

# **Software Requirements Specification: Simulation Platform for Smart Fridge and Sudoku Solver**

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# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose . . . . .	1
1.2	Document Conventions . . . . .	1
1.3	Intended Audience and Reading Suggestions . . . . .	1
1.4	Product Scope . . . . .	1
1.5	References . . . . .	1
<b>2</b>	<b>Overall Description</b>	<b>2</b>
2.1	Product Perspective . . . . .	2
2.2	Product Functions . . . . .	2
2.3	User Classes and Characteristics . . . . .	2
2.4	Operating Environment . . . . .	2
2.5	Design and Implementation Constraints . . . . .	2
2.6	User Documentation . . . . .	2
2.7	Assumption and Dependencies . . . . .	2
<b>3</b>	<b>External Interface Requirements</b>	<b>3</b>
3.1	User Interfaces . . . . .	3
3.2	Hardware Interfaces . . . . .	3
3.3	Software Interfaces . . . . .	3
3.4	Communications Interfaces . . . . .	3
<b>4</b>	<b>System Features</b>	<b>4</b>
4.1	Feature 1 . . . . .	4
4.2	Feature 2 . . . . .	4
<b>5</b>	<b>Other Nonfunctional Requirements</b>	<b>4</b>
5.1	Performance Requirements . . . . .	4
5.2	Safety Requirements . . . . .	4
5.3	Security Requirements . . . . .	4
5.4	Software Quality Attributes . . . . .	4
5.5	Business Rules . . . . .	4
<b>6</b>	<b>Other Requirements</b>	<b>5</b>

# 1 Introduction

## 1.1 Purpose

This document is a software requirement specification for the software platform which is built to aid the SmartFridge and Sudoku solver projects by providing simulated data.

## 1.2 Document Conventions

- Links are marked in blue color and are accessible through the web browser.
- Reference titles are in italics for easier viewing

## 1.3 Intended Audience and Reading Suggestions

The document is intended for the Systems and Software Engineering lecture (WS 2017-18) at Goethe University. This document is also developers and document writers of our related projects: SmartFridge and sudoku solver. The document must be read fully in order and it is preferred to read through the documents of the related projects to get better understanding.

## 1.4 Product Scope

A software platform for generating images which could be used as a dataset for other projects. For understanding scope of other projects, please refer to smart fridge software requirements specification document.

## 1.5 References

- IEEE, *Software Requirements Specification*. Available at [https://view.officeapps.live.com/op/view.aspx?src=https://web.cs.dal.ca/~hawkey/3130/srs\\_template-ieee.doc](https://view.officeapps.live.com/op/view.aspx?src=https://web.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc)
- Stuart R. Faulk, *Software Requirements: A Tutorial*, 1995. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.7770&rep=rep1&type=pdf>

## **2 Overall Description**

### **2.1 Product Perspective**

### **2.2 Product Functions**

### **2.3 User Classes and Characteristics**

### **2.4 Operating Environment**

### **2.5 Design and Implementation Constraints**

### **2.6 User Documentation**

### **2.7 Assumption and Dependencies**

## **3 External Interface Requirements**

### **3.1 User Interfaces**

### **3.2 Hardware Interfaces**

### **3.3 Software Interfaces**

### **3.4 Communications Interfaces**

## 4 System Features

### 4.1 Feature 1

### 4.2 Feature 2

## 5 Other Nonfunctional Requirements

### 5.1 Performance Requirements

### 5.2 Safety Requirements

### 5.3 Security Requirements

### 5.4 Software Quality Attributes

### 5.5 Business Rules

## 6 Other Requirements