CYRS

For

Digital Elevator PO4\_DGELV

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**Document status**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Status | Author | Date |
| V1.4 | released | Donia Mohamed | Feb 7, 2020 |

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Version** | **Author** | **Date** | **Change Description** |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.0 | Moustafa Ghareeb  Donia Mohamed | Jan 21, 2020 | Initial creation of the CYRS Document. |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.1 | Moustafa Ghareeb  Donia  Mohamed | Jan 23, 2020 | Different format of the CYRS Document. |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.2 | Moustafa Ghareeb  Donia Mohamed | Jan 24, 2020 | Changing in requirement  DIGELV \_CYRS\_02\_V1.0  By adding way of writing ID (keypad) |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.3 | Donia Mohamed | Feb 5, 2020 | Changing the content according to CYRS reviews  1-adding Document status before table of content  2-adding Revision history  3-The flowchart has been changed  4-updating the requirements  By adding the  >Req\_DIGELV\_CYRS\_03\_V1.0\_IMP(SW)  >Req\_DIGELV\_CYRS\_04\_V1.0\_IMP(HW)  >Req\_DIGELV\_CYRS\_06\_V1.0\_IMP(HW)  >Req\_DIGELV\_CYRS\_07\_V1.0\_IMP(HW)  >Req\_DIGELV\_CYRS\_08\_V1.0\_IMP(HW)  5-Adding Reference table |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.4 | Donia Mohamed | Feb 7,2020 | >updating the flowchart by adding extra button on/off  >updating the reference document table |

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1. Introduction

## 1.1 project description

**This project aims to have a digital elevator and will be more secured by lock system and it can support many features as:**

* **Lock system at calling the elevator**
* **Up and Down movement**
* **On / off for the elevator and reset.**

## 1.2 Flow Chart

**Micro Controller**

**ATMEGA32**

**PUSH BUTTON1**

**LCD**

**PUSH BUTTON2**

**BUZZER**

**KEYPAD**

**MOTOR**

**On/OFF Button**

2. CYRS specification

## ****2.1 Number of users****

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_01\_V1.0\_IMP(SW)**** |
| ****Title**** | **Number of users** |
| ****Description**** | **The supported maximum number of users are 10** |

## ****2.2 Creation of User ID****

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_02\_V1.0\_IMP(SW)**** |
| ****Title**** | **Creation of User ID** |
| ****Description**** | **setting your username for the first time**  **..> User name must be the First name using max 10 characters** |

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_03\_V1.0\_IMP(SW)**** |
| ****Title**** | **Creation of User ID** |
| ****Description**** | **setting your password for the first time**  **..> The new password must be consists of 4 digits** |

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_04\_V1.0\_IMP(SW)**** |
| ****Title**** | **Creation of User ID** |
| ****Description**** | **setting your username and password for the first time**  **..> When the user enter ID is already taken system will ask him about another one** |

## ****2.3 Behavior of elevator for correct ID****

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_05\_V1.0\_IMP(HW)**** |
| ****Title**** | **Behavior of elevator for correct ID** |
| ****Description**** | **The LCD will display OK when the user enter the ID correct** |

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_06\_V1.0\_IMP(HW)**** |
| ****Title**** | **Behavior of elevator for correct ID** |
| ****Description**** | **After LCD step user can access the elevator using two buttons up/down** |

## ****2.4 Behavior of elevator for wrong ID****

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_07\_V1.0\_IMP(SW)**** |
| ****Title**** | **Behavior of elevator for wrong ID** |
| ****Description**** | **The user has max 3 trials to enter his ID correct** |

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_08\_V1.0\_IMP(HW)**** |
| ****Title**** | **Behavior of elevator for wrong ID** |
| ****Description**** | **If the 3 trails not correct the LCD will display NOK** |

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_09\_V1.0\_IMP(HW)**** |
| ****Title**** | **Behavior of elevator for wrong ID** |
| ****Description**** | **buzzer will fire after action of LCD** |

## ****2.5**** ****The reset functionality****

|  |  |
| --- | --- |
| ****REQ ID**** | ****Req\_DIGELV\_CYRS\_010\_V1.0\_IMP(SW)**** |
| ****Title**** | **The reset functionality** |
| ****Description**** | **A reset for whole system is done when pressing on/off button for 2 sec** |

3. The Reference Document table

|  |  |  |  |
| --- | --- | --- | --- |
| Ref number | Document | version | status |
| 1 | CRS | V1.0 | Proposed |
| 2 | SIQ | \_ | \_ |