Politecnico di Milano

SAFESTREETS - DD

POLITECNICO
MILANO 1863

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1 Introduction

1.1 Purpose

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1.3 Definitions, Acronyms, Abbreviations

DA CAMBIARE MA SIMILE AL RASD ——————————

In this section follow definitions, acronyms (including their meaning) and abbreviations used in this document.

1.3.1 Definitions

- *User*: whoever interacts, in any way, with the application
- *Guest*: an User who has not completed the registration and can only use the application to view the statistics
- *Logged User*: an User who completed the registration and who is logged in the application
- *Citizen*: a person with a strong public spirit who registered and logged in to report traffic violations
- *Authority* : a member of the law enforcement who registered and logged in to monitor the incoming traffic violations
- *Municipality API*: service offered by the Municipality to the System to retrieve data of interest to compute statistics
- *Traffic violation*: occurrence of infringement of the laws that regulate vehicle operation on streets and highways

- *Parking violation*: specific category of traffic violations that involves all the incorrect ways to park a vehicle
- *Report*: document generated on the basis of the data provided by the Citizen signaling a violation. It includes the date, the time, the street name, the plate and the photos useful to testify the contravention
- *Historical Data*: all data provided to the System by the Citizen since his/her registration
- *Fiscal Code*: a 16 characters code used in Italy to uniquely identify a person

1.3.2 Acronyms

API	Application Programming Interface
DBMS	DataBase Management System
GPS	Global Positioning System
GUI	Graphical User Interface
URL	Uniform Resource Locator

Table 1.1: *Acronyms*

1.3.3 Abbreviations

- [**R.n**]: n-th Requirement in the RASD document

1.4 Revision History

[TBD]

1.5 Reference Documents

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- Specifications document: "SafeStreets. Mandatory project assignment"

- RASD document of SafeStreets
- IEEE Standard 830-1993: IEEE Guide to Software Requirements Specifications
- IEEE Standard 830-1998: IEEE Recommended Practice for Software Requirements Specifications
- UML documentation: `https://www.uml-diagrams.org`

1.6 Document Structure

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The rest of the document is organized as follows:

- **Overall Description**: in this section a more in-depth description of the application's domain will be provided, highlighting the context of the System and detailing the phenomena previously mentioned. The most relevant functions of the System will be pointed out and their interactions with all the actors will be illustrated with the help of Class Diagrams. Finally, this section includes all the constraints, dependencies and assumptions that can be used to entail each Goal.
- **Specific Requirements**: in this section the requirements will be fully explained and organized according to their type, associating to them the relative use cases and Sequence Diagrams to clarify the interactions between the User and the System. The main aim is to provide a useful item for both designers and testers.
- **Formal Analysis**: this section includes the formal model generated according to the Alloy language.

2 Architectural Design

2.1 Overview

2.2 Component View

2.3 Deployment View

2.4 Runtime View

2.5 Component Interfaces

2.6 Selected Architectural Styles and Patterns

2.7 Other Design Decisions

3 User Interface Design

3.1 User eXperience Diagrams

4 Requirements Traceability

5 Implementation, Integration and Test Plan

5.1 Overview

5.2 Component Integration

5.3 Something on Testing?

6 Effort Spent

The effort spent from each member of the team to build the DD can be summarized with the following tables:

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Task	Hours
First Meeting	-
Git and Overleaf Setup	-
Assignment Analysis and Workflow Decision	-
Purpose and Scope	-
Introduction Other Sections	-
Component and Deployment Views	-
Runtime View	-
Component Interfaces	-
Style, Patterns and Other Decisions	-
Mid-phase Meeting	-
UX Diagrams	-
Requirements Traceability	-
Implementation, Integration and Test Plan	-
Effort Tracking	-
Global Review	-
Total Hours	-

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