Project Description

For

VOICE CONTROLLED WRITING MACHINE

Project Supervisor:
Atanu Shome
Assistant Professor
Computer Science & Engineering Discipline,
Khulna University.

Prepared by:

Md.Motiur Rahman (190233) Talbia Fida(190216)

Khulna University, Bangladesh

February 20,2022

Description

The innovative idea of our project is to convert speech of human into a textual matter without any difficulty and hassles. The major advantage is that the system can write the spoken contents on paper using pen. It will help a person to produce written notes without putting physical effort. The writing machine is a mechanical plotter which is used to write the characters after recognizing it. It will be designed in two phase, first to listen the voice or speech of the user, later after getting the instructions the plotter or the writing machine attached with it start writing accordingly on the paper. An android application will be used to convert the voice into speech or word. The converted speech which is letters or symbols will be send into the Arduino. This is a transmission via ESP8266 Wi-fi module. According to the input given to Arduino the plotter will plot the letters and characters. The main motive behind our project is that it is an efficient system for managing time, to ease of the lives of handicap.

The Purpose

The purpose of our Project is :-- 1)To ease the lives of handicap, blind and paralyzed people by completing their write-up work based on their Voice Commands (whatever user speaks, machine will write on paper with given pen). 2)To design such a system that could write in User?s Handwriting with great speed compared to human writing speed & with same speed as Human Talking Pace. 3)A system that would help students to save their time from unnecessary write-up work. This machine would help them by completing their writing part with much faster, efficiently & without errors. 4)Easily replace the need of stenographers.

Feature

Homework writing machine is an automatic writing machine that is used for typing any type of text. Homework writing machine is working like a CNC machine. This Machine is working on 3 axis (X, Y, Z). This three axis motion is given by stepper motor and servo motor.

To built this system materials we need:

- 1. 2 PCs Ne-ma 17 Stepper motor
- 2. Arduino Uno R 3
- 3. Expansion Board A 4988 Driver
- 4. Mg 90 S Metal Gear Servo
- 5. 12 v to 36 v DC Cell or battery
- 6. Pencil
- 7. Boll pen
- 8. Screw



Figure1:Simplified Block Diagram

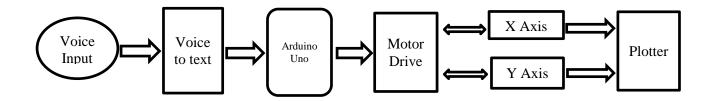


Figure 2: Detailed Block Diagram of Voice Recognised Writing Machine