

Abstract

At MobiGIS¹, GIS and Transport software publisher and geomatics services 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 the automatic build of multi-modal transport networks.

The purpose of my work is to expose functionalities originally coded in SQL and/or Python languages via a REST API in Java (JAX-RS). I therefore managed the business treatment (Python) and learned to handle data (PostGIS/SQL) via the « DataWizard » project. In the same time, in order to implement these web services I joined the « MobiSAAS » project and thus learned to develop with the « Dropwizard » framework.

The developed application of this project is similar to a SAAS², the main features of MobiAnalyst Desktop software. It is in the context of the administration interface (backend) I developed 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 may support multiple data formats of transport data (vector data « Shapefile » for example).

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

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

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

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