IN 2210 – Object Oriented Analysis and Design

Assignment 02

Project Name: Tourist Guide Web Application

Diagram: Class Diagram

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Introduction of the Project

Tourist guide web application is a web and mobile application that can get service by tourist who visit Sri Lanka. Tourist Can make a trip using this web application. It means tourist can select a location, book hotel around the selected location, book transport method. Tourist can hire a vehicle like taxi, three wheeler, and motor cycle using this web site. In this,

- Tourist
- Operator

Involved with this web application.

A class diagram can simply described as: That is, a standard diagram found in object-oriented strategy models. This will improve the system's identifiable and identifiable classes, each category's interface, attributes and methods, and each class's relationship. There is a class diagram which will help to develop our software application.

Let's identify what are the classes available in our project.

User class Take information about user. It can generalize as tourist and operator. It includes Email and Password. User login is happening here.

Tourist class take information about tourist. It includes Tourist_Id, Name, Passport No, Phone Number, Country, Password, Email, DOB of the tourist. Tourist can register in this tourist guide web application and after logging he/she can search location and select a location from the list. After that tourist can book a suitable hotel around the selected location. And If tourist like he/she can hire a transport method like taxi, three wheeler or motor cycle. Otherwise tourist can search available bus roots he can reach to the selected location. Tourist can give rating for other transportation method. After confirm the booking he/she can pay for the booking. Tourist can manage his account. Such as update or delete.

Operator class takes information about Operator. It includes name, phone number, Id no, email and password. In this case operator act as an employee of the company. Because of that operator does not want to register to this web site. He can directly log in to this web site using email and

password. His main duty is add hotel details, add locations, and add other transportation methods. As well operator can add another operator in to the system.

Location Class takes information about Location in Sri Lanka. It includes Location name, district, town, description and photos of the location. In here operator can add locations and manage locations. Also tourist can select location and view details in here.

Hotel Class takes information about Hotel. It includes Hotel name, Description, photos of hotel. Operator asks details from hotel vendor and adds hotel details to the relevant hotel. Also operator can manage hotels. In here, tourist can view hotel details, select hotel, check availability through the application.

Hotel Room Class takes information about Hotel Room of the hotel. It includes Hotel name, room category and price. Add price method is happening here.

Room Categorize class takes information about Room category, Description and Price of Room categorize. Add Room and manage Room are happening here. Operator can Add room and manage room details.

Booking class takes information about Booking_Id, Check in date, Check out date, Hotel Name, Tourist id of booking make by tourist. In here place bookings are happening here.

Other Transport class takes information about other transportation like taxis, three wheeler and motor cycle. It includes vehicle no, driver name, category, contact no of the driver and photos of vehicle. Tourist can rating and view details of other transport. Operator can add transport and manage transport in here. Also calculate price is happening here.

Bus class takes information about bus. It includes bus route and description. View_details is happening here. After selected the location tourist can view all bus routes, tourist can reach to the selected location.

Class Diagram

Booking
+ booking_id : int
+ check_in date : date
+ checkout_date : date
+ Hotel_Name : String
+ Tourist_id : int

+ createBooking() : void
+ manageBooking() : void

Location
+ location_name : String
+ District : String
+ town : String
+ Description : String
+ photos: Images

+ viewDetails() : void
+ selectLocation() : void
+ AddLocations() : void
+ ManageLocations() : void

User
+ email : String
- password : String

+ login() : void

Tourist
+ name : String
+ DOB : date
+ passportNo : String
+ country : String

+ register() : void
+ ManageAccount() : void

Operator
+ name : String
+ Phone_no : String
+ Id_No : String

+AddOperator() : void
+ ManageAccount() : void

RoomCategarize
+ RoomCategory
+ Description
+ Price

+ AddRoom() : void
+ ManageRoom() : void

BusRoute
+ routoNo : String
+ Route : String

+ viewDetails() : void

Hotel
+ Hotel_Name : String
+ Description : String
+ Photos : Images

+ viewDetails() : void
+ selectHotel() : void
+ CheckAvailability() : void
+ addHotels() : void
+ manageHotels() : void

Other Transport
+ Vehicle_No : String
+ Driver_Name : String
+ Category : String
+ Contact_ No : String
+ Photos : Images

+ rating() : int
+ AddTransport() : void
+ ManageTransport() : void
+ CalculatePrice() : real
+ viewDetails () : void

Hotel Room
+ Hotel_Name : String
+ Room_category: String
+ Price : real

+ AddPrice() : void

Relationships/multiplicities:
- 0..*
- 1
- 0..*
- 0..*
- 1
- 1..*
- 0..*
- 0..*
- 1
- 1..*
- 0..*
- 1
- 1