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# Cairo University FACULTY OF ENGINEERING



### System and Biomedical Engineering Department

## BIO-ELECTRONICS COURSE

# Elevator Micro-controller Task 2

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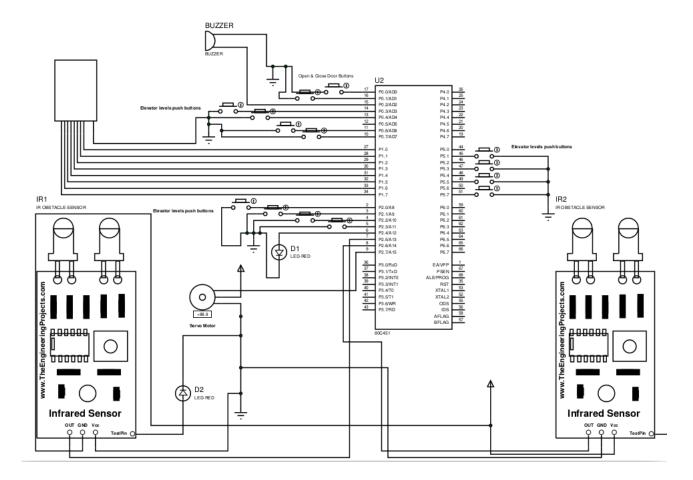
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#### 1 Introduction

Elevators are an important part of our lives. It makes our life easier; let us work and go to different floors faster, allows us to transport goods with ease and helps us feel comfortable and relax all throughout the ride. Without the elevator every person that needs to go up would have to spend incomparable amounts of effort getting to their destination.

#### 2 System Schematic Model



### 3 Completed Tasks

In this task we worked on C8051F020 to design a simple elevator system in a building consisting of four floors. Each floor has two buttons one for going up, and one for going down except for the ground and last floor have one button only. The Elevator itself have at least five buttons inside the cart, one for each floor. The elevator door wait for 5 seconds before closing, and the door can be stopped from closing by pushing the open button. Also, the elevator door opens if someone blocks the door. The "going up" buttons request the elevator to go to the top floors, while the a "going down" buttons request/make the elevator go to the ground floors. The maximum load for the elevator is five persons. If the number of persons exceeds five, an alarm will work and elevator will not move.

#### 4 Source Code

Elevator Application [github link]