

1 Overall Description

1.1 Product Perspective

The product we will release is composed by four main software applications.

- A **Web Application (User)** addressed to the *users* to use our service. This application has to interface mainly with the **Back-end Application** and with Google's Maps API.
- A **Mobile Application (User)** addressed to the *users* to use our service and available for Android, iOS, Windows Mobile and Blackberry. This application has to interface mainly with our **Back-end Application** and with Google's Maps API
- A **Mobile Application (Taxi Driver)** addressed to the *taxi drivers* to use our service and available for Android, iOS. This application has to interface mainly with our **Back-end Application** and with Google's Maps API
- A **Back-end Application** that will handle all the business logic and that has to interface mainly with Google's Maps API and with a MongoDB database .

1.1.1 User Interfaces

1.1.2 Hardware Interfaces

Both the *Mobile Application (User)* and the *Mobile Application (Taxi Driver)* has to interface with the GPS module and with the Network module.

1.1.3 Software Interfaces

Software interfaces for the Web Application (User)

- MyTaxyService API
 - Mnemonic : Back-end
- Google Maps API
 - Mnemonic : Google Maps API
 - Version Number : V3
 - Source : <https://developers.google.com/maps/documentation/javascript/>

Software interfaces for the Mobile Application (User and Taxi Driver)

- MyTaxyService API
 - Mnemonic : Back-end
- Google Maps API
 - Mnemonic : Google Maps API
 - Version Number : V3
 - Source : <https://developers.google.com/maps/>
- Android SDK
 - Mnemonic : Android
 - Version Number : 6.0
 - Source : <http://developer.android.com/sdk/index.html>
- iOS SDK
 - Mnemonic : iOS
 - Version Number : 9.2
 - Source : <https://developer.apple.com/ios/download/>
- Windows Mobile SDK
 - Mnemonic : Windows Mobile
 - Version Number : 6.5
 - Source : <http://www.microsoft.com/en-us/download/details.aspx?id=17284>
- BlackBerry SDK
 - Mnemonic : BlackBerry
 - Version Number : 10
 - Source : <https://developer.blackberry.com/>

Software interfaces for the Back-end Application

- Node.js API
 - Mnemonic : Node.js
 - Version : 4.2.1
 - Source : <https://nodejs.org/api/>
- MongoDB API
 - Mnemonic : MongoDB
 - Version : 3.0
 - Source : <https://docs.mongodb.org/manual/>
- Google Maps API
 - Mnemonic : Google Maps API
 - Version Number : V3
 - Source : <https://developers.google.com/maps/documentation/javascript/>
- Javascript API
 - Mnemonic : Javascript
 - Source : <https://developer.mozilla.org/en/docs/Web/API>

1.1.4 Communication Interfaces

Web Application (User)

Every application has to interface with the Internet network. This interface is handled by the operative systems and not by the applications themselves.

1.1.5 Memory Constrains

Mobile Applications (User and Taxi Driver) and Web Application

The Mobile and Web Applications can not exceed 75MB of RAM usage.

Back-End Application The Back-End application can not exceed 15GB of total RAM usage.

1.1.6 Site Adaptation Requirements

Software Adaptation

Every Mobile Application has to be developed according to the platforms design guidelines.