DIGITAL ELEVATOR PO4\_DGELV\_CYRS

DOCUMENT STATUS IS DRAFT

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DOCUMENT HISTORY

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| --- | --- | --- | --- |
| Version | Author | Date | Change description |
| V1.0 | Donia Mohamed | 21/1/2020 | The initial creation of CYRS |

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

FLOW CHART DESCRIBE HARDWARE INTERACTION

LCD to show the username and password

Keypad to enter 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

DIGITAL ELEVATOR REQUIREMENTS SPECIFICATION

***Req\_AKRAM\_CYRS\_100\_V1.0***

{

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

It must be 10 users maximum

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***Req\_AKRAM\_CYRS\_200\_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 character

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

}

***Req\_AKRAM\_CYRS\_300\_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

}

***Req\_AKRAM\_CYRS\_400\_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

}

***Req\_AKRAM\_CYRS\_500\_V1.0***

{

This requirement describe the reset functionality

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

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