#### **Project #2 description: Flight Ticket Booking System**

This project aims to create a web application platform for booking flights. Users can search for flights, select seats, make payments, and perform other activities. The system will facilitate users to book flights smoothly to give an enhanced user experience.

### Requirement 1: Users shall be able to register for a new account

- Test Case Name: User Registration
- Objective: To verify that users can successfully register for an account
- Action: In the user registration page, fill in valid user details such as personal details and contact information.
- Assert: Check that the user is registered and redirected to the login page.

# Requirement 2: Users shall be able to search for available flights

- Test Case Name: Search for Flight
- Objective: To verify that users can search for flights based on trip type (round trip, one way, etc), the number of passengers, origin, destination, and departure date
- Action: User enters valid information about their desired trip type, the number of passengers, and the departure date (and return date if they are doing a round trip).
- Assert: Check that an available list of flights that meet the users criteria are listed, and none if there are no flights available.

# Requirement 3: Users shall be able to select a flight they want to book

- Test Case Name: Select Flight
- Objective: To verify that users can select a flight of their choosing.
- Action: User is presented with a list of available flights matching their search criteria (criteria listed above). The user clicks on a specific flight to select it.
- Assert: Check that the user is redirected to the next step, which is choosing available seats.

### Requirement 4: Users shall be able to log in to their account

- Test Case Name: User Login
- Objective: To verify that a user can log in to their account
- Action: User is presented with a user login page to fill in proper account details and press login
- Assert: Check that the user details match a registered account and redirect to main page / Redirect user to login page if account has logged out

#### Requirement 5: Users shall be able to pick an available seat of their selected flight

- Test Case Name: Seat Selection
- Objective: To verify a user can select an available seat of their choosing from their selected flight
- Action: User is presented with a selection of available seats and clicks on an available seat to select and book
- Assert: Check that a user can successfully select an available seat and redirect to traveller information

### Requirement 6: Users should be able to successfully pay for their chosen seat

• Test Case Name: Payment Screen

- Objective: To verify a user can successfully and securely pay for their seat with their financial account details
- Action: User is presented with payment options, where they select an option and fill in corresponding valid financial details before submitting
- Assert: Check that a successful payment is made when a user submits their financial details

## Requirement 7: Users should be able to view ticket / download booking confirmation

- Test Case Name: View Booking
- Objective: To verify that users can view and download their booking confirmation after a successful payment.
- Action: Users are able to click the "Download Confirmation" / "Download Ticket" button on the confirmation page.
- Assert: Check that the file containing the booking details is successfully downloaded.

## Requirement 8: Users should be able to cancel their flight booking

- Test Case Name: Cancel flight booking
- Objective: To verify that users can cancel their flight booking and get a confirmation.
- Action: Users are able to click "Cancel Booking" from their account page.
- Assert: Ensure that the system asks for a confirmation of cancellation, and upon confirming, cancels the booking and displays a success message.

### Requirement 9: Users should be able to make changes to their booking

- Test Case Name: Modify flight booking
- Objective: To verify that users can modify their booking, such as changing flight and seat.
- Assert: Check that the system updates the information and displays the changes on the confirmation page.

#### Requirement 10: Users should be able to filter search results

- Test Case Name: Filter Search Results
- Objective: To verify that users can filter flight search results based on several factors
- Action: On the search results page, use the filters to refine the search by selecting an airline, setting a price range, and limiting the duration of flights.
- Assert: Ensure that the flight results updates correctly, and only displays flights that match the filter criteria.

# Requirement 11: Users should be able to fill in their traveller information after selecting a flight.

- Test Case Name: Fill Traveller Information
- Objective: To verify that users can fill in their personal details and contact information after selecting a flight.
- Action: On the traveler information page, the user fills in valid person details and contact information for each passenger.
- Assert: Ensure that the traveler information is correctly saved and the user is redirected to the payment page.