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RASD

RASD of Data4Help, AutomatedSOS and Track4Run

Sommario

[1. Introduction 2](#_Toc528928416)

[1.1 Purpose 2](#_Toc528928417)

[1.2 Scope 2](#_Toc528928418)

[1.3 Definitions , Acronyms, Abbreviations 2](#_Toc528928419)

[1.3.1 Definitions 2](#_Toc528928420)

[1.3.2 Acronyms 2](#_Toc528928421)

[1.3.3 Abbreviations 2](#_Toc528928422)

[1.4 Document Structure 2](#_Toc528928423)

[2. Overall Description 4](#_Toc528928424)

[3. Specific Requirements 5](#_Toc528928425)

# 1. Introduction

## 1.1 Purpose

## 1.2 Scope

## 1.3 Definitions , Acronyms, Abbreviations

### 1.3.1 Definitions

* **Individual**: user of the application whose health status is monitored.
* **Third party**: user of the application who requests health status data acquired from individuals.
* **Data Acquisition Device:** device that can provide data about the health status of an individual.
* **Individual Request**: request (advanced by a third party) to get access to a specific individual’s data about his/her health status. In this case the identity of the individual is shown to the third party.
* **Group Request**: request (advanced by a third party) to get access to health status data of anonymous group of individuals.
* **Runner**: *individual* who has subscribed himself to a run.
* **Organizer**: user of the application who organises a run by defining a path.
* **Spectator**: user who can see the position of runners through the application.
* **Path**: path of a run.

1.3.2 Acronyms

* RASD: Requirement Analysis and Specification Document
* API: Application Programming Interface
* GPS: Global Positioning System
* DAD: Data Acquisition Device

### 1.3.3 Abbreviations

* [Gn]: nth goal
* [Dn]: nth domain assumption
* [Rn]: nth functional requirement

## 1.4 Document Structure

1. **Introduction**: this part presents *purpose* and *scope* of the applications Data4Help, AutomatedSOS and Track4Run. The applications goals are listed and described. In this section there is also an analysis of world, shared and machine phenomena that concerns these applications.
2. **Overall description**: further details about shared phenomena and model domain are provided. Also, most important requirements and domain assumptions are defined. The aim of this part is to focus user needs and to give an overall description of the application’s model.
3. **Specific Requirements**: all aspects presented in the previous section are more deeply analysed in this part. All application requirements are listed and their link with goals and domain assumptions is stressed. Use cases are defined, and most important cases are analysed with the support of diagrams. Hardware and software interfaces are analysed. Constrains and limitations of the application are identified; necessary software attributes are enlightened.
4. **Formal Alloy analysis**: More relevant and critical parts of the model described in the previous sections are deeply analysed in this part with the use of Alloy.
5. **Effort spent**: this part lists for each member who worked at this document the number of hours dedicated to each section.
6. **References**: external resources used in the development of the current document.

# 2. Overall Description

# 3. Specific Requirements