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# Introduction

## Purpose

The purpose of this SRS document is to provide the software functional requirements and other non-functional requirements for the SafeHome project, which is the final project of their CS350 course, carried out by team 2 (consisted with Youngseok Kim and Seokju Hong).

## Intended Audience and Reading Suggestions

Main reader of this document is supposed to be CS350 team 2 members, Youngseok Kim and Seokju Hong, who will implement whole component of the SafeHome. This document is written to help understand whole project clearly, reduce the gap of both’s idea on the project, and encourage collaboration. Another target reader of this document is teaching assistants and professor of CS350, which was held in 2015 spring semester, to evaluate team 2’s work on SRS.

Followings are the brief summary of each chapters.

1. “Chapter 1: Introduction” provides overview of the SafeHome project: the goal of the project, the purpose of this document, the scope of this project, and the outstanding issues.
2. “Chapter 2: System features” provides brief summary of to-be-implemented features of the SafeHome project, and analysis on assumptions, constraints, use-cases, acceptance criteria of each features.
3. “Chapter 3: Functional requirements” provides the functional requirements of the project, followed by to-be-implemented features with priority.
4. “Chapter 4: Non-functional requirements” provides any requirements other than functional requirements, such as performance requirements, process requirements, quality requirements, and security requirements.
5. Glossary, references, Who-Did-What table and any other information that is needed to understand whole document will be written on appendixes.

## Scope

The goal of this project is to implement home security and surveillance system and software “SafeHome” in an innovative tiny box. The system is expected to serve many features and functions to alarm and prevent possible risks and accidents, such as fire over the house, robbery, trespassing, and so on. This system also serves web-based dashboards and API’s which can control security and surveillance system of the SafeHome box. There are many features and functions that will be implemented at the version 1.0, however, as this is a software project, it evolves. More possible risk-preventing features and improvements are expected to be implemented in the software product line.

## Outstanding Issues

None to date

# Assumptions

The following are assumptions made in this design:

1. SafeHome box is connected to the internet.
2. SafeHome is expected to update via internet when some security patches are available.
3. Operating temperature of the device is expected to be from -10 degree Celsius to 50 degree Celsius.
4. SafeHome is expected to be connected to the power outlet properly.
5. SafeHome is expected to run 1~2 days even after power outage happens.
6. SafeHome uses safe encrypted communication and if related security issues happen, related patches will be automatically applied.
7. SafeHome console is expected to be durable even with free falling with 2 meter height.

# Requirement Notes/Legends

**Priority of data in field :**

|  |  |
| --- | --- |
| R | Required |
| O | Optional |
| SM | System Maintained (value cannot be changed) |
| C | Conditionally required |

# System Features

## Fire extinguishing system

### General description

### Use cases

## Door security system

### General description

### Use cases

## Garage security system

## Window security system

## CCTV system

## Web-based monitoring dashboard system

# Functional Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Feature Number |  | Requirement Number |  | R/O/SM/C |  |
| Created date |  | Author |  | | |
| Updated date |  | Updated by |  | | |
| Requirement |  | | | | |
| Description |  | | | | |

# Non-functional Requirements

## Performance Requirements

## Process Requirements

### Standard Requirements

* + - 1. Platform constraints
      2. Coding style constraints
      3. and many many more

## Management Requirements

## Software Quality Requirements

## Security Requirements

### Access Permission

### Privacy

# Change Log

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Source** | **Author** | **Change** |
| 2013/03/11 | Course Preparation | Il-Chul Moon | Initial template development |
|  |  |  |  |
|  |  |  |  |