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Software Engineering 2: My Taxi Service
**D**esign **D**ocument

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# Contents

# 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 1016$^{tm}$-2009 IEEE Standard for Information TechnologySystems 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