

A.A. 2019/2020 Software Engineering 2 Project:

"SAFE-STREET"

Requirements Analysis and Specification Document November 6, 2019

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1 Introduction

1.1 Purpose

1.1.1 General Purpose

Nowadays, an ever-increasing number of cars and a shortage in the number of police officers caused the emergence of various traffic violations and accidents. Although two traditional solutions to solve these problems were rising the number of police officers and their equipment, due to the poor efficiency and inordinate cost, it is not feasible to continue this trend. This is where the power of technology can take the responsibility to help authorities to bring the order to the streets.

The only solution to assist authorities without expanding budgets is to participate in people with an intuitive and simple method. Hence, the "SafeStreet" app is proposed, which provides the possibility of reporting traffic violations and accidents by taking advantage of crowed-sourcing. Users can report violations by just taking pictures of infringement and license plate, then sending them.

1.1.2 Goals

- [G1]Users should be able to report traffic violations
- [G2] Users should be able to access information regarding the safety of different areas.
- [G3] Authorities should have access to the details of the traffic violations reported by the users.
- [G4] Authorities should be provided with possible interventions to prevent violations.
- [G5] Authorities should have access to refined data related to committed violations.
- [G6]Users should be able to view reports that they have previously made.

1.2 Scope

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1.3 Definitions, Acronyms, Abbreviations

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1.4 Revision history

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1.5 Reference Documents

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1.6 Document Structure

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2 OVERALL DESCRIPTION

2.1 Product perspective

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2.2 Product functions

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2.3 User characteristics

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2.4 Assumptions, dependencies and constraints

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3 SPECIFIC REQUIREMENTS

3.1 External Interface Requirements

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3.1.1 User Interfaces

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3.1.2 Hardware Interfaces

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3.1.3 Software Interfaces

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3.1.4 Communication Interfaces

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3.2 Functional Requirements

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3.3 Performance Requirements

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3.4 Design Constraints

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3.4.1 Standards compliance

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3.4.2 Hardware limitations

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3.4.3 Any other constraint

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3.5 Software System Attributes

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3.5.1 Reliability

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3.5.2 Availability

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3.5.3 Security

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3.5.4 Maintainability

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3.5.5 Portability

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