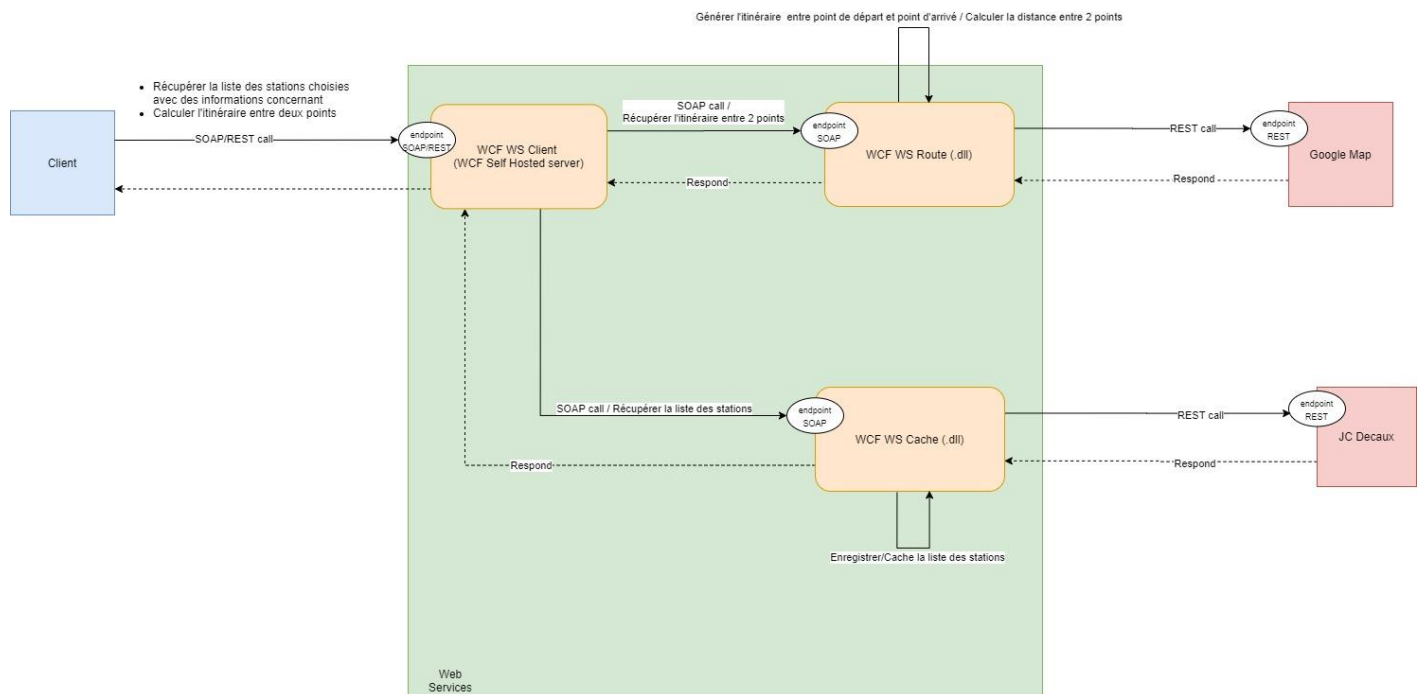# Second Lab Project – Let's go Biking Web Service

Project Architecture

In the second lab, the architecture is remained as diagram below.

Additionnal feature

In the second lab, I have added a feature missing from the first one which is finding the nearest stations from the one that we selected at the beginning.
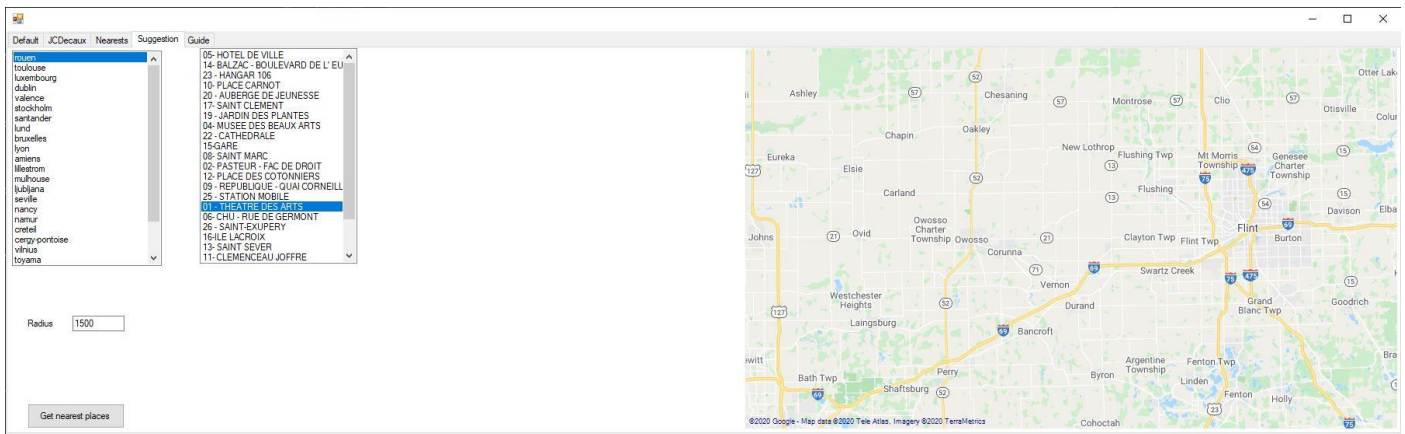
External feature

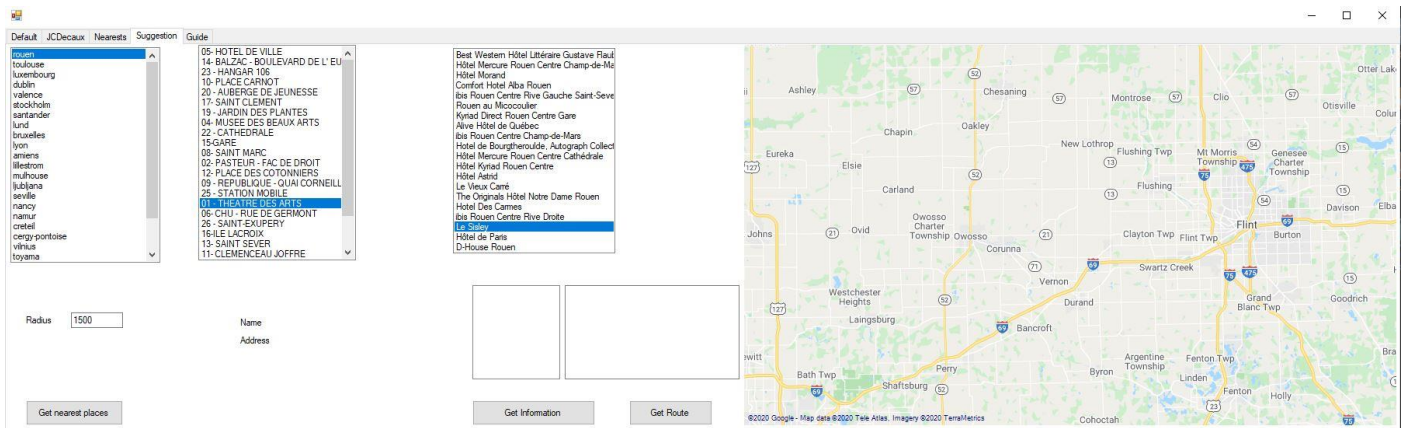The external feature we have chosen for the second delivery is that :

« *Create a new service that give a selection of point of interest for tourism and that give the most adapted itinerary to visit them.* »

This feature allow us to select the JCDecaux station as the start point and then get a list of point of interest around this location giving by the radius, by defaut the radius is 1500m. Then, we can also get the information about these points as name, adress, reviews about these places. And of course, we can get the route between the starting point and the place selected.
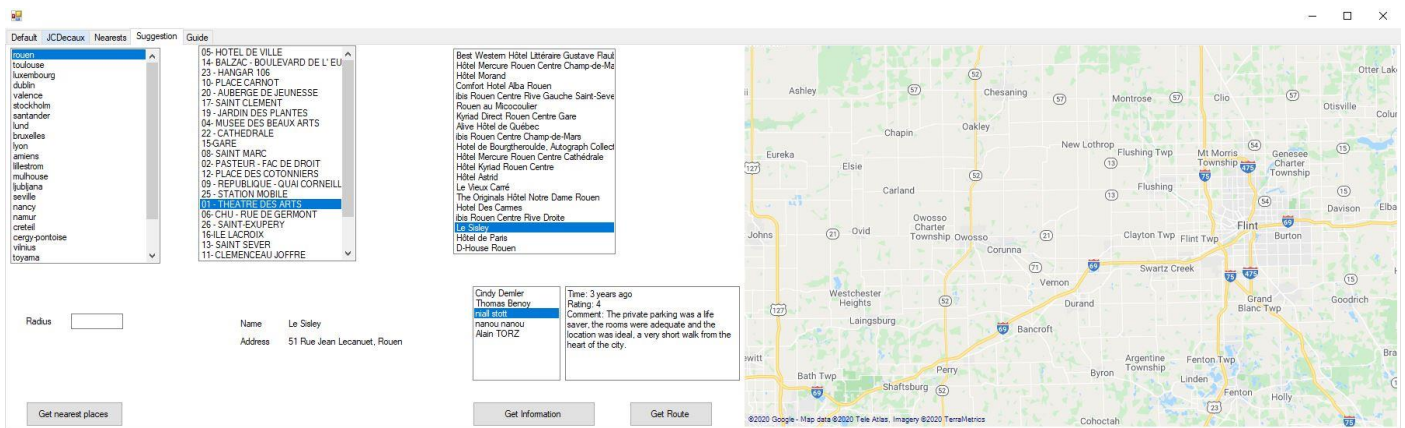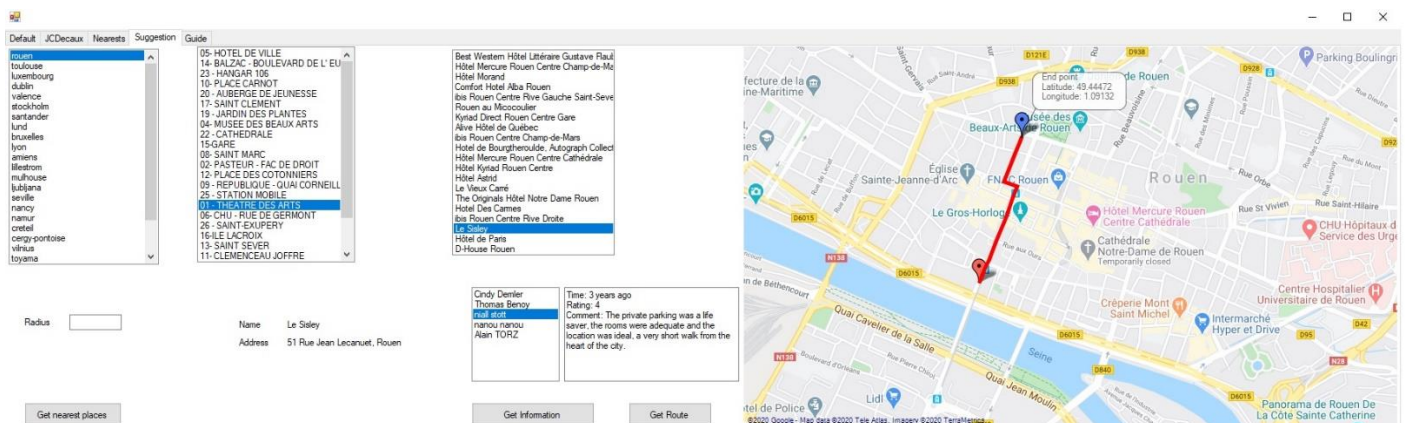
Visualization

Select JCDecaux station and get nearest places

Select a place from list and get information

Select an author name and visualize the comment

Get route between JCDecaux starting point and place ending point

How to run the project

The projects was builded successfully on Visual Studio 2019 and saving as .exe file

In the zip file, you can run the self-hosted server by executing :

goBikingWS\SelfHostedServer\bin\Debug\SelfHostedServer.exe

Also, you can run the GUI Client application by executing :

goBikingClient\goBikingClient\bin\Debug\goBikingClient.exe

NB : Please execute these files as administrator.

Developed by using

- Visual Studio 2019
- .NET Framework 4
- Json.NET Framework - Json format handling
- GMap.NET.Windows - Routing, geocoding, directions and maps from Google used on Windows form.
- JCDecaux API - A service of JCDecaux allows to get open data about JCDecaux bicycle stations.
- Directions API - A service of google map platform that calculates directions between locations.
- Places API - A service that returns information about places using HTTP requests. Places are defined within this API as establishments, geographic locations, or prominent points of interest.