

Final Presentation

MyTaxiService

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RASD

The RASD Document

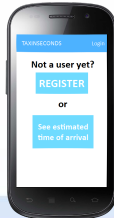
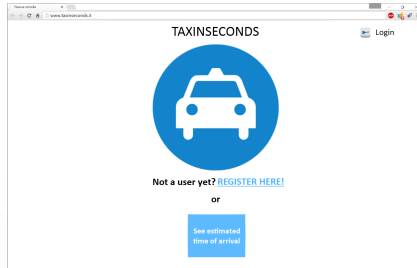
The approach

We tried to solve all the easy problems with a KISS approach, in order to focus on the actual difficulties.

- ▶ Login, logout, registration were kept as standard as possible
- ▶ Usability was kept in mind, customizability was not considered as a feature
- ▶ We tried to keep as little as possible the user inputs and let the application do the work

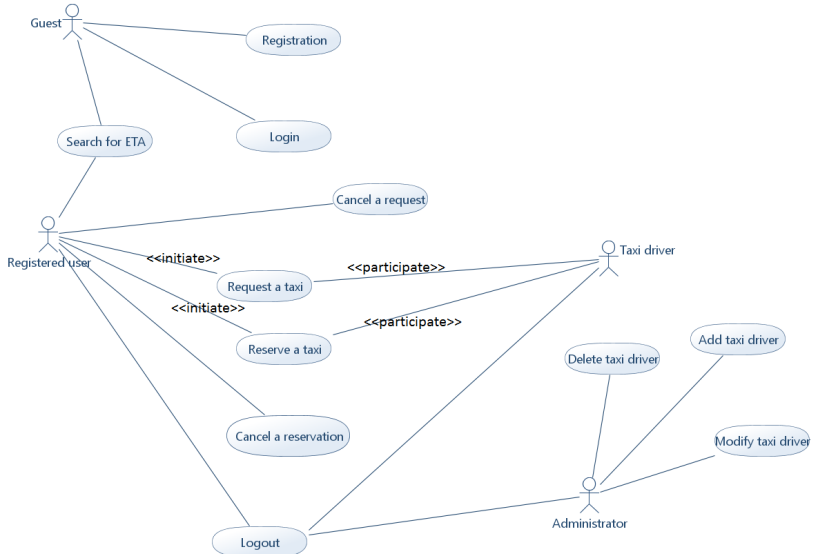
Two simple interfaces

Adaptive web-based UI to ensure maintainability



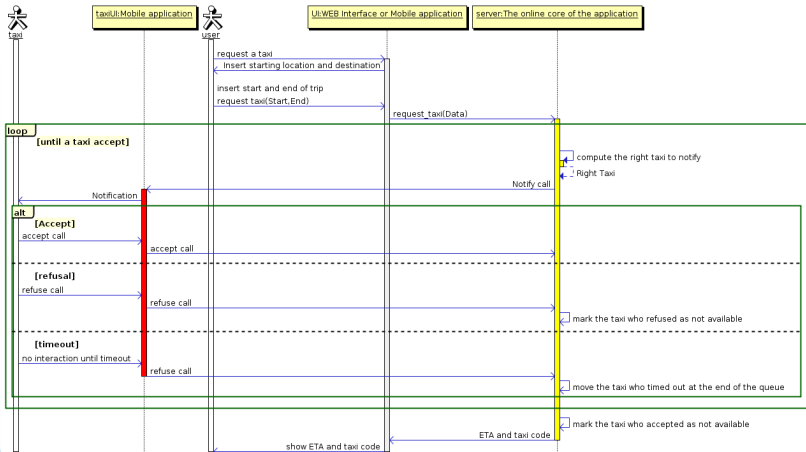
Use Cases

All the actions allowed were planned and analysed



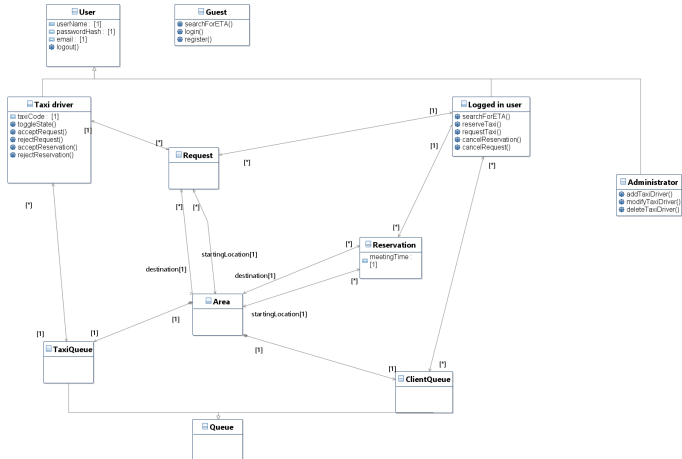
Use Cases

Each use case is analysed in depth with a sequence diagram

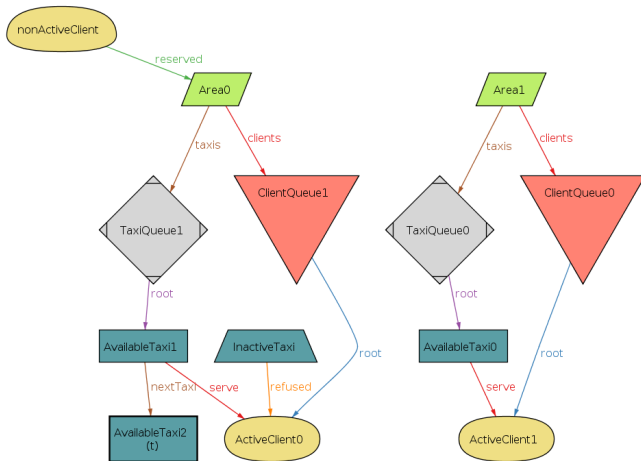


Class Diagram

The class diagram was kept as readable as possible, underlying the main decisions taken



Alloy



Design Document

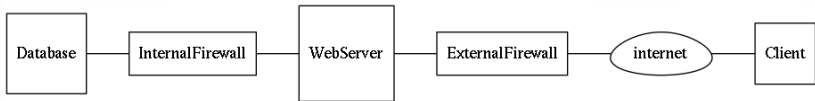
The Design

The architecture of the application is pretty standard

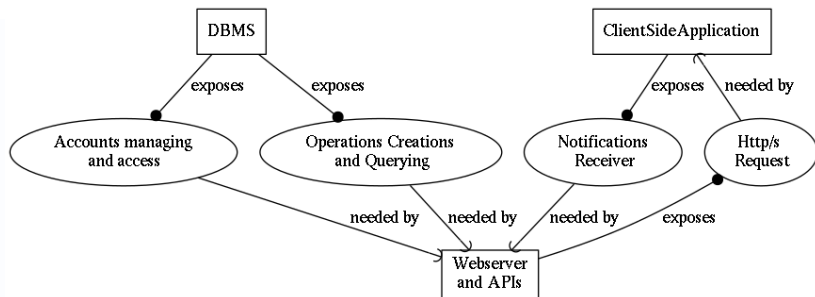
- ▶ Classical DMZ structure for the Network
- ▶ Database + Web server for the components

The Deployment

A standard DMZ + Internal network approach was used



The Component View



More on the Components

Extensibility and maintainability as targets

- ▶ Both mobile and web version are based on web technologies.
- ▶ The queues, reservations and requests are computed by the DBMS.
- ▶ The web server ignores the fact that the client is using a mobile app or a browser.
- ▶ The APIs query the DBMS in the exact same way the Web Server does.

Test Document

The sandwich approach

The sandwich approach allows to first test the outer parts of the applications

Project Plan

Function Points

152 FP in Total:

- ▶ Internal Logical File 45 FP
- ▶ External Input 70 FP
- ▶ External Output 19 FP
- ▶ External Inquiry 18 FP

COCOMO

- ▶ ~7000 estimated thousands of **Source Lines Of Code**
- ▶ ~25 Person-Month
- ▶ 3 People for a total of 10 Months

Code Inspection