

Unfortunate Series of Elevator Events – Test Plan

Engineering Projects VI

EECE73125-22S-Sec1

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Table of Contents

Webpage	3
Raspberry Pi	3
Remote Connection.....	3
Elevator	3
Wiring.....	3
Code.....	4

Webpage

- All pages linked through home or index page
- GUI interface functions properly
 - Buttons
 - Login
 - Password
 - Links
- Images display suitably
- Embedded files are viewable
- Changes made in Google Documents/Spreadsheets automatically carry over to their respective embedded files
- Formatting remains the same across all pages
- Webpage is accessible from the Raspberry Pi

Raspberry Pi

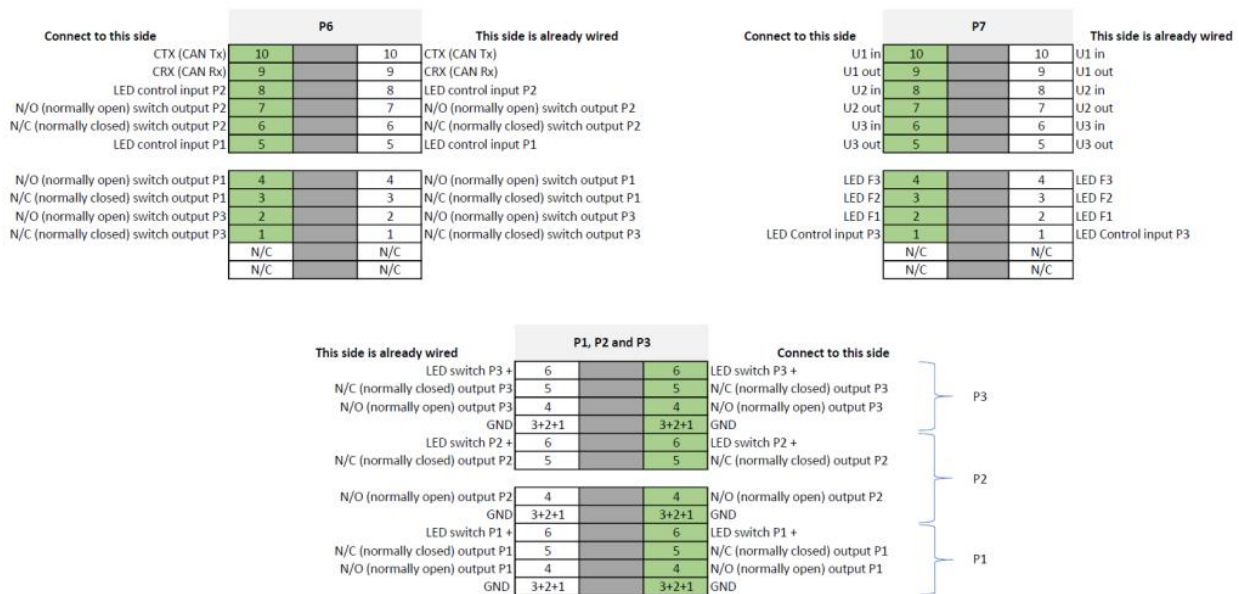
Remote Connection

- Setup server
- Connect via HTTP and SSH
- View elevators in class lab

Elevator

Wiring

LEDs and Buttons



- LEDs receive appropriate power (+3V)
- Buttons receive appropriate power (+3V)
- Buttons connected to STM32 through debouncing circuitry
- When buttons are activated, LED's light up

Elevator Switch Panel CAN Board

- P7 – pins 2,3,4 connected to power (+5V)
- P7 – pins 5 to 10 connected to switch output
- P1, P2, & P3 – pins 1 to 6 connected to output of switch LEDs

Code

- Buttons are defined
- Floor addresses are defined
- LED states are defined
- CAN bus filters are set
- When blue button on the Nucelo 64 is pressed, the user LED illuminates
- After changing the blue button for the elevator buttons
 - P1 brings elevator to floor 1
 - P2 brings elevator to floor 2
 - P3 brings elevator to floor 3
- The LEDs light up with their respective buttons when elevator reaches that floor
- Elevator doors open and close when button is pressed