SMART HAND GLOVES

Good evening to everyone, I am Sankar Sethi going to present about "SMART HAND GLOVES"

Every human in this world need to communicate but the disabled people fail to do so. Hence we have tried to bridge the communication gap by designing a communicating portable device.

The device consists of button and each button is assigned by a specific task. The human brain analyses the button readings and identify exact need.

The data is received by arduino and transmitted to the speaker through the Bluetooth module.

Let's see the hardware view of our project. We require a rubber glove, arduino UNO, Bluetooth module, jumper wires, button and a 12 V battery.

- 1. Arduino UNO: Arduino UNO is the development board used in this project which transfers the output data by the Bluetooth module to the smart phone.
- 2. Bluetooth module:-This module helps to transmit the output data to the Smartphone by Bluetooth transmission and the data is shown on the screen of the phone.
- 3. *Jumper wire*:- Jumper wires are used to connect the different sensors and modules to the Arduino board
- 4. *Metallic buttons:* The metallic button is used as conducting switch to select the need of the user.
- 5. Battery: Battery is used to power up the glove

This is the schematic representation . 12 Buttons are placed in the gloves fingers and each button is connected with a specific wire. 12 wires are connected to the digital pin of the arduino and the wire of another button which is placed in thumb is connected to the ground.

Each button has a specific task to perform. For e.g. when we touch the 1st button through our thumb then it will display "I want to drink water".

When our thumb touch any of the 12 buttons, then data will be transmitted to arduino and it will send it to Bluetooth module.

The Bluetooth module consists of 4 pins. The gnd of arduino is connected with the gnd of Bluetooth module, 5v of arduino is connected with vcc of Bluetooth module and the TX pin of arduino is connected with the Rx pin of Bluetooth module.

Tx is used for transmission of data and Rx is used for receiving the data.

We have made an application using MIT through which we will send the output.

This is the display screen in our smart phone which displays the output.

The applications of the gloves are:-

- **1.MEDICAL PURPOSES**
- **2.EASY WAY TO IMPLEMENT HOME AUTOMATION**
- **■** 3.GREAT HELP TO THE OLD
- 4.BENEFICIAL TO THE DUMB AND THE WEAK
- 5.CAN BE USED IN ROBOTICS