



Java Application Development

Design and implement a backend web application that manages booking for airline company Paris Airline. Which allows customers to make online booking for a flight.

1. Implement a rest api which add a new User, displays, updates and deletes a User
2. Implement a rest api that add a new Plane, displays, updates and deletes a Plane
3. Implement a rest api that add a new Airport, displays, updates and deletes a Airport
4. Implement a rest api which add a new Flight, displays, updates and deletes a Flight
5. Implement a rest api which creates, reads, updates and deletes a new Employee/Client by taking account User
6. Implement the search feature which will find available flights for a departure city, a destination city and a departure date.
7. Implement a rest api that will allow to book for a new customer or for an existing customer a flight by providing a lastname, firstname, passport number, birthdate, departure city, arrival city, departure hour, arrival hour, flight number.

Data model

- **User**(Id , firstname, lastname, address, email, phone, birthdate)
- **Client** (Num Passport)
- **Employee**(Num emp)
- **Plane** (Id plane, brand, model, manufacturing year)
- **Airport** (Id airport, name airport, country airport, city airport)
- **Flight** (Id Vol, ville depart, ville arriv, heure date départ, heure date arrivée, aeroport depart, aeroport arriv, identifiant avion, nombre de place)
- **Book** (Id reservation, Id vol, Id client)
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To store your data you could use a mysql database or a collection like a List.

NB : Using a database to store your data will give you +5 points in comparison to the team who used a collection.