

## Tina Kralimarkova (tnk7060) - Log in/ Registration + Public user + Customer + Set up

### Set up:

- Created github
- Set up project and dependencies
- Connected database
- Updated database to better flow with application

### Log in/ Registration:

- Created separate login and registration pages for each role
- Ensured consistency with the database for registration. No duplicate users, all fields filled in correctly
- Display error if a registration field is filled in incorrectly
- Ensured accurate login, users cannot log in without the correct credentials.
- Hashed passwords using SHA-256 cryptographic hash function.

### Public user:

- Allowed public users to search for upcoming flights by origin or destination airport, city, and date.
- Allowed public users to look up flight status for in-progress flights by providing the airline and flight number.

### Customer:

- Created 3 pages for customers: home page, spending page, purchases page
- Home page with a display of flights available for purchase, includes filters for date range, origin and destination. If a flight is sold out, it no longer appears on list
- Spending page with analytics of spending by filters
- Purchases page with a table for upcoming flights and all flights.
- Ensured server side pricing and purchasing of tickets. Users cannot buy a ticket for a plane that is full.
- Ensured users must be logged in to view spending, purchases, or buy flights. If not logged in, redirected to log in page

## Raquel Jimenez (rj2391) - Booking Agent + Airline Staff (Admin & Operator)

### Booking agent

- Created 4 pages: Home, Purchased Flights, Search & Purchase, and Analytics.
- All pages enforce agent authentication at the start of each route.
  - Home: Provides buttons linking to the remaining three pages.
  - Purchased Flights: Shows all flights the agent has booked for registered customers, with filters for departure airport, arrival airport, and date ranges.

- Search & Purchase: Displays all available tickets for upcoming flights across all airlines (excluding delayed/in-progress flights). Agents can filter by departure airport, arrival airport, and departure date.
  - When clicking 'Buy', a popup asks for the customer's email.
  - The system checks whether the agent is authorized by the airline.
  - If the customer does not exist, an error is shown (as agents cannot buy for non-registered users).
  - Once a ticket is purchased, it is removed from the available flights list.
- Analytics: Displays all required metrics along with bar charts.
- All pages include corresponding HTML files.

### Airline Staff (Admin)

- Created 9 pages: Home, Default View, Passenger List, Customer Flights, Analytics, Add Airport, Add Airplane, Create Flight, and Authorize Agent.
- All routes require admin login.
  - Home: Buttons linking to all other staff pages.
  - Default View: Shows all upcoming flights for the airline within the next 30 days, with filters for departure airport, arrival airport, and date ranges.
  - Passenger List: Displays all passengers on a selected flight; staff can click customers for more info.
  - Customer Flights: Shows all flights a selected customer has taken with that airline.
  - Analytics: Includes all required monthly and yearly statistics.
  - Add Airport: Inserts the airport after checking whether its city already exists; if not, the city is added first.
  - Add Airplane: Accepts airplane ID and seat capacity.
  - Create Flight:
    - Validates airplane existence and airline ownership.
    - Retrieves seat capacity.
    - After inserting the flight, it automatically generates the corresponding number of tickets based on seat capacity.
  - Authorize Agent: Allows staff to designate booking agents for the airline.
- All pages include HTML templates.

### Airline Staff (Operator)

- Created 6 pages: Home, Default View, Passenger List, Customer Flights, Analytics, and Update Flight Status.
- All routes require operator login.
  - The first five pages are the same as the Admin version.
  - Update Flight Status: Allows operators to change a flight's status.
- All pages include HTML templates