FIRST TASK

Steps:

1- Plug the ESP32 to your PC or laptob by using micro cable.

2- Go to Tools > Board > Boards Manager > from the search bar write "esp32" > click on install.

3- Go to Tools > Board > select the name of your ESP32 board.

4- Go to Tools > Port and select a COM port available.

5- write the following code in arduion editor :

/\*

Blink

Turns an LED on for one second, then off for one second, repeatedly.

Most Arduinos have an on-board LED you can control. On the UNO, MEGA and ZERO

it is attached to digital pin 13, on MKR1000 on pin 6. LED\_BUILTIN is set to

the correct LED pin independent of which board is used.

If you want to know what pin the on-board LED is connected to on your Arduino

model, check the Technical Specs of your board at:

https://www.arduino.cc/en/Main/Products

modified 8 May 2014

by Scott Fitzgerald

modified 2 Sep 2016

by Arturo Guadalupi

modified 8 Sep 2016

by Colby Newman

This example code is in the public domain.

https://www.arduino.cc/en/Tutorial/BuiltInExamples/Blink

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// the setup function runs once when you press reset or power the board

void setup() {

// initialize digital pin LED\_BUILTIN as an output.

pinMode(LED\_BUILTIN, OUTPUT);

}

// the loop function runs over and over again forever

void loop() {

digitalWrite(LED\_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)

delay(1000); // wait for a second

digitalWrite(LED\_BUILTIN, LOW); // turn the LED off by making the voltage LOW

delay(1000); // wait for a second

}

6- Press the upload button.

Second task

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta http-equiv="Cache-Control" content="no-cache, no-store, must-revalidate" />

<meta http-equiv="Pragma" content="no-cache" />

<meta http-equiv="Expires" content="0" />

<title>Speech to text conversion using JavaScript</title>

<meta name="description" content="">

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet" href="style.css">

<link href="https://fonts.googleapis.com/css?family=Shadows+Into+Light" rel="stylesheet">

</head>

<body>

<div class="mycontainer">

<h1>Speech to text conversion using JavaScript</h1>

<div class="mywebapp">

<div class="input">

<textarea id="textbox" rows="6"></textarea>

</div>

<button id="start-btn" title="Start">Start</button>

<p id="instructions">Press the Start button</p>

</div>

</div>

<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>

<script src="script.js"></script>

</body>

</html>

var SpeechRecognition = window.webkitSpeechRecognition;

var recognition = new SpeechRecognition();

recognition.lang = "ar";

var Textbox = $('#textbox');

var instructions = $('instructions');

var Content = '';

recognition.continuous = true;

recognition.onresult = function(event) {

var current = event.resultIndex;

var transcript = event.results[current][0].transcript;

Content += transcript;

Textbox.val(Content);

};

recognition.onstart = function() {

instructions.text('Voice recognition is ON.');

}

recognition.onspeechend = function() {

instructions.text('No activity.');

}

recognition.onerror = function(event) {

if(event.error == 'no-speech') {

instructions.text('Try again.');

}

}

$('#start-btn').on('click', function(e) {

if (Content.length) {

Content += ' ';

}

recognition.start();

});

Textbox.on('input', function() {

Content = $(this).val();

})