

1. Set up the backend with Spring Boot:

- Create a new Spring Boot project using your preferred IDE or Spring Initializr.
- Configure your application to connect to the MySQL database.
- Implement the necessary entities for flights, seats, and bookings.
- Create RESTful APIs to handle flight searches, seat availability, and ticket booking.

2. Design the database schema:

- Create tables for flights, seats, and bookings in the MySQL database.
- Define appropriate relationships between the tables, such as foreign key constraints.

3. Implement the frontend with React:

- Set up a new React project using create-react-app or your preferred tool.
- Create React components to handle the user interface for flight search, seat view, and ticket booking.
- Implement logic to interact with the backend APIs to fetch flight data, available seats, and book tickets.

4. Flight Search:

- Create an API endpoint in Spring Boot to handle flight searches based on user input (e.g., origin, destination, departure date).
- In the frontend, create a form to collect user search criteria and send a request to the backend API.
- Display search results to the user, showing available flights that match the criteria.

5. Seat View:

- Create an API endpoint in Spring Boot to fetch available seats for a selected flight.
- In the frontend, implement a seat map or a list to display the available and booked seats.
- Allow users to select seats and proceed to the booking process.

6. Booking Tickets:

- Create an API endpoint in Spring Boot to handle ticket bookings.
- In the frontend, enable users to enter passenger details and confirm the booking.
- Upon successful booking, update the seat status and create a new booking record in the database.

7. Implement user authentication (optional):

- If you want to add user accounts and authentication, you can use Spring Security on the backend and JWT tokens for authentication in the frontend.

8. Deployment:

- Deploy the Spring Boot backend on a server with MySQL database access.
- Deploy the React frontend on a web server or a cloud platform.

Remember to handle error cases, input validation, and data security throughout the application. This project can be extended and improved with additional features such as flight filtering, payment integration, user profile management, etc. Happy coding!