HSI

for

Digital Elevator

Version 1.0 proposed

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Revision History

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| --- | --- | --- | --- | --- | --- |
| **Name** | **Version** | **Author** | **Date** | **Change Description** | **Document Status** |
| HSI\_DIGITAL\_ELEVATOR | V\_1.0 | Ahmed Refaat,  Marcelle Samir | Jan 23, 2020 | Initial creation of the HSI Document. | Proposed |

# 1. Introduction

## Purpose

This project aims at developing a Digital Elevator with lock system to be more secure and have specific functionalities.

The purpose of this document is to present a detailed description of the Digital Elevator System. It will explain the purpose, scope and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate.

## Project Scope

This software system will be an Embedded System for a digital elevator. This system will be designed to secure the usage of the elevator and handle the movement of it. By having a limited number of resigned users with unique ID and entered password, we can secure the usage of the elevator. Using some developed buttons, the users can easily control the movement of the elevator.

2. Hardware/Software specification

## ****2.1 Req \_ DIGELV \_HSI\_01\_V1.0****

**{**

**This requirement describe the max number of users can access the Elevator,**

**It must be 10 users maximum**

**(2.1 Req \_ DIGELV \_CYRS\_01\_V1.0)**

**}**

## ****2.2 Req \_ DIGELV \_ HSI \_02\_V1.0****

**{**

**This requirement to set the limitation of each user name when he set your username and password for the first time**

**1) User name must be First name by max 10 characters**

**2) The new password must be 4 digits**

**3) When the user enter setting the ID is already taken system will ask him about another one**

**}**

## ****2.3 Req \_ DIGELV \_ HSI \_03\_V1.0****

**{**

**This requirement describe the behavior of elevator when the user enter ID correct**

**1) When pass the given ID correct the LCD will display OK**

**2) He can access the elevator by using two buttons up/down**

**}**

## ****2.4 Req \_ DIGELV \_ HSI \_04\_V1.0****

**{**

**This requirement describe the behavior of elevator when the user enter ID not correct**

**1) The user has max 3 trials**

**2) If the 3 trails not correct the LCD will display NOK and buzzer will fire**

**}**

## ****2.5 Req \_ DIGELV \_ HSI \_05\_V1.0****

**{**

**This requirement describe the reset functionality**

**A reset for whole system is done when pressing on/off button for 2 sec**

**}**