book-it

CIS3270 Final Term Project

A hand holding a magnifying glass over a globe

Description automatically generated with low confidence

Charles Wibonele

Kimberly Barboza

Ronald Ramsey

TAble of  
Contents

business requirements 1

Scope of the Project: 1

Objectives: 1

Project Overview: 2

Functional Requirements: 2

User Registration: 2

Forgot Password: 3

User Login: 4

Search Flight: 4

Flight Detail Page: 5

Book Flight: 5

Enter Payment Information: 6

Add/Delete or Update flight: 6

Cancellation of Reservations 7

Security Requirements: 7

CLASS DIAGRAMs 8

DB Classes 8

Common Classes 9

GUI Classes 10

data model 11

Process Flow 12

Customer Process Flow 12

Admin Process Flow 13

# business requirements

## Scope of the Project:

The goal of this project is to create and deploy an airline ticket reservation system. All accessible air flight information is merged together and can be accessed conveniently through a single point, thanks to a well-designed database. A user-friendly user interface is provided to allow different combinations of search criteria to be retrieved from the user and corresponding database search statements to be generated. The air ticket reservation system provided both customer and administration interfaces with the latter used for administration purposes.

## Objectives:

The main goal of the proposed system is to make online the processes of the air ticket reservation and cancelation system. The goal is to create a distributed system that customers will utilize, as well as to make ticket reservation simple and straightforward to use.

## Project Overview:

The Airline Reservation System project entails the creation of a generic airline ticketing website that allows clients to look up the availability and costs of various airline tickets. This project also includes capabilities such as online user registration, management staff or administrator changes to the website's details, and adding, deleting, or changing flight information and details. This website would be designed to function similarly to any other online airline ticketing service.

There are numerous advantages to the proposed system. It is quite simple for people from all around the world to register. The system is more tailored to the individual. It is designed in such a way that new users may quickly grasp all of the options available. It is created in a quick and simple approach. This technology assists the customer in comparing the rates offered by several travel agents and selecting the most convenient price for them.

## Functional Requirements:

The functional requirements of the Airline Reservation System are divided among the customer and the administrator of the application.

### User Registration:

In the case that the user does not yet have an account they will have to register for one. Users register with the application by providing all the necessary details, in order to make reservations or bookings for flights.

#### Users: Customers and Admin

Input: The user will have to provide their first and last name, address, city, state, zip code, username, password, email address, social security number, security question and their security answer.

Output: All of the details entered in the customer registration page will be verified and accepted by the system into the database.

### Forgot Password:

In the case that the user is already registered and has an account but forgot their password to be able to access their account they can use this function to retrieve their password by answering a security question.

#### Users: Customers and Admin

Input: The user will have to provide their username; they will be prompted with a security question and will have to input their security answer.

Output: The application then verifies if their security answer matches the one in the database their password will be displayed.

### User Login:

Once the user is registered and has an account, they will log into the application with their username and password.

#### Users: Customers and Admin

Input: When enrolling with the system, the user or client creates a username and password. They then log into the system with them to make reservations or view any information.

Output: If the username and password provided by the customer are correct, the program checks the authenticity of the username and password and allows the user to view the information available on the system.

### Search Flight:

Users search for airline tickets that meet their needs.

#### Users: Customers and Admin

Input: When searching for flights the user will have to enter the city that they are “leaving from” and where they are “Going to”, the departing and returning dates. They will need to choose whether their flight will be round trip, one-way, or multi-city. The user will then enter the number of travelers, and their flight class: economy or first class.

Output: The program will gather their information and filter the flights to show the ones that match their chosen criteria.

### Flight Detail Page:

Shows the users the results of their searches and allows users to view and compare airline flight details like the flight prices, times, duration and airline. Users can then select the flight they want to book. It also allows users to make changes to their search and load different flights.

Input: Flights can be booked by selecting the “book” option after users have reviewed the different flight details. Users can modify their flights search by changing their flight type, the number of travelers, the flight class, the cities they will be flying to and from as well as the departing and arrival dates.

Output: If changes to the flight search have been made, the system will gather the information and show a new set of results from the search. When users choose to book the flight, they will be directed to different page to enter further information.

### Book Flight:

The user books airline tickets and enters information on whose traveling.

#### Users: Customers and Admin

Input: After the customer looks up the information related to various airlines and finds the one they want to book they will enter the traveler’s personal information. They will enter the travelers first, middle and last name, phone number, gender, date of birth, and confirmation email.

Output: The application will save the traveler information and assign it to their ticket.

### Enter Payment Information:

Once the flight has been selected for booking and the traveler’s information has been entered their payment method.

#### Users: Customers and Admin

Input: User will input the name on the card, card number, expiration date, CID, zip code, and the total amount.

Output: The system will process the card information and complete the payment, it will then reserve the seat for the user and display the booking number, the flight summary data and allow the user to make a new booking.

### Add/Delete or Update flight:

where the administrator adds, deletes or modifies customer information in the system database

#### Users: Admin

Input: administrator logs in and makes the wanted changes

Output: System receives the changes and makes the modifications

### Cancellation of Reservations

The flight is deleted from the user’s account

#### Users: Customers and Admin

## Security Requirements:

Users will be needed to log in to the system with their username and password to view and modify their own reservation information. Only approved members who are on the list of authorized managers will be able to perform administrator tasks. Customers will be able to see only their own previously placed orders, not ones submitted by other customers, according to the system.

# Text Description automatically generated with low confidenceCLASS DIAGRAMs

## DB Classes

Table

Description automatically generated

## Common Classes

A picture containing table

Description automatically generated

## GUI Classes

# Diagram Description automatically generateddata model

# Diagram Description automatically generatedProcess Flow

## Customer Process Flow

## Admin Process Flow

Diagram

Description automatically generated