Component Design
Airline Reservation System

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Kaavya Kuppa
CIS 895 – MSE Project
Department of Computing and Information Sciences
Kansas State University

Committee Members:
1. Dr. Daniel Andresen
2. Dr. Torben Amtoft
3. Dr. Mitchell L. Neilsen
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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