Map your hike

Analysis and Design Document

Student:Dobner Imola

**Group:30233**

Revision History

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# Project Specification

The purpose of this document is to collect, analyze, and define high-level needs and features of the “Map your hike” system. It focuses on the capabilities needed by the stakeholders and the target users, and **why** these needs exist. The details of how the “Map your hike” fulfills these needs are detailed in the use-case and supplementary specifications.

This application is meant to provide all kind of data that might be useful to a hiker while planning or experimenting his trip. I would like to start this project by ensuring the most basic information needed before and during a hiking: map, water supply, weather and accommodation. The purpose of this document is to clarify the scope of the project I am going to implement and to provide some vague details about what kind of services it is going to assure.

This document’s scope is to provide a brief description about the tools, the competences needed to finish this project, other similar applications and the plan of contribution for each week.

# Elaboration – Iteration 1.1

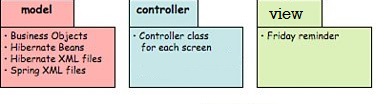
# Domain Model

# Architectural Design

## Conceptual Architecture

Model–View–Controller (usually known as MVC) is an architectural pattern commonly used for developing user interfaces that divides an application into three interconnected parts. This is done to separate internal representations of information from the ways information is presented to and accepted from the user. The MVC design pattern decouples these major components allowing for efficient code reuse and parallel development.

## Package Design



## Component and Deployment Diagrams

# Elaboration – Iteration 1.2

# Design Model

## Dynamic Behavior

*[Create the interaction diagrams (1 sequence, 1 communication diagrams) for 2 relevant scenarios]*

## Class Design

*[Create the UML class diagram; apply GoF patterns and motivate your choice]*

# Data Model

*[Create the data model for the system.]*

# Unit Testing

*[Present the used testing methods and the associated test case scenarios.]*

# Elaboration – Iteration 2

# Architectural Design Refinement

*[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]*

# Design Model Refinement

## *[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

# Construction and Transition

# System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

# Future improvements

*[Present future improvements for the system]*

# Bibliography