

Flight Manager

Group #1

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System Overview

The system to be developed is a flight management system in response to airline companies need to organize and planify upcoming flights.

The main purpose of the system is to establish a clear and detailed calendar defining each upcoming flight in a unique and usefull way.

Flight Manager will be used by both CCOs and crew members through a website and mobile application.

Users

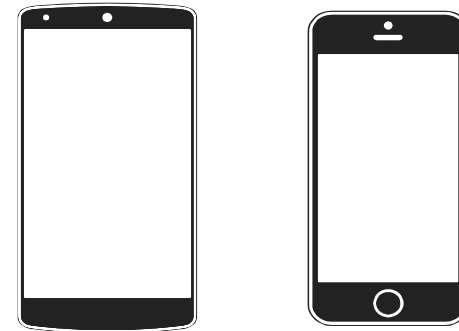
CCO Group

As for the CCO group, advanced privileges and flight modification access are granted through a website version of the system.



Crew Members

On the other hand, crew members only have a reading access in order to stay informed and accomplish their check-in in the best way.



Business Objects

In addition to some supplementary entities such as OFP, meteorology, NOTAM and advertising, our system has 3 major business objects detailed further more, which are flights, planes and employees.

Business Objects

Plane

- model
- ATC_number
- commercial_number

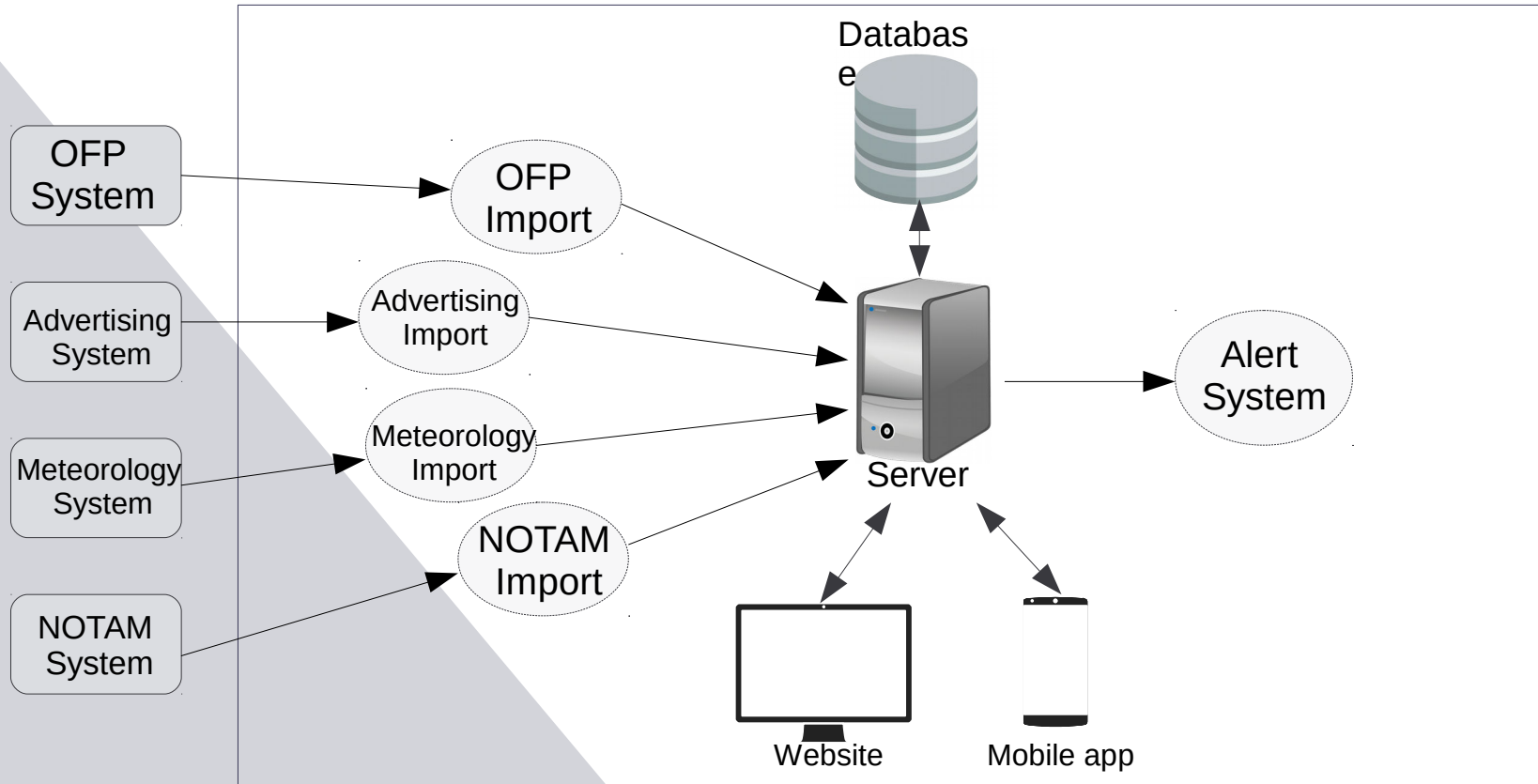
Flight

- ATC_number
- departure_airport
- arrival_airport
- departure_time
- arrival_time
- OFP
- NOTAM_list
- ad_list
- meteo_card
- crew_list

Employee

- employee_id
- first_name
- last_name
- job_title

Technical Diagram

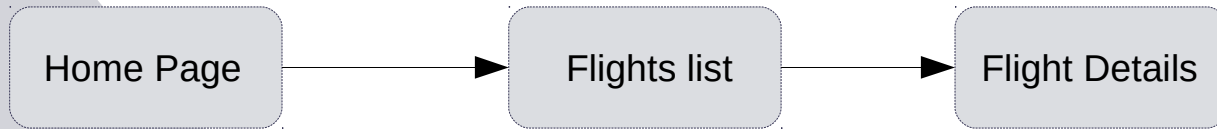


Mobile App Outline

The mobile version of Flight Manager is destined to crew members as mentioned before.

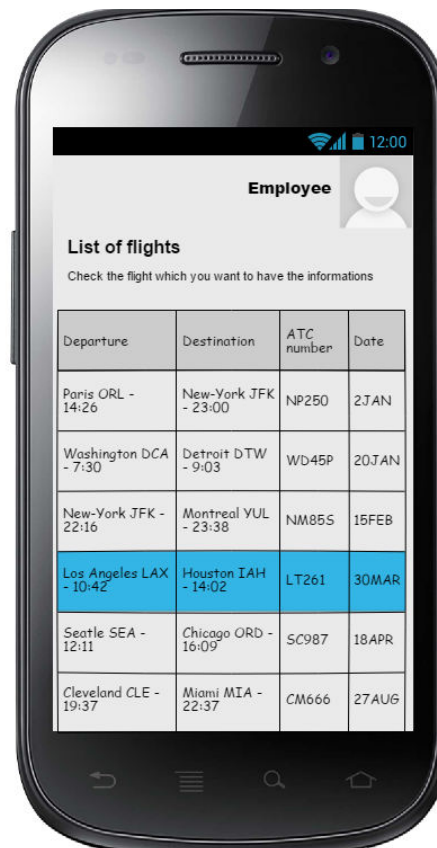
It will provide appropriate information display accordingly to each member's job title.

Mobile App Navigation Schema



The amount of information displayed in both the flights list and each flight details will be adapted to the job title of the person authenticated in the current session.

Mobile App Mock-ups



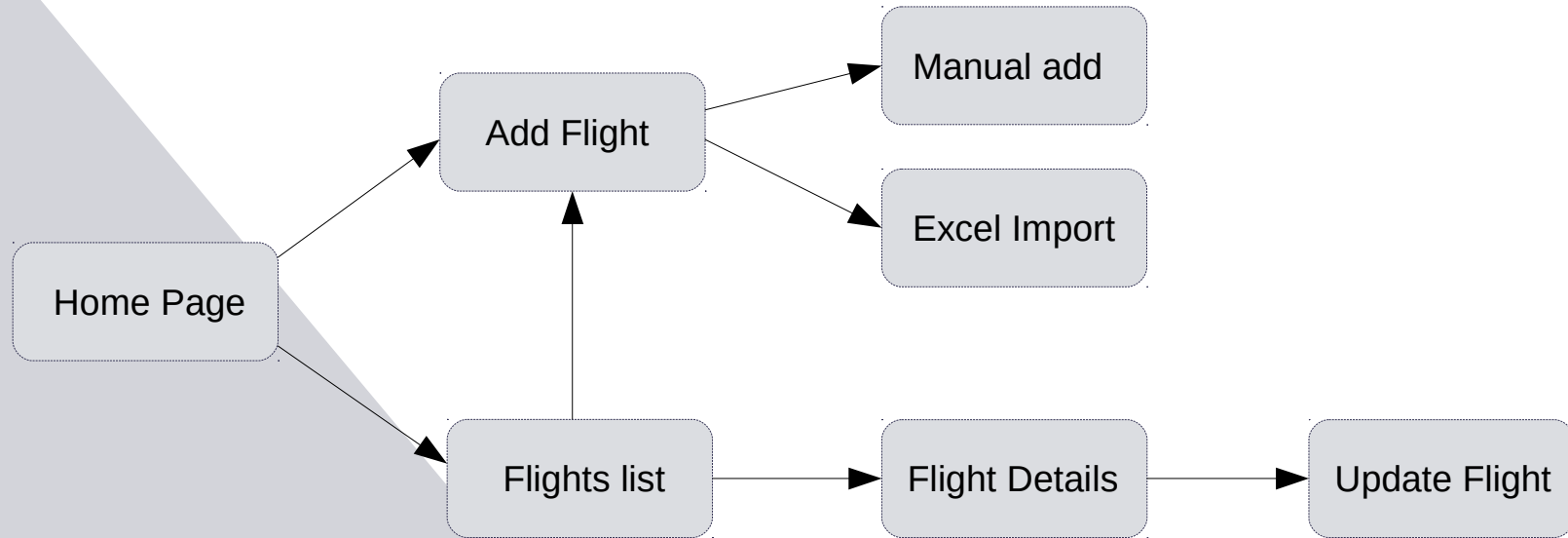
Webviews

Type	URL	Behavior
GET	/flight	Return the list of flight
GET	/flight/{ATC_number}	Return details of flight for the corresponding «ATC_number»

Website Outline

**The website version of Flight Manager
Is intended for CCO members as it will
provide data modification interfaces.**

Website Navigation Schema



An authentication interface will be developed further more before granting access to the home page as the update privilege is a serious matter.

Website Mock-ups : Home page



Website Mock-ups : Flights list

[Add Flight +](#)

Tools ▾

5 ▾

records per page

Search: [Save as PDF](#)
[Import Excel](#)

ATC Numbers	Departure	Destination	Departure time	Arriving time	Details
EZY 985	Rome	Barcelone	26 Jan 19 - 11h46	26 Jan 19 - 11h46	Details
UX 1039	Lyon	Barcelona	26 Jan 19 - 11h46	26 Jan 19 - 11h46	Details
AF 4048	Amsterdam	Brazzaville	26 Jan 19 - 11h46	26 Jan 19 - 11h46	Details
AF 4048	Paris	Antatararivo	26 Jan 19 - 11h46	26 Jan 19 - 11h46	Details
AF 4048	Cotonou	Amsterdam	26 Jan 19 - 11h46	26 Jan 19 - 11h46	Details
ATC Numbers	Departure	Destination	Departure time	Arriving time	Details

Showing 1 to 5 of 11 entries

[← Prev](#)[1](#)[2](#)[3](#)[Next →](#)

Website Mock-ups : Add Flight

Add Flight(s)

CCO's name

Add manually


Import from EXCEL file

Website Mock-ups : Flight Details

[Home](#) > [All Flights](#) > Details

[Modify](#)

PARIS ORLY
ORY



MALAGA
AGP


ATC
AF 2586

DEPART TIME 20JAN - 05:50

ARRIVAL TIME 20JAN - 07:50

TEAM



Function	Name
Pilot	Content 1
Co-Pilot	content 2
Steward	Steward 1
Steward	Steward 2
Steward	Steward 3

METEO

Website Mock-ups : Add Form

ADD FLIGHT





[Home page](#) > [List flights](#) > Add flight

Departure airport	<input type="text"/>
Arrival airport	<input type="text"/>
Departure time	<input type="text" value="dd/mm/yyyy"/> 
Arrival time	<input type="text" value="dd/mm/yyyy"/> 
OFF	<input type="text"/>
NOTAM	<input type="text"/>
ID Crew	<input type="text"/>

Website Mock-ups : Update Form

EDIT FLIGHT

[Home page](#) > [List flights](#) > Edit flight

Departure airport	<input type="text" value="Paris Orly"/>
Arrival airport	<input type="text" value="Washington"/>
Departure date	<input type="text" value="12/02/2019"/> 
Departure time	<input type="text" value="08:50"/> 
Arrival date	<input type="text" value="12/02/2019"/> 
Arrival time	<input type="text" value="18:50"/> 
OFP	<input type="text"/>
NOTAM	<input type="text"/>
ID Crew	<input type="text"/>

Webviews

Type	URL	Behavior
GET	/flight	Return the list of flight
GET	/flight/{ATC_number}	Return details of flight for the corresponding «ATC_number»
PUT	/flight	Add flight
POST	/flight/{ATC_number}	Update flight for the corresponding «ATC_number»

Workspace Structure

Backlog

Function	Description	Priority	Workload
Flights list	A clear display of all the upcoming flights with a minimum of details ordered ascendently by the date of flight. The list will also allow visualizing the details of a selected flight.	5	3
Details of a specific flight	A display of all the flight's details with a link to the update form if necessary.	5	3
Add flight to database	A blank form to fill with the necessary information. Some details might not be filled while the prominent ones are essential. The form will also allow import interfaces for the NOTAM and OFP lists.	4	4
Update a flight record	An editable pre-filled form with the old information.	4	4
Excel Import	An alternative method to manually adding several flights at a time using an excel file.	3	1
Alert System Implementation	A mail notification will be sent to the CCO members if a flight isn't correctly filled a week before departure. A second reminder will be sent 12hours before departure if the OFP isn't mentionned yet.	2	1

Git Repository

Link to our git repository : <https://github.com/andressito/ProjetGLA2019>

As for the persistence layer, our classes are the followings :

- ActionFlight.java
- Ads.java
- DAOException.java
- Employee.java
- EmployeeDao.java
- Flight.java
- FlightDao.java
- Interface_plane.java

All the implemented classes are in the link above.
Same goes for the stub.