Mobility Vocabulary Development & Showcase

Summer Semester 2015

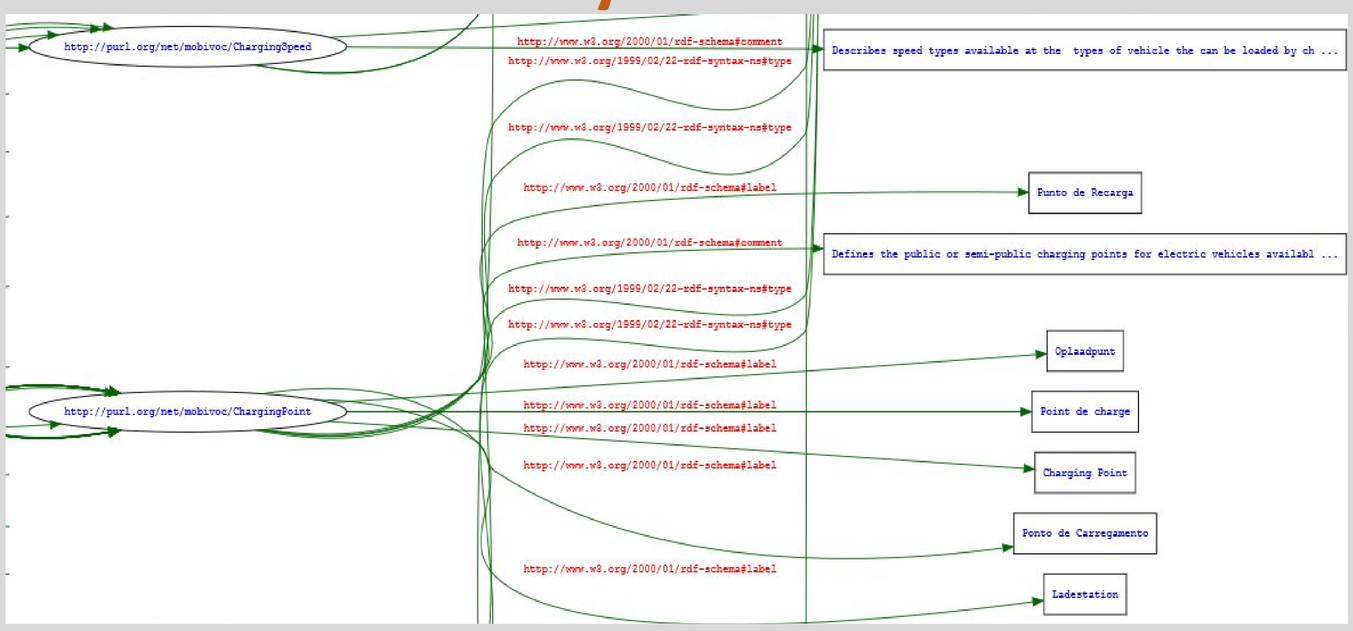
Goal

- ➔ Development of a standardised <u>vocabulary</u> for fuel data and for electrical vehicles
- ➔ Creation of an <u>end-user application</u> which uses the developed vocabulary

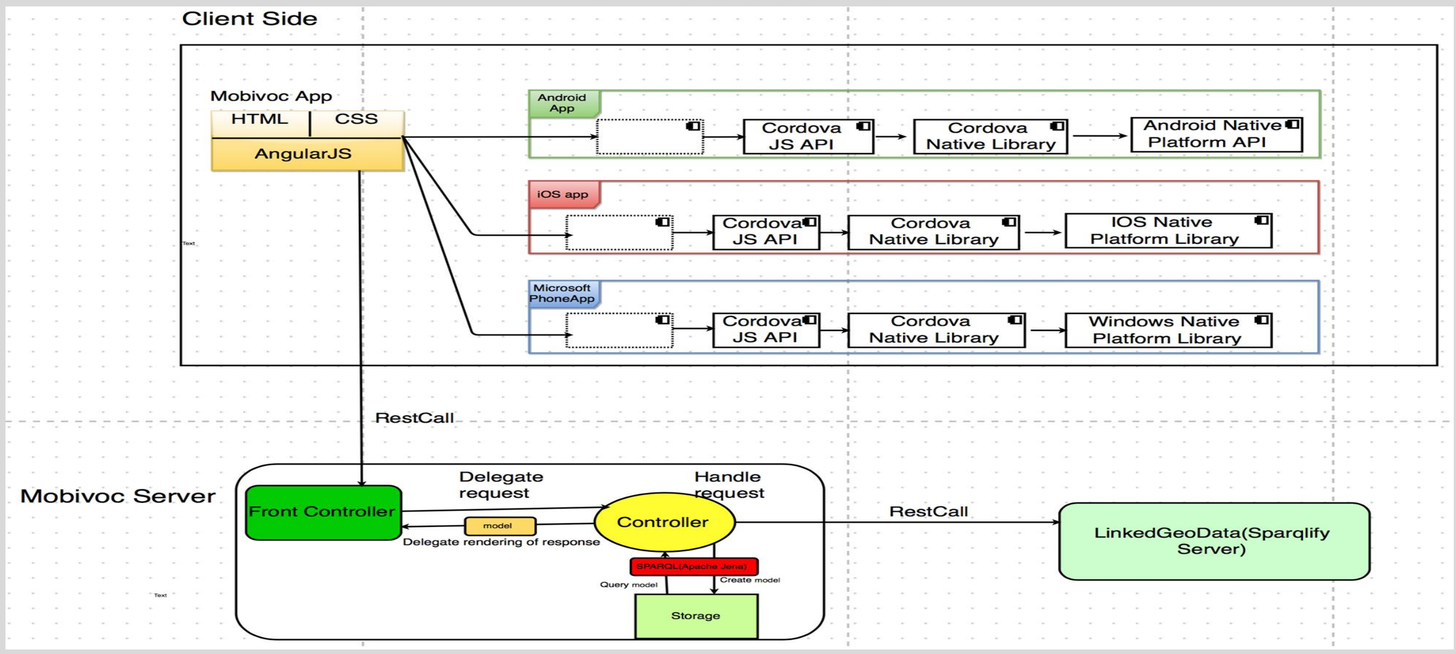
Technology

- MobiVoc
- RDF
- SPARQL API (Apache Jena)
- OWL 2.0
- RDFS
- Apache Cordova
- Java Spring
- REST
- AngularJS
- Apache Tomcat

Vocabulary Visualization

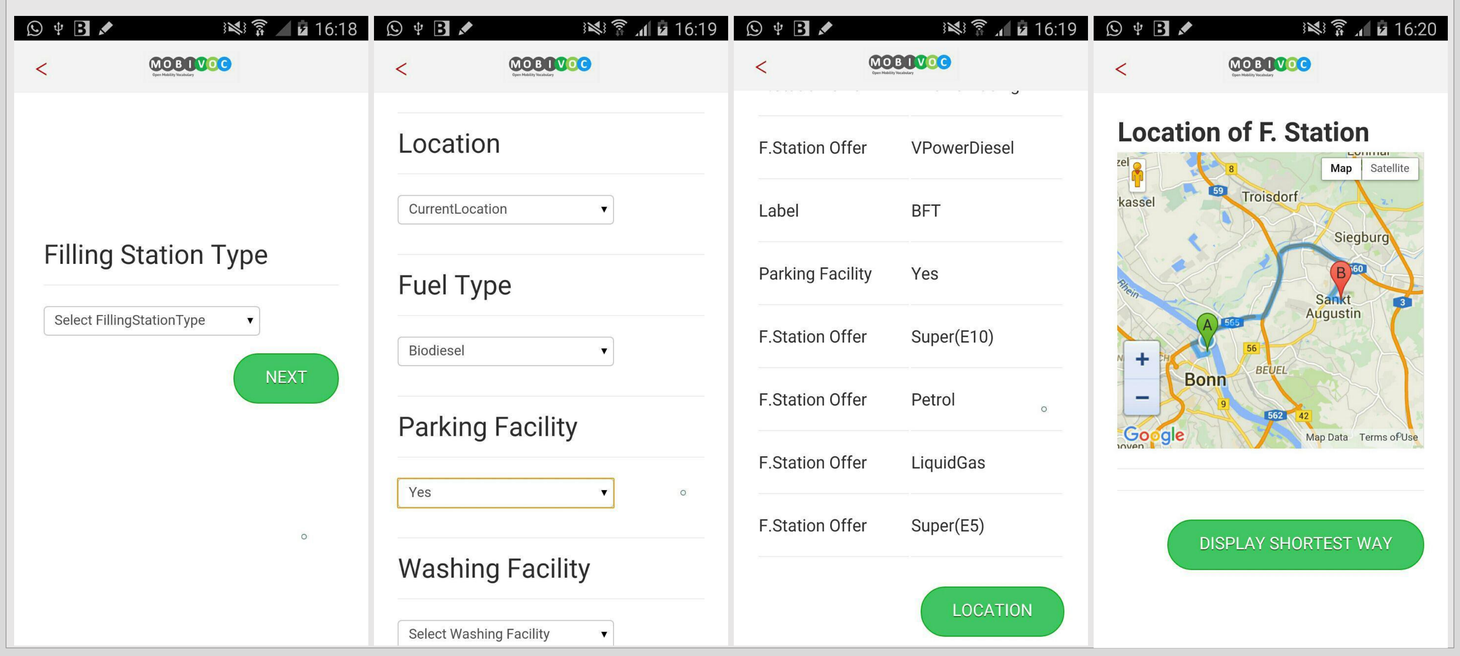


Architecture



End-user Application

The system shows the functionality of the new vocabulary that is developed. It is written in Java on Eclipse, implemented in Java spring, works on mobiles as well as pads. Application uses data from GeoSparql. It queries on GeoSparql and returns the results which are stored as turtle format in the server side. Application has also client side which shows the query results within the proper format. Data exchange between client and server side is implemented with JSON.



Testing

Syntax
Rdf Translator Tool

Semantic
Oops (OntolOgy Pitfall Scanner)

End-user Application
Test cases using SPARQL queries

Virtual Machine Description

Hostname: Windows15-MobiVoc

Installed on: EIS02

Software installed: JDK 1.8, JavaSpring Framework, Apache Tomcat 8, Apache Cordova, Eclipse Luna

Local Access:
OS User: eis-user
Password: E1sdb2015

Remote Access:
Partner ID: 549 614 999
Password: E1sdb2015

GitHub Link:

https://github.com/EIS-Bonn/MA-INF3232-Lab-SS2015/tree/master/GroupE

EIS Enterprise Information Systems

Mentor: Niklas Petersen
Glykeria Alvanou
Yesim Aslan
Umut Hatipoglu

universitätbonn