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"Voice operated lift control system using microcontroller."

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Abstract: *Now a days we can find the large buildings, malls, hospitals in our area. The buildings have more numbers of floor. This paper suits for handicap, paralysis people to move from one floor to another floor by using the elevator. Main purpose of this paper is to design elevator wireless system with the help of android and Bluetooth and microcontroller concept.*

Key Words: Microcontroller, IR Sensor, DC Motor, 7 Segment Display.

1. INTRODUCTION

Elevator is a turned into the important part in our everyday life. We utilize it from moving products and group of people vertically in large buildings that time elevator is more useful. In present situation elevator is important thing for the shopping center, shopping market, schools, and hospitals. So we are make it more programmed through our task. Voice to text convertor software technique by which the elevator can be controlled. Voice operated lift control system acts like a human-machine communication system.

This paper document findings and result of a research of elevator control by using wireless technology like Bluetooth module and

Microcontroller AT89c52. In this paper lift control system is going to be produce by using microcontroller. Thus the main purpose of this paper is to design voice operated lift control system with the help of wireless technology that is Bluetooth module to design program for this system. To the combination of hardware and software in order to simulate the function of voice operated lift control system.

1.1OBJECTIVES OF PROJECT:

- 1. Operation of lift through voice commands.
- 2. It is operated on the voice of any person.
- 3. To highlight key provision on the use of voice operated lift for handicap person.

1.2PROPOSED SYSTEM:

The voice operated system is the main part of this project. Voice to text convertor software is communication mechanism between the user and

Microcontroller. The project makes the use of DC motor for the moving of lift. Microcontroller is programmed, with the help of embedded C programming. The microcontroller is capable of communicating with all input and output modules of elevator. The Bluetooth module is used for the wireless connection between the user and controller.

Figure1: Diagram of proposed system of project

2. METHODOLOGY:

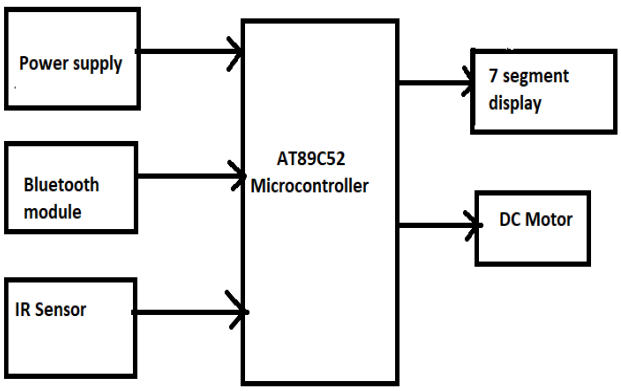

Figure-2: Block diagram.

2.1. Hardware description:

Regulated power supply
Microcontroller
Bluetooth module
DC Motor
7 Segment display

Microcontroller:

Microcontroller is the very important part of this project. The 89c52 contains nonvolatile memory. Microcontroller will fetch the new program code itself while using the system and also it fetches reprogram itself. In the programming system code. 89c52 provides number of features like: 8K byte flash, watch dog timer, three 16 bit timer, 256 bytes of RAM, a full duplex serial port and clock circuitry.

DC Motor:

DC motor is also important in this system. It is useful for rotating the rotor. The DC motor wires carries the current are the space of magnetic field. Magnetic fields are rotating clock-wise and anticlockwise. The 12V DC motor is used in this system. DC motor is used to drive the lift. It support the bidirectional rotation.

Figure-3: DC Motor.

Bluetooth Module:

This HC-06 Bluetooth module is the most and easiest way to go wireless technology. This module allows you to wirelessly extend your serial interface, Hence any program running on your laptop feels its controlling local serial port which is over a wireless Bluetooth link.

The four pins are +5v, GND, TXD, RXD. Supply voltage should be 3.3v-6v. Absolute maximum is 7v.

Figure4: Bluetooth module

IR Sensor:

The IR sensor is used for the in which floor lift is present. IR sensor will have an IR transmitter and receiver. IR rays are continuously emitted from the transmitter and any object will be reflected back to the receiver.

Figure5: IR Sensor

CONCLUSION:

This paper deals with programming and through it we can display the floors through the 7 segment display which the elevator is moving and stop. The voice command is generated at each stage of elevator. The IR sensor is used for the purpose of identify the lift location and also how many people enter in the lift and also exit in the lift. Bluetooth is used for the wireless technology to transfer the data from mobile to the elevator.

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