

Projet JAVA/IHM/IG - 3D Flights Map

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Introduction

Bibliothèques et Version JAVA

Description Fonctionnelle

Description technique

- Parsage

- Stockage de l'information

- Filtres

- 3D

- 2D

Démonstration

Conclusion

- ▶ Parsage d'une base de donnée CSV
- ▶ Représentation 3D
- ▶ Recherche de vol

- ▶ JMonkeyEngine
- ▶ Apache Commons CSV
- ▶ Swing
- ▶ JAVA 8 (lambdas, API Stream)

Description Fonctionnelle

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3D Flight Map - - Amrati Ghazi Enzo Hamelin

File Display Help

Departure

Country *:

City:

Airport:

Arrival

Country *:

City:

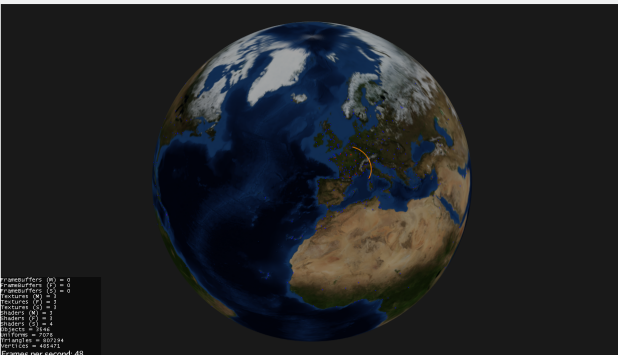
Airport:

Options

Airline:

☒ Display only actives airlines

☐ Display all the airports



Framebuffers (M) = 0
Framebuffers (C) = 0
Framebuffers (S) = 0
Textures (M) = 3
Textures (V) = 3
Textures (C) = 3
Shaders (M) = 1
Shaders (C) = 1
Shaders (S) = 4
Objects = 1146
Vertices = 80734
Triangles = 48401
Frames per second: 48

Source Airport			Destination Airport		
Id: 1324	Name: Campo Dell Oro	Id: 309	Name: Liege		
IATA_FAA: AJA	ICAO: LRG	IATA_FAA: LGG	ICAO: EBLG		
Latitude: 41.923637	Longitude: 8.802917	Latitude: 50.637417	Longitude: 5.443222		
Timezone: 1.0	DST: E	Timezone: 1.0	DST: E		
City: Ajaccio	Country: France	City: Liege	Country: Belgium		

Airline

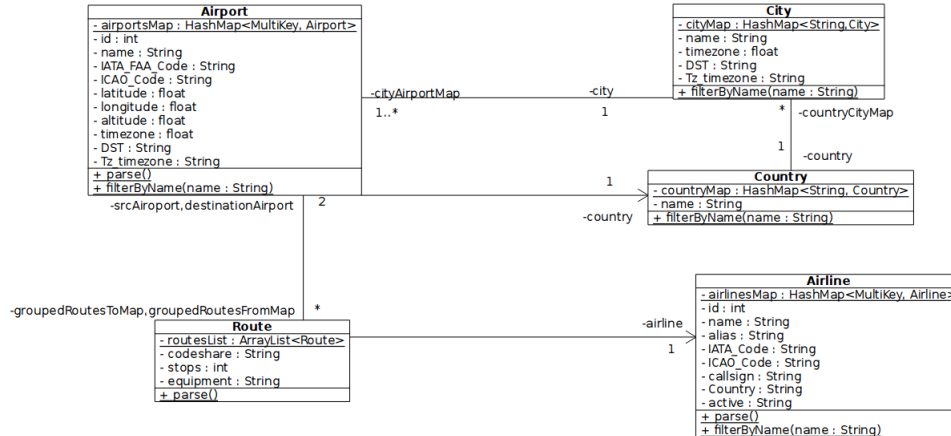
Id:	Alias:
Name:	ICAO:
IATA:	Hide this
Country:	
Callsign:	Active:

Results

Filters

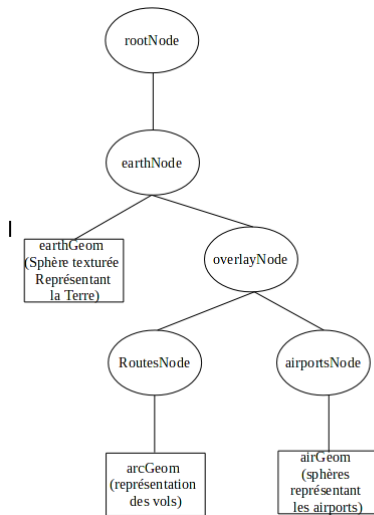
Departure	Arrival	Airline
La Garenne	Mazamet	Airlinair (Fr...
La Garenne	Orly	Airlinair (Fr...
Campo Dell...	Arlanda	Nonwegian ...
Campo Dell...	Biard	Airlinair (Fr...
Campo Dell...	Blagnac	Air France (...)
Campo Dell...	Blagnac	Corse-Med...
Campo Dell...	Caumont	Nationwide ...
Campo Dell...	Charles De	easyjet (Un...
Campo Dell...	Cote D'Azur	Air France (...)
Campo Dell...	Cote D'Azur	Alitalia (Italy)
Campo Dell...	Cote D'Azur	Corse-Med...
Campo Dell...	EuroAirport	easyjet (Un...
Campo Dell...	Gardemoen	Nonwegian ...
Campo Dell...	Gatwick	easyjet (Un...
Campo Dell...	Geneve Col...	easyjet (Un...
Campo Dell...	La Roche	Airlinair (Fr...
Campo Dell...	Liege	Air France (...)
Campo Dell...	Liege	Corse-Med...
Campo Dell...	Luxembourg	Luxair (Lux...
Campo Dell...	Mazamet	Airlinair (Fr...
Campo Dell...	Nantes Atl...	Air France (...)
Campo Dell...	Nantes Atl...	Corse-Med...
Campo Dell...	Olbia Costa	Transavia ...
Campo Dell...	Orly	Air France (...)
Campo Dell...	Orly	Corse-Med...
Campo Dell...	Provence	Air France (...)
Campo Dell...	Provence	Alitalia (Italy)
Campo Dell...	Provence	Corse-Med...
Campo Dell...	Saint Exup...	Air France (...)
Campo Dell...	Saint Exup...	Alitalia (Italy)

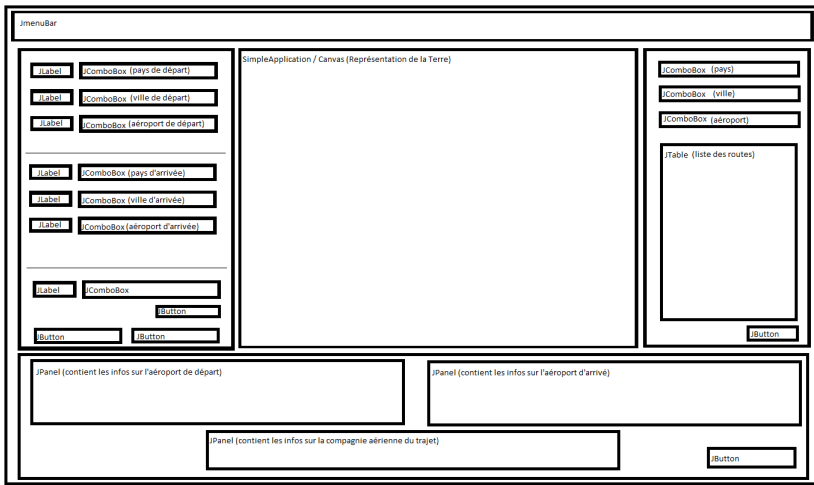
```
CSVParser parser = CSVParser.parse(file, Charset.forName("ISO-8859-1"),  
CSVFormat.MYSQL.withDelimiter(',').withQuote('"').withNullString("N"));
```



applicationPart.Filter

```
- Filter()
+ filterByName(name : String, type : String) : ArrayList<?>
+ filterAirportsByCity(name : String) : ArrayList<ArrayList<Airport>>
+ filterCitiesByCountry(name : String) : ArrayList<City>
+ filterRoutesByAirline(name : String, activeOnly : boolean) : ArrayList<Route>
+ filterRoutesFromAirport(name : String) : ArrayList<Route>
+ filterRoutesToAirport(name : String) : ArrayList<Route>
+ filterRoutesToOrFromAirport(name : String, type : String) : ArrayList<Route>
+ filterRoutesToCity(name : String) : ArrayList<Route>
+ filterRoutesFromCity(name : String) : ArrayList<Route>
+ filterRoutesToOrFromCity(name : String, type : String) : ArrayList<Route>
+ filterRoutesToCountry(name : String) : ArrayList<Route>
+ filterRoutesFromCountry(name : String) : ArrayList<Route>
+ filterRoutesToOrFromCountry(name : String, type : String) : ArrayList<Route>
+ filterRoutesToOrFrom(toOrFrom : String, name : String, type : String) : ArrayList<Route>
+ filterByPlaceAndAirline(toOrFrom : String, name : String, type : String, airline : String, activeOnly : boolean) : ArrayList<Route>
+ filterByDirectAipToAip(srcAip : String, dstAip : String, airline : String, activeOnly : boolean) : ArrayList<Route>
+ filterByDirectCityToCity(srcCity : String, dstCity : String, airline : String, activeOnly : boolean) : ArrayList<Route>
+ filterByDirectCountryToCountry(srcCountry : String, dstCountry : String, airline : String, activeOnly : boolean) : ArrayList<Route>
+ filterByDirectPlaceToPlace(srcPlace : String, dstPlace : String, type : String, airline : String, activeOnly : boolean) : ArrayList<Route>
+ filterByAipToAip(srcAip : String, dstAip : String, airline : String, activeOnly : boolean) : ArrayList<ArrayList<Route>>
```



Démonstration

Des Questions ?

Merci de votre attention