

Luca Scannapieco - 877145

Andrea Pasquali - 808733

Emanuele Torelli - 876210

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PowerEnJoy

Design Document

Table of contents

[1. Introduction 3](#_Toc468215116)

[1.1. Purpose 3](#_Toc468215117)

[1.2. Scope 3](#_Toc468215118)

[1.3. Definitions, acronyms, abbreviations 3](#_Toc468215119)

[1.4. Reference documents 3](#_Toc468215120)

[1.5. Document structure 3](#_Toc468215121)

[2. Architectural design 3](#_Toc468215122)

[2.1. Overview 3](#_Toc468215123)

[2.2. Component view 3](#_Toc468215124)

[2.3. Deployment view 3](#_Toc468215125)

[2.4. Runtime view 3](#_Toc468215126)

[2.5. Component interfaces 3](#_Toc468215127)

[2.6. Selected architectural styles and patterns 3](#_Toc468215128)

[2.7. Other design decisions 3](#_Toc468215129)

[3. Algorithm design 4](#_Toc468215130)

[4. User interface design 4](#_Toc468215131)

[5. Requirements traceability 4](#_Toc468215132)

[6. Effort spent 4](#_Toc468215133)

[7. References 4](#_Toc468215134)

# 1. Introduction

## 1.1. Purpose

## 1.2. Scope

## 1.3. Definitions, acronyms, abbreviations

## 1.4. Reference documents

## 1.5. Document structure

# 2. Architectural design

## 2.1. Overview

The PowerEnJoy service is implemented as a common client-server application, in which the offered services are essentially three:

* User interface services
* Application services
* Storage services

Each of these logic services is placed in the corresponding physic layer, the result is that we adopted a three-tier architecture.

MOCKUP

-illustra tier uno con le sue interfacce

-spiega del web server e del server in generale

-spiega perché abbiamo usato tre tier (perché dividere server e db)

The user interface has two different implementations, one is constituted by a web app that can be run on a modern browser, and the other one is the PowerEnJoy mobile application.

## 2.2. Component view

The high-level components architecture is composed of five different elements. The main element is the central server. The client starts the communication with the central by using a web browser or the mobile application.

Furthermore, during a ride, there is another component to which the central communicates: the screen of the car.

-presenta le funzionalità dei componenti del tier uno (ogni funzionalità del sistema su uno dei tre componenti del tier 1)

HIGH LEVEL DIAGRAM

Esplosioine del component view

* Spiega a grandi linee la struttura del server
* Spiega le varie interfacce
* Spiega perché abbiamo le view
* Spiega che c’è un model che riflette la struttura del db

COMPONENT DIAGRAM

* Spiega il database (class diagram)

CLASS DIAGRAM DB

## 2.3. Deployment view

-Spiega a cosa serve

-Spiega perché TCP IP

-spiega del wer server

DEPLOYMENT DIAGRAM

## 2.4. Runtime view

See available cars

Reservation

Unlock and start a ride

End ride

## 2.5. Component interfaces

Due parole introduttive

COMPONENT VIEW

## 2.6. Selected architectural styles and patterns

-mvc server

## 2.7. Other design decisions

inventa

# 3. Algorithm design

# 4. User interface design

# 5. Requirements traceability

# 6. Effort spent

# 7. References