**PO4\_DGELV\_DIGITAL ELEVATOR**

**SRS DOCUMENT**

**Version 1.0**

**Draft**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 1/24/2020 | 1.0 | Initial Release, specifying software used functions. | Mira Mousa Ahmed |
| 1/24/2020 | 1.1 | The State machine diagram was added. | Salma Amr |

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# 1. Introduction

## 

## Purpose

This SRS the software functional and nonfunctional requirements.

## 1.2 Specification Objectives

The objectives of this specification are to:

* Provide a Software system overview for a digital Elevator with lock system.

# 2. System Overview

## 2.1 Definition

The digital Elevator has lock system for 10 users that can be configured and edited by the user with high security sequence to ensure that only approved users can use the elevator.

## 2.2 Software Requirement

|  |  |  |
| --- | --- | --- |
| **Feature** | **REQ\_ID** | **Used Hardware** |
| **CheckUserLimit** | REQ\_ PO4\_DGELV \_SRS\_01\_V1 | This function will be handled when the program states that the user use the elevator for the first time.  It should check for the users’ limit as it must have 10 users only and refuse to sign up the user if it will exceed this limit. |
| **SignUp** | REQ\_ PO4\_DGELV \_SRS\_02\_V1 | This function will be handled if the CheckUserLimit states that the user can be added to the database.  It should ask for new username that cannot exceed 10 characters and new password with max 4 digits.  If the username is already taken the user should enter another one. |
| **SignIn** | REQ\_ PO4\_DGELV \_SRS\_03\_V1 | This function will be handled when the program states that the user is already signed up or it’s not his first entry.  It will Ask the user for username and password.  If the username and password are correct it will display OK and return the program state as ready.  If wrong it will display NOK with a buzzer sound and allow 3 trials which will be blocked for 5 sec after them. |
| **Reset** | REQ\_ PO4\_DGELV \_SRS\_04\_V1 | This function will be handled if the program states reset and this state is entered when on/off button is pressed for 2 seconds at any state. |
| **UpAndDown** | REQ\_ PO4\_DGELV \_SRS\_05\_V1 | This function will be handled if the program states ready.  If the Up button is pressed the motor will left the elevator up and if the down button is pressed it moves down. |

## 2.3 State Machine

