

Component Design

Airline Reservation System

**Submitted in partial fulfillment of the requirements of the degree of Master of
Software Engineering**

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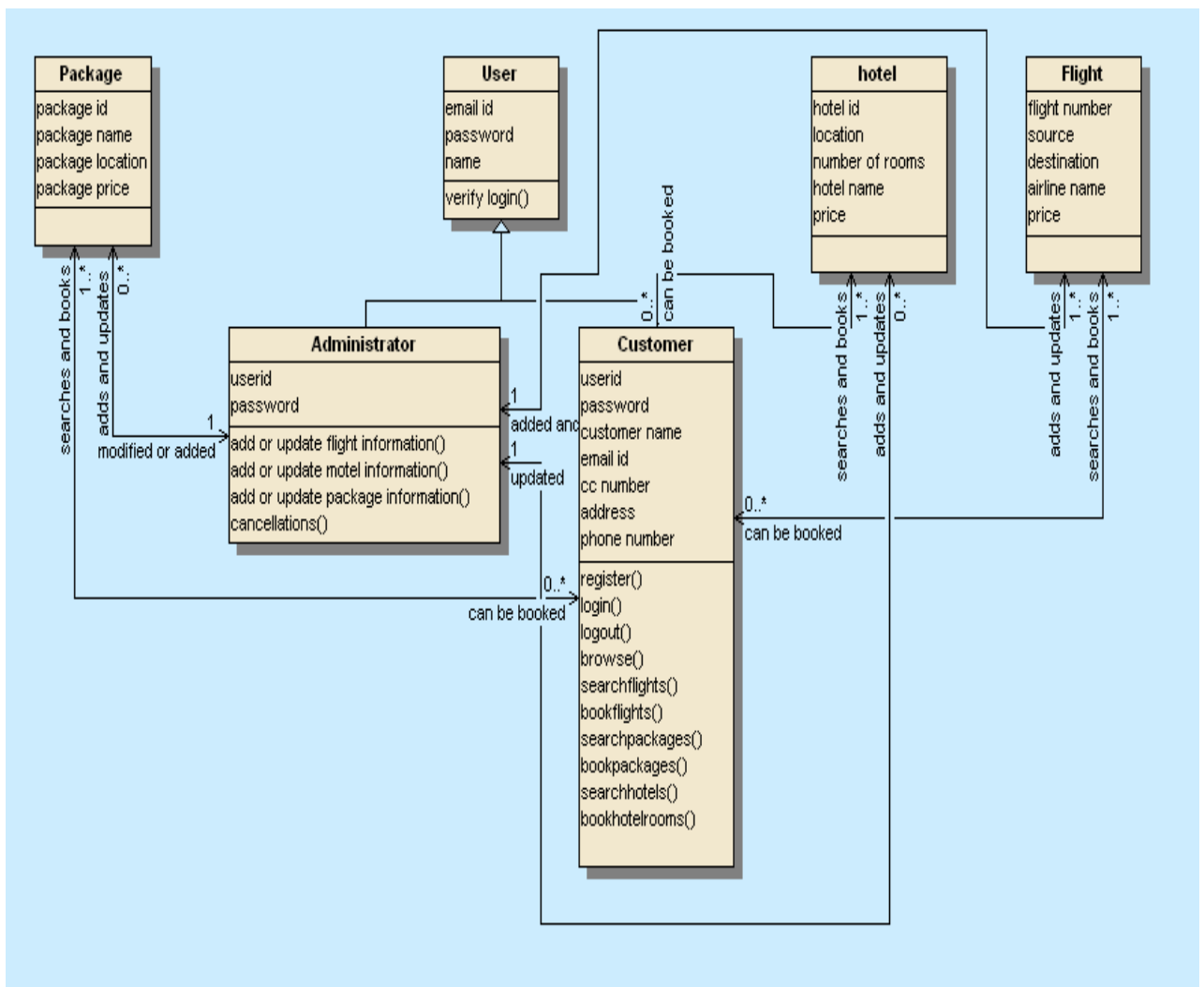
1. INTRODUCTION AND PURPOSE

The main purpose of the Component Design document is to provide and explain the component design for the Airline Reservation System project in detail.

2. CLASS DIAGRAM

The class diagram of the Airline Reservation System project would be as follows:

Figure 1 - CLASS DIAGRAM



2.1 CLASS DESCRIPTIONS

2.1.1 USER



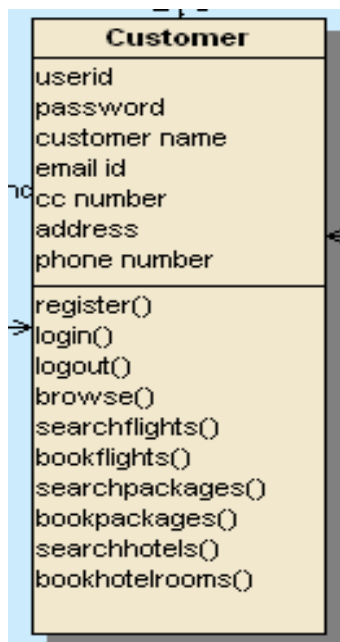
The user class is responsible for handling all the user functions. This user class is the super class or the base class for two types of users namely the customer and the administrator. The user logging into the system will be mainly verified for their username and password., which is the email id for the customer and a username for the administrator.

2.1.2 ADMINISTRATOR



The administrator class is the sub class of the user class. This class is mainly depicted here to define all the attributes and functions carried out by the administrator of the Airline Reservation System website. The attributes for the administrator of the Airline Reservation System website are the userid and password, which the administrator uses to log on to the Airline Reservation system website. The administrator would be able to perform the tasks of adding or updating the information for flights, motels and packages etc.

2.1.3 CUSTOMER



The customer class has been depicted here as it is a sub class for the super class user of the Airline Reservation System project. The attributes for the customer would be the userid, password, customer name, email id, credit card number, address, phone number.

The functions that the customer of the website would be able to perform are :

Register() – the customer would be able to register onto the system

Login() - the customer can login with the email id and password

Logout() – the customer would be able to logout of the system

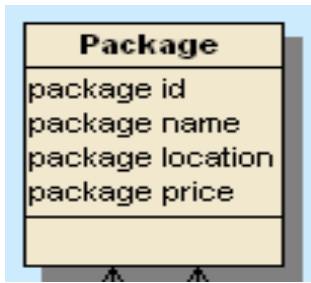
Browse() – the customer can browse through the website

Searchflights() and bookflights() – the customer would be able to search and book the flights available on the website.

Searchpackages() and bookpackages() - the customer would be able to search and book packages available on the website

Searchhotels() and bookhotels() - the customer would be able to search and book for the hotels available on the website

2.1.4 PACKAGE



The class package is depicted in the class diagram to represent the set of packages present in the application. The customer can book packages using the PackageSearch page.

Package generally has the following attributes:

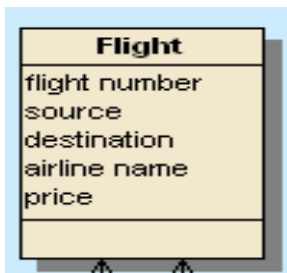
Package id – a unique id given to a package

Package name – the name of the package

Package location - the location of the package...it indicates the place where the package is available

Package price – the price of the package

2.1.5 FLIGHT



The class flight is depicted in the class diagram to represent the set of flights present in the application. The customer can book packages using the FlightSearch page. A flight present in the airline reservation system, generally has the following attributes:

Flight number - A unique number is given to the flight

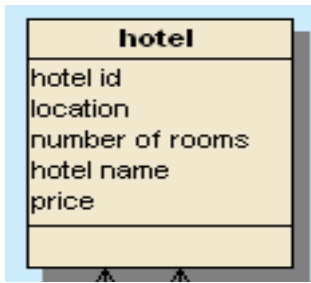
airline name – the name of the airline that the flight belongs to

source – the place where the flight has as its beginning point

destination – the place where the flight has as its end point

price – the price of the airline ticket of a particular flight

2.1.6 HOTEL



The class hotel is depicted in the class diagram to represent the set of hotels present in the application. The customer can book hotels using the HotelSearch and HotelBooking page. A Hotel available in the Airline Reservation System application generally has the following attributes:

hotel id – a unique id given to a hotel

hotel name – the name of the hotel

location - the location of the hotel

number of rooms – the number of rooms available at each hotel

price – the price of each room in a hotel