Application: FlightWeb

Contents

I. Architecture:

- ASP.NET MVC5 (Framework 4.5.2)
- **Pattern Used**: Generic Repository Pattern
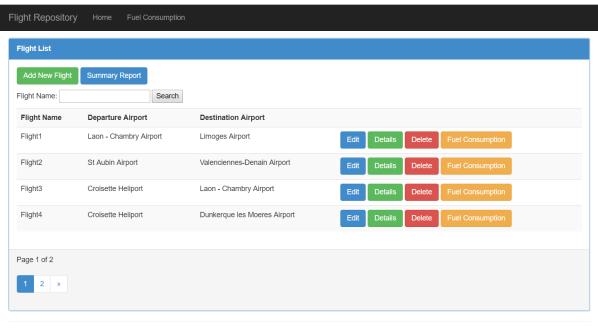- **BDD:** EF 6.1 CodeFirst.
- **Reporting:** Crystal report

II. Used Libraries:

- Google Maps API
- PageList
- AutoMapper

Note: I used JsonFile (airportsFR.json) to load list of airports in DropdownLists (Departure & Destination). Another approach is to use WebAPI.
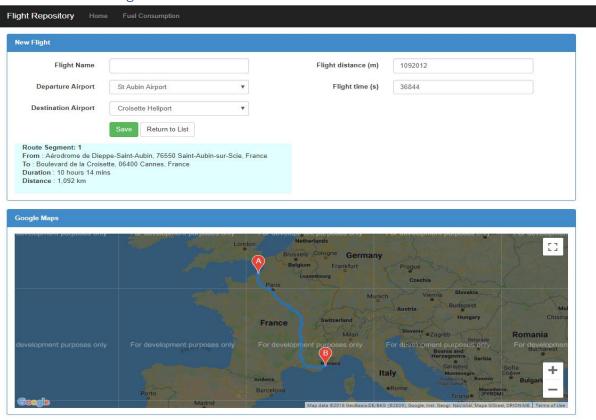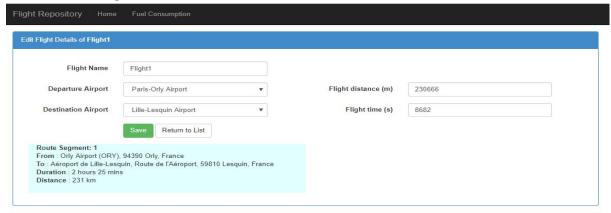
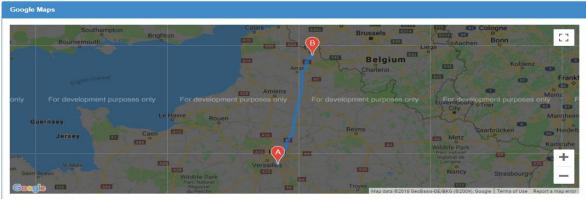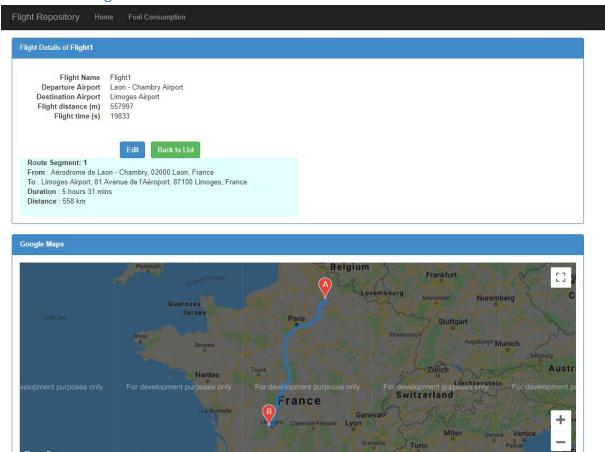# III. Flight:

1. List of Flights:

2. Add New Flight:

Flight Repository   Home   Fuel Consumption

New Flight

Flight Name	
Departure Airport	St Aubin Airport ▼
Destination Airport	Croisette Heliport ▼

Flight distance (m)	1092012
Flight time (s)	36844

Save   Return to List

Route Segment: 1
From : Aérodrome de Dieppe-Saint-Aubin, 76550 Saint-Aubin-sur-Scie, France
To : Boulevard de la Croisette, 06400 Cannes, France
Duration : 10 hours 14 mins
Distance : 1,092 km

Google Maps

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3. Edit a Flight:

Flight Repository   Home   Fuel Consumption

Edit Flight Details of **Flight1**

Flight Name	Flight1
Departure Airport	Paris-Orly Airport ▼
Destination Airport	Lille-Lesquin Airport ▼

Flight distance (m)	230666
Flight time (s)	8682

Save   Return to List

Route Segment: 1
From : Orly Airport (ORY), 94390 Orly, France
To : Aéroport de Lille-Lesquin, Route de l'Aéroport, 59810 Lesquin, France
Duration : 2 hours 25 mins
Distance : 231 km

Google Maps

4. Show flight details :
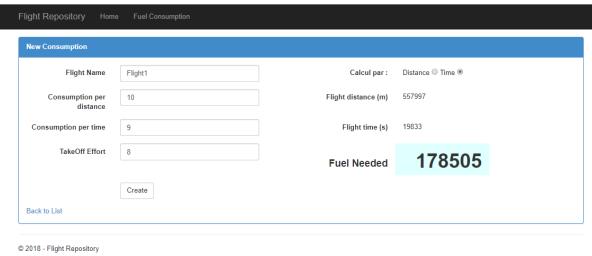

5. Load a Summary Report :

IV. Consumption :

6. List Of Consumptions

Flight Repository   Home   Fuel Consumption

Consumption List

Flight Name	Consumption per distance	Consumption per time	TakeOff Effort			
Flight1	2.00	3.00	4.00	Details	Delete	Edit
Flight2	17.00	7.00	6.00	Details	Delete	Edit
Flight2	3.00	4.00	8.00	Details	Delete	Edit
Flight1	99.00	9.00	9.00	Details	Delete	Edit

Page 1 of 2

| 1 | 2 | » |

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7. Add new Consumption :

Flight Repository   Home   Fuel Consumption

New Consumption

Flight Name	Flight1	**Calcul par :** Distance ○ Time ◉
Consumption per distance	10	**Flight distance (m)** 557997
Consumption per time	9	**Flight time (s)** 19833
TakeOff Effort	8	**Fuel Needed** **178505**

Create

Back to List

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8. Edit a consumption :

Edit Consumption Details of Flight1

Consumption per distance	2.00	
Consumption per time	3.00	
TakeOff Effort	4.00	

Flight distance (m)   557997

Flight time (s)   19833

Fuel Needed   **1115998**

Calcul par :   Distance ● Time ○

[Save] [Return to List]

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Explorateur de solutions

Rechercher dans Explorateur de solutions (Ctrl+$)

- Solution 'Flight.Application' (2 projets)
  - **Flight.test**
    - Properties
    - Références
    - app.config
    - packages.config
    - TestCalcul.cs
  - FlightWeb
    - Connected Services
    - Properties
    - Références
    - App_Data
    - App_Start
    - bin
    - Content
    - Controllers
      - ConsumptionController.cs
      - FlightController.cs
    - DAL
    - fonts
    - Migrations
    - Models
    - obj
    - Reports
    - Scripts
    - Views
    - airportsFR.json
    - favicon.ico
    - Global.asax
    - packages.config
    - Project_Readme.html
    - Startup.cs
    - Web.config

airportsFR.json Details.cshtml   Edit.cshtml   Create.cshtml   Create.cshtml   FlightC

Schéma : <Aucun schéma sélectionné>

```
 1    [
 2        {
 3            "iata": "JCA",
 4            "iso": "FR",
 5            "status": 1,
 6            "name": "Croisette Heliport",
 7            "continent": "EU",
 8            "type": "heliport",
 9            "size": null
10        },
11        {
12            "iata": "DPE",
13            "lon": "1.241111",
14            "iso": "FR",
15            "status": 1,
16            "name": "St Aubin Airport",
17            "continent": "EU",
18            "type": "airport",
19            "lat": "49.961388",
20            "size": "small"
21        },
22        {
23            "iata": "CQF",
24            "lon": "1.933333",
25            "iso": "FR",
26            "status": 1,
27            "name": "Calais-Dunkerque Airport",
28            "continent": "EU",
29            "type": "airport",
30            "lat": "50.95",
31            "size": "medium"
32        },
33        {
34            "iata": "XCP",
35            "iso": "FR",
36            "status": 1,
37            "name": null,
```

99 %

Sortie   Liste d'erreurs...   Paramètres d'exception   Console du Gestionnaire de package