CYRS

for

Digital Elevator

Version 1.1 proposed

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Revision History

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| --- | --- | --- | --- | --- | --- |
| **Name** | **Version** | **Author** | **Date** | **Change Description** | **Document Status** |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.0 | Moustafa Ghareeb,  Donia Mohamed | Jan 21, 2020 | Initial creation of the CYRS Document. | Proposed |
| CYRS\_DIGITAL\_ELEVATOR | V\_1.1 | Moustafa Ghareeb,  Donia Mohamed | Jan 23, 2020 | Different format of the CYRS Document. | proposed |

1. Introduction

## 1.1 project description

**This project aims to have a digital Elevator and also support lock system to be more secure and have many functionalities like:**

* **Lock system when calling the elevator**
* **The system support 10 users maximum can access**
* **The ID of any user must be consists of:**

1. **Username consists of user’s first name**
2. **Password consists of 4 digits**

* **If user ID already exist so to access the Elevator must enter the ID correct**
* **If ID not correct for 3 trials so cannot able to access elevator and buzzer fires**
* **Up and down movement**
* **If the ID is correct so we can use 2 switches to go up and down**
* **On and off to elevator**
* **Reset elevator to normal mode**
* **If button up/down pressed for 2 sec the elevator will reset**

## 1.2 Flow Chart

Keypad to enter username and password

LCD to show the username and password

The LCD will display NOK and buzzer will fire

The LCD will display ok and user can handle the elevator by two buttons up and down

correct

If correct

If ID correct

2. CYRS specification

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

**{**

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

**It must be 10 users maximum**

**}**

## ****2.2 Req \_ DIGELV \_CYRS\_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 \_CYRS\_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 \_CYRS\_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**

**}**

## ****2.1 Req \_ DIGELV \_CYRS\_05\_V1.0****

**{**

**This requirement describe the reset functionality**

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

**}**

3. The relation between CRS and CYRS

|  |  |
| --- | --- |
| CYRS | CRS |
| ****Req \_ DIGELV \_CYRS\_01\_V1.0**** | ●You have 10 users for this elevator |
| ****Req \_ DIGELV \_CYRS\_02\_V1.0**** | **●Each user has a Username and password.** **●When the user calling the elevator for the first time , the system will acquire him to enter New ID “First name ” by max 10 character and a new password “\*\*\*\*” 4 digits then he is OK to use the Elevator** |
| ****Req \_ DIGELV \_CYRS\_03\_V1.0**** | ●When the user is calling the Elevator for the second time , the system will request him to enter his ID and pass to use the ELEV.●when user is setting the ID is it already taken system has to ask for another one.●When pass for the given ID is correct the system should give display OK and start moving up / Down as the request from the user. |
| ****Req \_ DIGELV \_CYRS\_04\_V1.0**** | ●When the Pass of the given ID is wrong the system should display NOK with Buzz soundThe user has 3 trials then blocked for 5 sec |
| ****Req \_ DIGELV \_CYRS\_05\_V1.0**** | ●A reset for the whole system is done when pressing On/Of button for 2 sec |