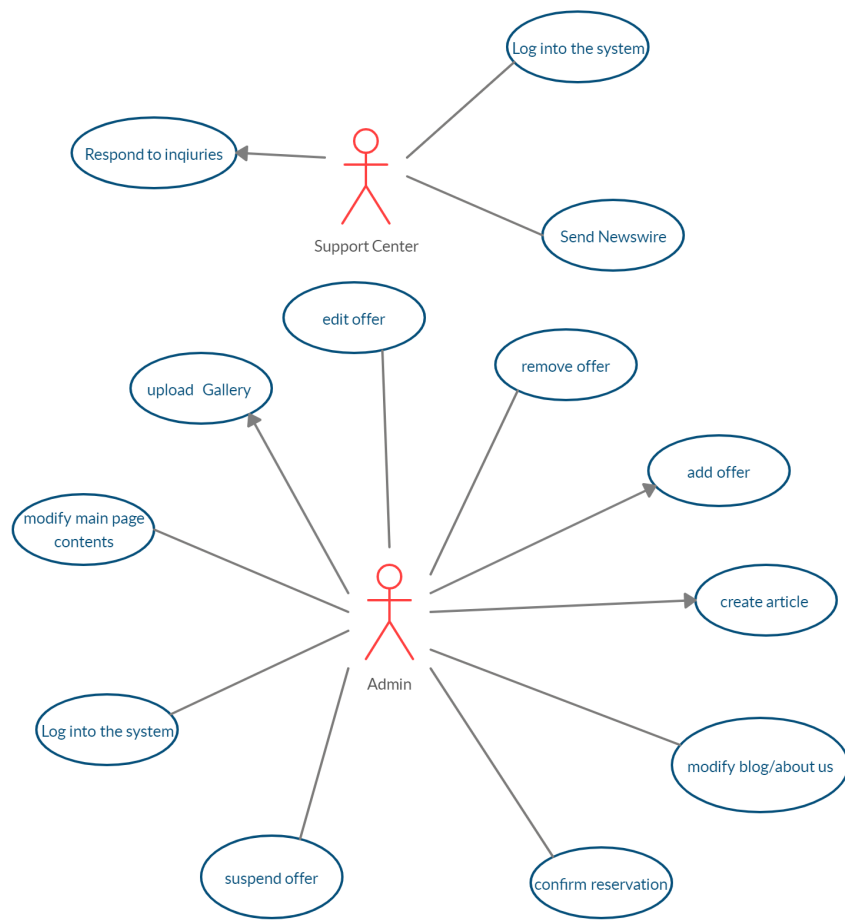


Figure 6: Admin use case

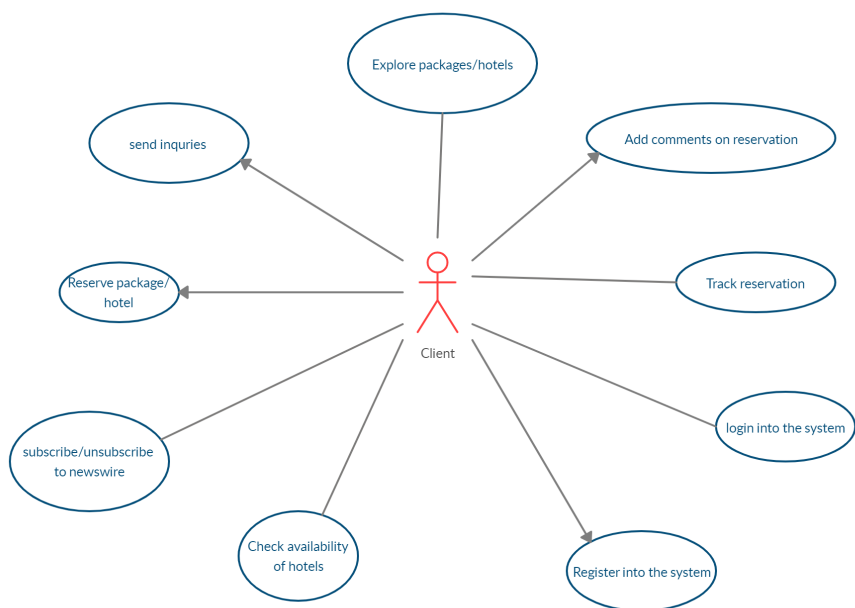


Figure 7: User use case

10 References

References

- [1] “Github link to the project,” <https://github.com/Ramez007/Tourism-Project>.
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