Flight Sharing Platform

BEAUGIRAUD Paul PORCEL Lauréna



Summary

| ! • System definition p.3 |
|-------------------------------|
| • System features details p.4 |
| |
| Business Objects p.7 |
| ⊕ Technical proposition p.8 |
| DAO Interfaces |
| Navigation diagram p.10 |
| |
| ■ Backlog |

System definition

The system to developed is a website for a flight sharing platform in order to put a pilot in touch with passengers. The site will have an account system with 2 distinct roles: the pilot and the passenger. Without being registered, a passenger will be able to search for a flight with its characteristics among a list of flights added by the pilots. Finally, reservations will be accepted through a mail system and reminders will be send the day before flights.



System features details (1)

- Consult a flight: all the site users can search for a flight and see all flight information by selecting the departure aerodrome and the period sought.
- Register: as a pilot or passenger by completing the registration form.
- *Edit profile:* by adding other necessary information to the account or by modifying it.
- **Planning a flight:** The pilot can plan flights by manually adding the useful information (departure and destination aerodrome, flight duration, number of places available, price per passenger, flight sheet with trip details).
- Book a flight: identified passengers can book a plane by selecting the desired number of seats.
- *Flight viewing* pilots and passengers can view their flights respectively plan or book.



System features details (2)

- Automatic mail sending: An email is automatically sent to the pilot following the reservation of a plane by a passenger. This email tells him the number of seats reserved for each reservation.
- Confirmation of flight: The pilot can confirm or not a booked flight.
- Reminder mail: A reminder of public and private information is sent the day before each flight to all participants.



The Users



The pilot will be able to add **account information** concerning his personal life, the aircraft used (experience, qualifications, number of hours of flight, etc.). He can also add **public information**: flight planification and details (with the flight sheet), **private information** (meeting place, telephone), and modify them. Finally, a pilot can **accept reservation request.**



The non-registered can **search for a flight** and view the details of all the flights found. But pilot and passenger can also search and book a flight of other pilots. A registration form must be completed to complete and finish the reservation.



The passenger can edit his profile by adding new information (photo, description, weight, ID,...) and modify them. He can book the chosen flight and indicate the number of seats desired. Finally, he can check the list of his reserved flights.

Business objects

User

- ID
- First Name
- Last Name
- Email
- Date of Birth
- Password
- Profile picture
- Description
- ID card
- weight

Pilot

- Experience
- Qualifications
- Number of flight hours
- Private info: phone

Flight

- Aerodrome (departure and arrival)
- Time (departure and arrival)
- ID
- Number of places
- Number of places taken
- Pilot
- Passengers
- Plane
- Price
- Meeting place

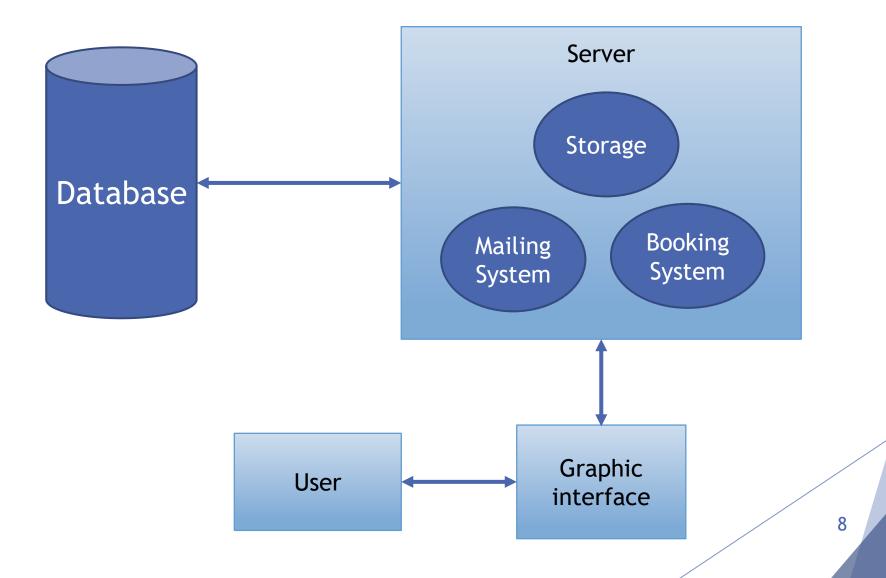
Aerodrome

- · ID
- Country
- Town
- Code name

Plane

- ID
- Pilot
- Model name
- Number of places

Technical proposition



DAO Interfaces

AerodromeDao

- List<Aerodrome>getAerodromes()Aerodrome getAerodrome(int aerodromeID);User postAerodrome();
- User putAerodrome();
- boolean deleteAerodrome();
- List<Flight> getFlightsDeparture();
- List<Flight> getFlightsArrival();

-

PilotDao

```
    List<Pilot> getPilots();
    Pilot getPilots(String pilotID);
    User postPilot();
    User putPilot();
    boolean deletePilot();
    List<Flight> getFlightsAdded(String pilotName);
    List<Aircraft> getPlanes(String pilotName);
```

FlightDao

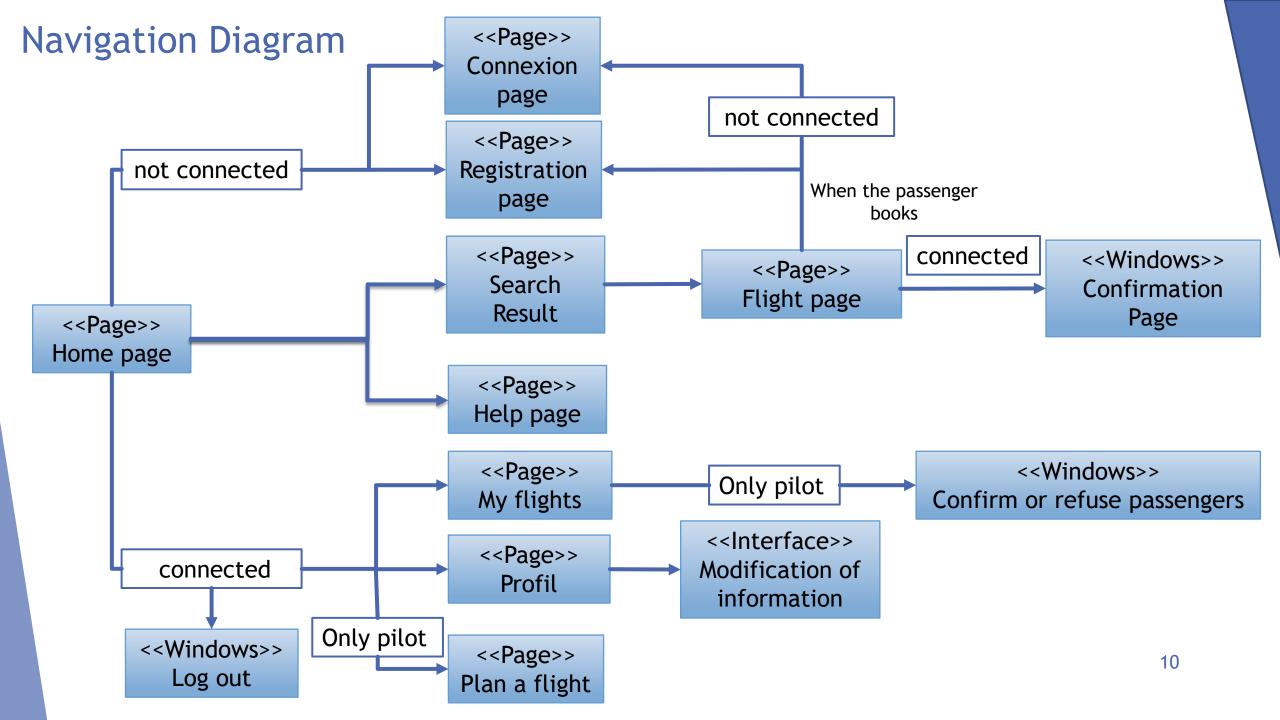
```
- List<Flight>getFlights();
- Flight getFlight(int flightID);
- User postFlight();
- User putFlight();
- boolean deleteFlight();
- List<User> getPassengers();
```

AircraftDao

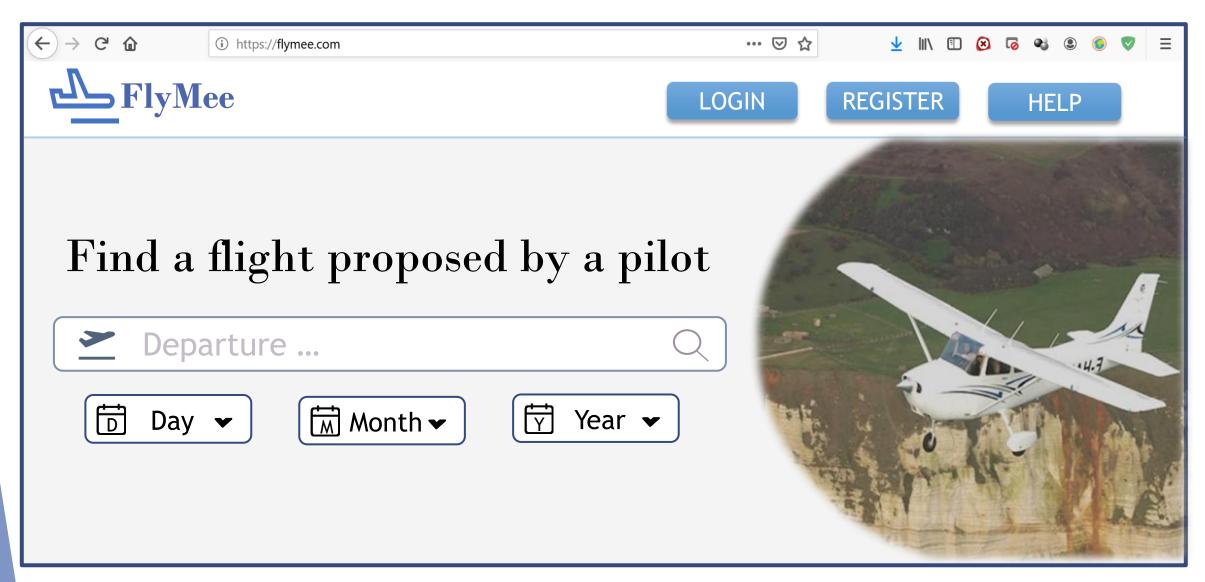
```
    List<Arcraft> getAircrafts()
    Aircraft getAircraft(String aircraftID);
    User postAircraft();
    User putAircraft ();
    boolean deleteAircraft();
```

UserDao

```
- List<User> getUsers();
- User getUser(int userID);
- User postUser();
- User putUser();
- boolean deleteUser();
- boolean postFlight(String username);
```

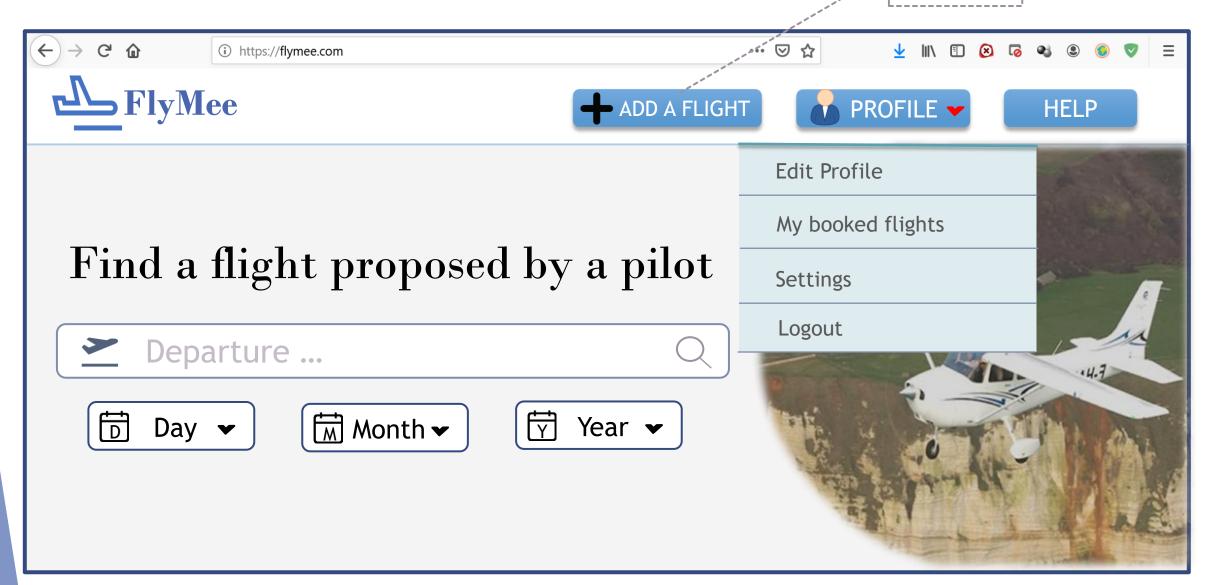


Mock-ups (1) - Homepage without register



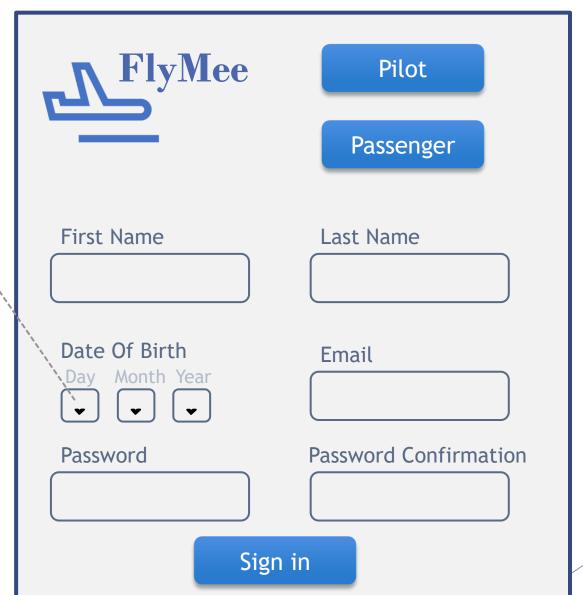
Mock-ups (2) - Homepage connected

Only with a pilot account

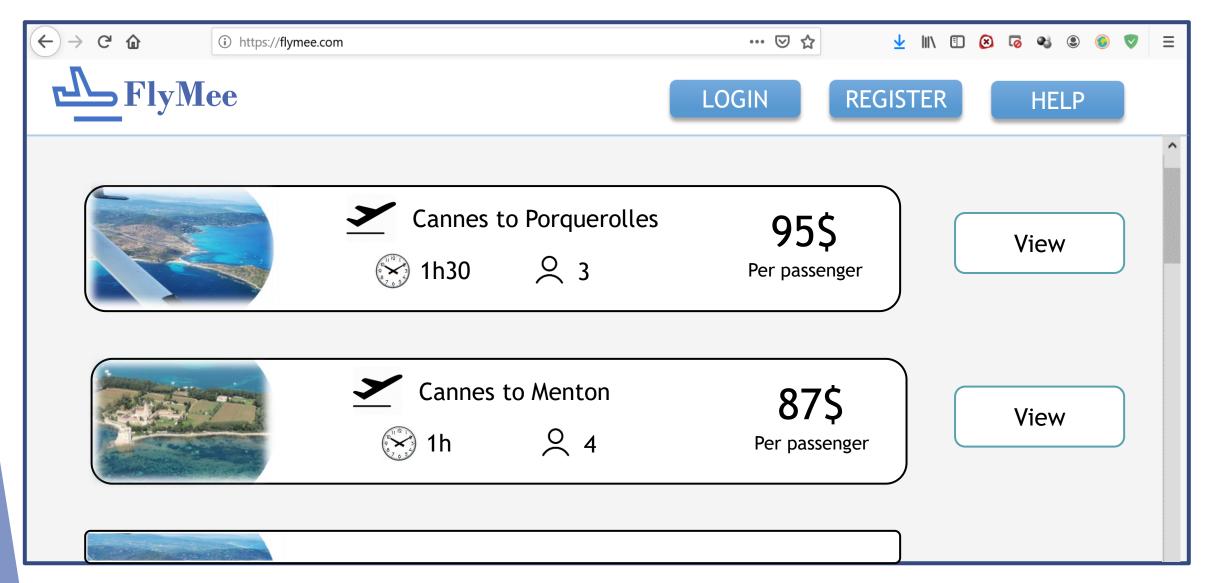


Mock-ups (3) - Registration form

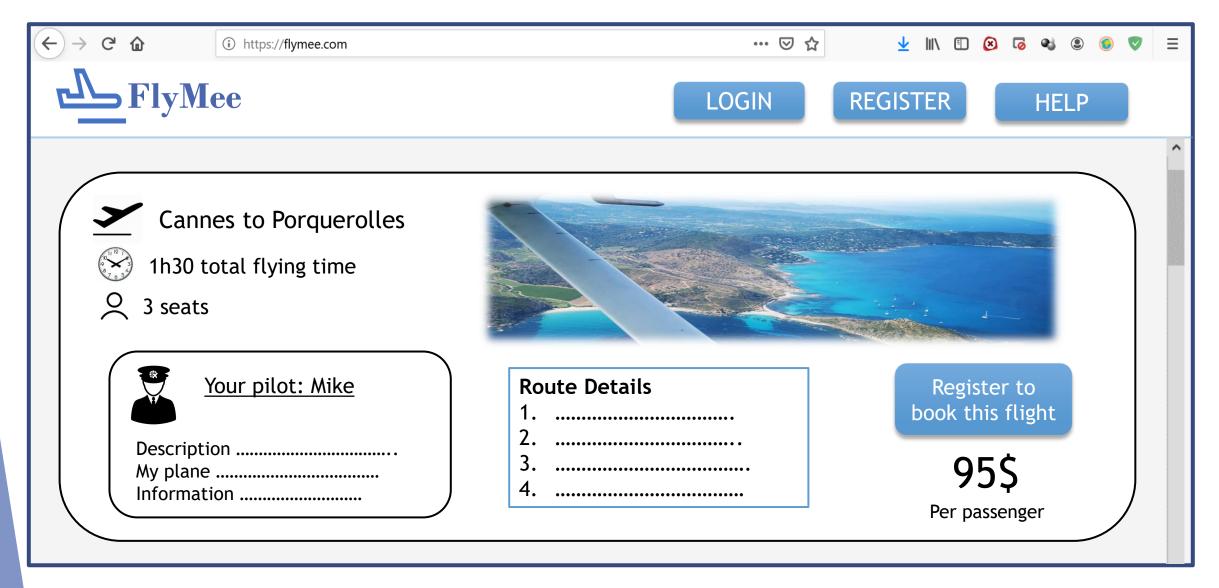
We can type the day on the keyboard or scroll down the list of days



Mock-ups (4) - List of flights find



Mock-ups (5) - View flight



Backlog (few examples)

| Example of Backlog | | | |
|---|----------|---------|--|
| Explanatory text | Priority | Worload | |
| A Database with user accounts, flights, available aerodromes. | 5 | 3 | |
| A pilot must be able to plan a flight | 4 | 1 | |
| A visitor must be able to search for flights by entering the departure aerodrome and the date | 4 | 2 | |
| A logged in user must be able to log out | 3 | 5 | |
| All visitors must have access to a help page | 2 | 4 | |
| A passenger must be able to cancel a flight | 1 | 3 | |



Find the complete table in the attached excel