

CONTROL ARDUINO USING SPEECH

1-Add button to the web

```

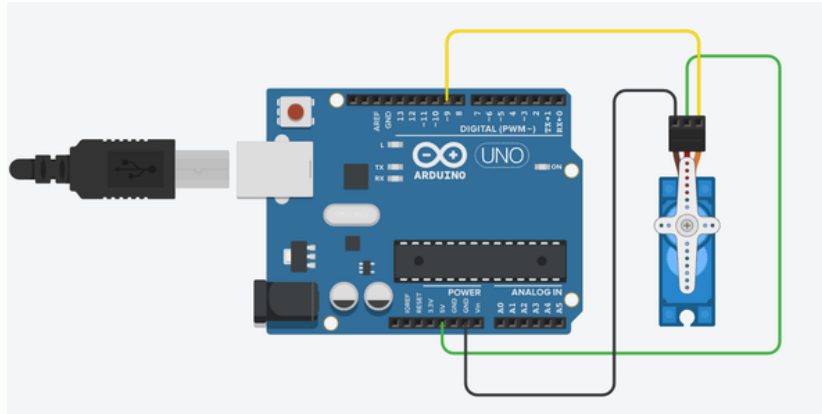
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="initial-scale=1.0, maximum-scale=1.0, user-scalable=1">
6     <title>converter Home</title>
7     <link rel="stylesheet" type="text/css" href="css/style.css">
8     <link href="layout.css" rel="stylesheet type="text/css">
9 </head>
10
11 <body>
12 <div class="voice_to_text"> <h1>هېڅ رڼا اخلایم یصی ن یل لیدی .ن م لوجم</h1>
13 <div class="text"><h2>لیبل ال انشېبص غل بل یرت لرغ و ټول بل اول ټول ټوټې او عکس له تپون او کچې او وچه چل وړ او ده</h2>
14 <div id="convert_text"><textarea> 2022م زلی دیک تل ا</div>
15 <button class="">کلیکون ن یل لیدی</button> <button id="click_to_convert">
16 <button class="">له یې وټ</button> <button role="button" id="button1">
17 </div>
18 <script type="text/javascript" src="js/script.js"></script>
19 </footer>
20 <script src="code.js"></script>
21 </html>

```

محول من صوت الى نص يدعم اللغة العربية

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2- Connecting the motor with arduino+code



```
#include <Servo.h>
Servo myservo;
int servoPosition = 0;
const int servoPin = 9;
void setup()
{
  Serial.begin(9600);
  pinMode(LED_BUILTIN, OUTPUT);
  digitalWrite(LED_BUILTIN, HIGH);
  delay(1000);
  digitalWrite(LED_BUILTIN, LOW);
  myservo.attach(servoPin);
  myservo.write(90);
}
void loop()
{
  if (Serial.available() > 0)
  {
    String incomingString = Serial.readString();
    Serial.print(F("Received from Serial: "));
    Serial.println(incomingString);
    if (incomingString.startsWith("right"))
    {
      Serial.println(F("Turning Right"));
      for (servoPosition = 0; servoPosition <= 180; servoPosition++)
      {

```

```

      if (Serial.available() > 0)
      {
        String incomingString = Serial.readString();
        Serial.print(F("Received from Serial: "));
        Serial.println(incomingString);
        if (incomingString.startsWith("right"))
        {
          Serial.println(F("Turning Right"));
          for (servoPosition = 0; servoPosition <= 180; servoPosition++)
          {
            myservo.write(servoPosition);
            delay(20);
          }
        }
        else if (incomingString.startsWith("left"))
        {
          Serial.println(F("Turning Left"));
          for (servoPosition = 180; servoPosition >= 0; servoPosition--)
          {
            myservo.write(servoPosition);
            delay(20);
          }
        }
      }
    }
  }
}
```

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```
1 document.querySelector('button').addEventListener('click', async () => {
2   // Prompt user to select any serial port.
3   const port = await navigator.serial.requestPort();
4   await port.open({baudRate:9600});
5 });
6 click_to_convert.addEventListener('click',function(){
7   var speech = true;
8   window.SpeechRecognition = window.webkitSpeechRecognition;
9   const recognition = new SpeechRecognition();
10  recognition.interimResults = true;
11  recognition.lang = 'ar';
12  recognition.addEventListener('result', e=>{
13    const transcript = Array.from(e.results)
14      .map(result =>result[0])
15      .map(result => result.transcript)
16    convert_text.innerHTML=transcript;
17  })
18  if(speech == true){
19    recognition.start();
20  }
21 })
```

