

Abstract

Within MobiGIS¹, publisher of GIS and Transport software and geomatics service company, I joined the Research & Development « MobiSAAS » project.

My internship subject focuses on developing web services that expose functionalities of road and transit data import, for automatic build of multi-modal transport networks.

The objective of my work is to expose functionalities originally coded in SQL and/or Python language via a REST API in Java (JAX-RS). So I initially took over the business treatment (Python) and learned to manipulate data (PostGIS/SQL) via the « DataWizard » project. In the same time, in order to implement these web services I joined the « MobiSAAS » project and so learned to develop with the « Dropwizard » framework.

The developed application of this project presents like a SAAS² the main features of MobiAnalyst Desktop software. It is in the context of the administration interface (backend) I develop features to upload transit data (GTFS³). The prospects of my work will be to generalize the utility classes and methods I have developed so that the application could support multiple data formats of other transport data format (vector data « Shapefile » for example).

During this internship I worked on several projects : MobiSAAS, DataWizard, Crislab, etc. So I participated in various phases of software development lifecycle : from the design R&D (MobiSAAS) to development of business code (DataWizard), until delivery to the customer (Crislab).

1. <http://www.mobigis.fr/>

2. https://en.wikipedia.org/wiki/Software_as_a_service

3. <https://developers.google.com/transit/gtfs/>