



## VOICE CONTROLLED WHEEL CHAIR FOR PHYSICALLY DISABLED PERSON

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### Abstract:

This task portrays the plan of a savvy, mechanized, voice controlled wheelchair utilizing implanted framework. Proposed configuration underpins voices actuation framework for actually incapacitated abled wheelchair. The voice order is given through a phone gadget having Bluetooth and the order is moved and changed over to string by the BT Voice Control for Arduino and is moved to the Bluetooth Module HC-05 associated with the Arduino board for the control of the Wheelchair. For instance, when the client says „Go“ then the seat will move forward way. at the point when he says „Back“ then the seat will move in reverse way. likewise, „Left“, „Right“ for turning it in left and right ways separately. „Stop“ for making it stop. This framework was planned and created to save cost, time and energy of the patient.

Keywords: voice, wheel chair, disabled, Arduino.

### 1. Introduction:

In this framework, we use ARDUINO UNO (ATmega328P) microcontroller which goes about as mind of the framework, in light of the fact that the whole framework program guidance put away in it [1]. Here in this idea the wheelchair is constrained by Bluetooth voice orders [2]. The IR sensor is utilized to distinguish the obstacle, if there is any obstacle identified in transit the buzzer cautions the individual and



wheelchair quits moving a similar way rather it moves various way [3]. This idea encourages the truly tested to work the actual wheelchair [4].

## **2. Methodology:**

The fundamental occupation of the HC-05 is adding two way (full-duplex) wireless usefulness to your undertakings. It tends to be utilized to impart between two microcontrollers with serial abilities (like two Arduinos), yet it can likewise be utilized to control any Bluetooth gadget with a microcontroller or the other way around [5]. The HC-05 gets controlled through the TX and RX pins and supports the utilization of standard AT orders. For that reason, clients should enter an uncommon order mode when the gadget controls up. This is finished by pulling the key pin low when turning the module on. Something else, the gadget boots into information mode, which permits it to speak with different gadgets wirelessly [6]. When the module controls on, it ought to be discoverable by any Bluetooth gadget, for instance, a cell phone. You would then be able to interface with the gadget with the standard secret word. After building up the association, information sends and converts to a serial stream by the HC-05. This serial stream is then perused by the microcontroller the module is associated with. Sending information from the microcontroller works a contrary way. The figure 1 shows the outline of voice controlled wheel seat framework.

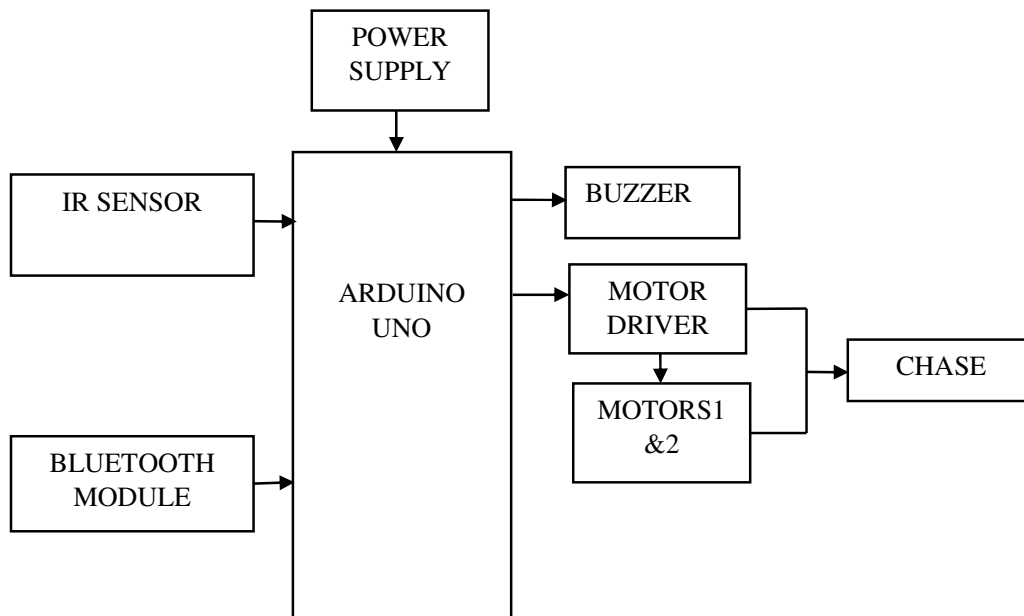


Figure 1: Overview of voice controlled wheel chair system.

### 3. Conclusion

Consequently our undertaking "VOICE CONTROLLED WHEEL CHAIR FOR PHYSICALLY DISABLED PERSON" is clarified obviously in this report. It clarifies plan and execution of a wheel seat utilizing Bluetooth. The wheel seat follows the orders given. After plan interaction of the circuit it has been tried to check whether it follows the order of the client and moves effectively. It likewise faculties the obstacle which is lying in its way. The obstacle is detected by the IR sensors. This task will help the contrastingly abled people and the matured individuals to live freely. By actualizing this venture incapacitated patients gets profited. Contrasting with ordinary wheel seat this will be more successful and



accommodating. In future it tends to be utilized for debilitated individual and visually impaired individuals. This framework is ease framework with new innovation. It lessens human endeavors. This is useful to genuinely crippled individuals who couldn't ready to work with their hand. It lessens hazard. It is a protected and helpful framework and the client feels more great and can be autonomous

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