



Politecnico di Milano, A.A. 2015/2016

Software Engineering 2: My Taxi Service
Design Document

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November 18, 2015

Contents

1	Introduction	2
1.1	Purpose	2
1.2	Scope	2
1.3	Definitions, Acronyms, Abbreviations	2
1.3.1	Definitions	2
1.3.2	Acronyms	2
1.3.3	Abbreviations	3
1.4	Reference Documents	3
1.5	Document Structure	3
2	Architectural Design	4
2.1	Overview	4
2.2	High level components and their interaction	4
2.3	Component view	4
2.4	Deployment view	4
2.5	Runtime view	4
2.6	Component interfaces	4
2.7	Selected architectural styles and patterns	4
2.8	Other design decisions	4
3	Algorithm Design	5
4	User Interface Design	6
5	Requirements Traceability	7
6	References	8

1 Introduction

1.1 Purpose

The goal of this Design Document is to explain the design choice made during the architectural analysis and the functionalities that will be developed.

1.2 Scope

The aim of the Design Document is to present the main architecture of My Taxi Service application. The structure will be based on the requirements analysis we made in the RASD document.

1.3 Definitions, Acronyms, Abbreviations

1.3.1 Definitions

Visitor Someone who visits my taxi service application's website but it's not logged in

User Someone who is registered and logged in my taxi service application

Passenger A type of logged user, who uses the application to call a taxi

Taxi driver Another type of logged user, who uses the application to answer calls from the system

1.3.2 Acronyms

DBMS Database Management System.

JEE Java Enterprise Edition.

API Application Programming Interface.

ER Entity-Relational Model.

EJB Enterprise Java Bean.

HTML Hypertext Markup Language.

HTTP Hypertext Transfer Protocol.

JDBC Java Database Connectivity.

UML Unified Modeling Language.

UX User eXperience.

MVC Model View Controller.

JPA Java Persistence API.

XHTML eXtensible Hypertext Markup Language.

1.3.3 Abbreviations

1.4 Reference Documents

- Structure of the design document.pdf
- ISO/IEC/IEEE 42010 Systems and software engineering Architecture description
- IEEE Std 1016tm-2009 IEEE Standard for Information Technology Systems Design Software Design Descriptions

1.5 Document Structure

The document is structured in six parts

1. Introduction
2. Architectural Design
3. Algorithm Design
4. User Interface Design
5. Requirements Traceability
6. References

2 Architectural Design

2.1 Overview

2.2 High level components and their interaction

2.3 Component view

2.4 Deployment view

2.5 Runtime view

2.6 Component interfaces

2.7 Selected architectural styles and patterns

2.8 Other design decisions

3 Algorithm Design

4 User Interface Design

5 Requirements Traceability

6 References