

- Predefined HTML code for voice_selfie_app.html

```

<html>
  <head>
    <title>My Selfie App</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>

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

  </head>

  <body>
    <div class="container">
      <center>
        <h1>Voice Selfie App

        </h1>
        <hr>
        <h4 style="color: red;">Please press allow as soon as popup comes. After you give a voice command</h4>

        <div class="form-group">
          <h3>Say "take my selfie"</h3>
          <label>Your voice output : </label>

        </div>

        <p>Press the Start button</p>

        <label>Your webcam : </label>

        <br>

        <label>Your selfie Will Display Here: </label>

      </center>
    </div>

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

  </body>
</html>

```

This HTML file has

Bootstrap links

our **style.css** file link

our **main.js** file link

and some html codes which you already know

- After adding important HTML elements in voice_selfie_app.html like -
 - Anchor tag
 - Replacing the selfie image with your image
 - Adding a textarea

```

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  <head>
    <title>My Selfie App</title>
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    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>

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

    <script src="https://cdnjs.cloudflare.com/ajax/libs/webcamjs/1.0.26/webcam.js"></script>
  </head>

  <body>
    <div class="container">
      <center>
        <a href="" id="link" download="myselfie.png"></a>
        <h1>Voice Selfie App
        
        </h1>
        <hr>
        <h4 style="color:red;">Please press allow as soon as popup comes. After you give a voice command</h4>

        <div class="form-group">
          <h3>Say "take my selfie"</h3>
          <label>Your voice output : </label>
          <textarea class="form-control" id="textbox" readonly="true"></textarea>
        </div>
      </center>
    </div>
  </body>
</html>

```

Output -

```

<div class="container">
  <center>
    <a href="" id="link" download="myselfie.png"></a>
    <h1>Voice Selfie App
    
    </h1>
    <hr>
    <h4 style="color:red;">Please press allow as soon as popup comes. After you give a voice command</h4>

    <div class="form-group">
      <h3>Say "take my selfie"</h3>
      <label>Your voice output : </label>
      <textarea class="form-control" id="textbox" readonly="true"></textarea>
    </div>
  </center>
</div>

```

Voice Selfie App



Please press allow as soon as popup comes. After you give a voice command

Say "take my selfie"

Your voice output :

- Adding a start button
- Adding a div to hold the webcam
- Adding a div to hold the selfie taking by the webcam

```

<button class="btn btn-primary" onclick="start()">Start</button>
<p>Press the Start button</p>

<label>Your webcam : </label>
<div id="camera"></div>

<br>

<label>Your selife Will Display Here: </label>
<div id="result" ></div>
</center>
</div>

<script src="main.js"></script>
</body>
</html>

```

Start button

Div to hold the webcam

Div to hold the selfie

Our JS link

Output-

```

<button class="btn btn-primary" onclick="start()">Start</button>
<p>Press the Start button</p>

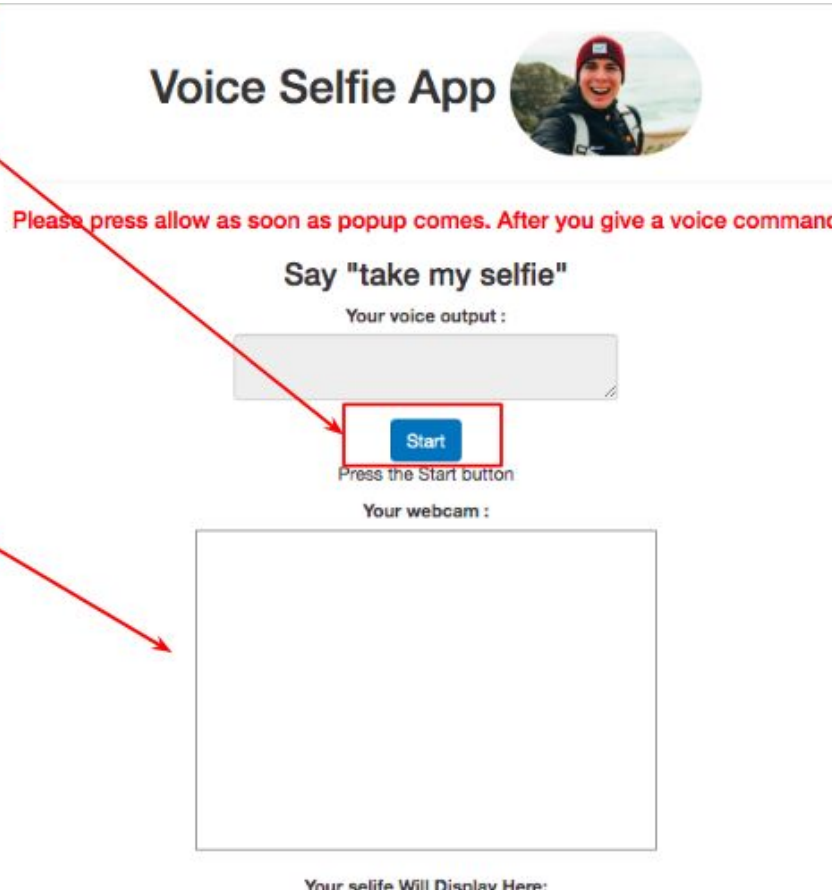
<label>Your webcam : </label>
<div id="camera"></div>

<br>

<label>Your selife Will Display Here: </label>
<div id="result" ></div>
</center>
</div>

<script src="main.js"></script>
</body>
</html>

```



Voice Selfie App

Please press allow as soon as popup comes. After you give a voice command

Say "take my selfie"

Your voice output :

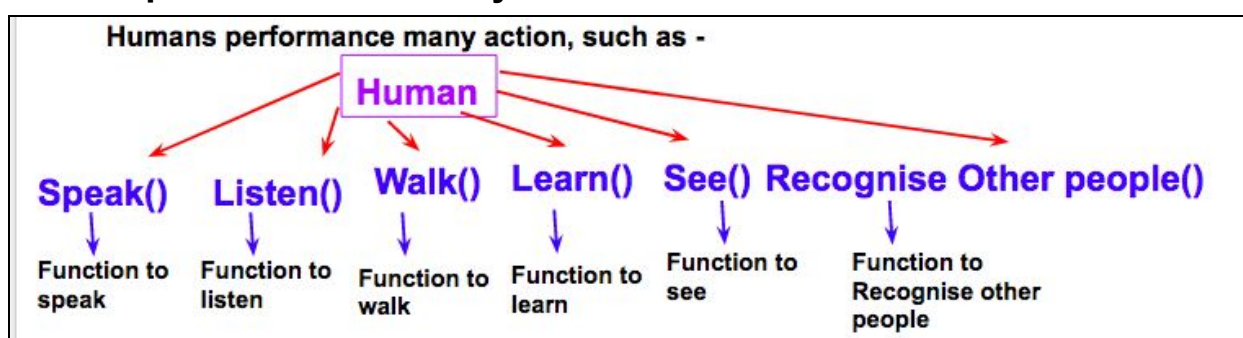
Start

Press the Start button

Your webcam :

Your selife Will Display Here:

• Explanation of new keyword



So if we want to create a new human with a name john, and ask him to speak.

So from the above image we can understand that **human** has all function to perform all actions. So for understanding let's say this **human** is an API and to create new human everytime we will use this API

Creating Human steps -

1. First we will create a new human with name John.

John = new human()

→ Name of the human ↑ ← Calling the **human** API, as per the above explanation

New keyword is use to create new human

2. And ask the john to speak

John.speak()

→ Name of the human ← Function to perform action speak

- JS code for speech to text -

```
var SpeechRecognition = window.webkitSpeechRecognition;

var recognition = new SpeechRecognition();

function start()
{
  document.getElementById("textbox").innerHTML = "";
  recognition.start();
}

recognition.onresult = function run (event) {

  console.log(event);

  var Content = event.results[0][0].transcript;
  console.log(Content);

  document.getElementById("textbox").innerHTML = Content;
}
```

- Explaining the first two line of the code

```
var SpeechRecognition = window.webkitSpeechRecognition;

var recognition = new SpeechRecognition();
```

```
window.webkitSpeechRecognition;
```

This is the **Web Speech API** used to recognise what we are speaking and convert it in to text

First we will store this API into a variable, so that we can use this **Web Speech API**, like this -

```
var SpeechRecognition = window.webkitSpeechRecognition;
```

The way we created new human - **John = new human()**

The same way we will create a new **Web Speech API** to use in our webapp, and store it inside a variable

```
var recognition = new SpeechRecognition();
```

Variable, to store new **Web Speech API**

Calling the **Web Speech API**, as per the above explanation

New keyword is use to create **Web Speech API**

- Explaining the start function from the speech to text code -

→ Now define the start() function -

```
function start()  
{
```

→ Whenever the start button is pressed we want the textarea to be empty. For that we are updating textarea with an empty value

```
document.getElementById("textbox").innerHTML = "";
```

After creating new human with a name john

```
John = new human()
```

We asked john to speak, by calling **speak()** from **human API**

```
John.speak()
```

The same way after creating new **Web Speech API** and storing it inside a variable

```
var recognition = new SpeechRecognition();
```

We will call the start() function from **Web Speech API**.

```
recognition.start();
```

This start function is a predefined function of **Web Speech API** and it will convert your speech to text.

Output of

```
console.log(event);
```

-

```
main.js:15
▼ SpeechRecognitionEvent ⓘ
  bubbles: false
  cancelBubble: false
  cancelable: false
  composed: false
  ▶ currentTarget: SpeechRecognition {g...
  defaultPrevented: false
  emma: null
  eventPhase: 0
  interpretation: null
  isTrusted: true
  ▶ path: []
  resultIndex: 0
  ▼ results: SpeechRecognitionResultList
    ▼ 0: SpeechRecognitionResult
      ▼ 0: SpeechRecognitionAlternative
        confidence: 0.7236707806587219
        transcript: "how are you"
        ▶ __proto__: SpeechRecognitionAL...
        isFinal: true
        length: 1
        ▶ __proto__: SpeechRecognitionResu...
        length: 1
        ▶ __proto__: SpeechRecognitionResult...
        returnValue: true
      ▶ srcElement: SpeechRecognition {gram...
      ▶ target: SpeechRecognition {grammars...
      timeStamp: 913367.8750000035
      type: "result"
      ▶ __proto__: SpeechRecognitionEvent
```

Output of - `document.getElementById("textbox").innerHTML = Content;`

Your voice output :

how are you

Start

Press the Start button