

Index.html

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <title>Stryker Teachathon</title>
```

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

```
</head>
```

```
<body>
```

```
  <nav id="navbar" class="">
```

```
    <div class="nav-wrapper">
```

```
      <div class="logo">
```

```
        <!-- Logo Placeholder for Inlustration -->
```

```
        <a href="index.html"><i class=""></i></a>
```

```
      </div>
```

```
    <ul id="menu">
```

```
      <li><a href="index.html">Home</a></li>
```

```
      <li><a href="demo.html">Demo</a></li>
```

```
      <li><a href="about.html">About</a></li>
```

```
    </ul>
```

```
  </div>
```

```
</nav>
<div class="content">
  <h2 class="title"><span style="color: #FAAB05;">Stryker</span> Techathon</h1>
  <div class="idea">
    <br>
    <p>Hip or Knee replacement post surgery issue identification using Computer Vision</p>
  </div>
</div>
</body>
```

Demo.html

```
<!DOCTYPE html>
<html lang="en">
<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Stryker Teachathon</title>

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

</head>

<body onload="init()">
```

```

<nav id="navbar" class="">
  <div class="nav-wrapper">
    <div class="logo">
      <!-- Logo Placeholder for Inlustration -->
      <a href="#home"><i class=""></i></a>
    </div>
    <ul id="menu">
      <li><a href="index.html">Home</a></li>
      <li><a href="demo.html">Demo</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </div>
</nav>
<div class="below-nav">
  <div class="vision">
    <div><canvas id="canvas"></canvas></div>
    <div id="label-container"></div>
  </div>
</div>
<script src="https://cdn.jsdelivr.net/npm/@tensorflow/tfjs@1.3.1/dist/tf.min.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/@teachablemachine/pose@0.8/dist/teachablemachine-
pose.min.js"></script>
<script src="script.js"></script>
</body>

```

Script.js

```
const URL = "https://teachablemachine.withgoogle.com/models/yeJ93Mq5/";
```

```
let model, webcam, ctx, labelContainer, maxPredictions;
```

```
async function init() {
```

```
  const modelURL = URL + "model.json";
```

```
  const metadataURL = URL + "metadata.json";
```

```
  // load the model and metadata
```

```
  model = await tmPose.load(modelURL, metadataURL);
```

```
  maxPredictions = model.getTotalClasses();
```

```
  // Convenience function to setup a webcam
```

```
  const size = 600;
```

```
  const flip = true; // whether to flip the webcam
```

```
webcam = new tmPose.Webcam(size, size, flip); // width, height, flip

await webcam.setup(); // request access to the webcam

await webcam.play();

window.requestAnimationFrame(loop);


// append/get elements to the DOM

const canvas = document.getElementById("canvas");

canvas.width = 500; canvas.height = 550;

ctx = canvas.getContext("2d");

labelContainer = document.getElementById("label-container");

for (let i = 0; i < maxPredictions; i++) { // and class labels

    labelContainer.appendChild(document.createElement("div"));

}

}
```

```
async function loop(timestamp) {  
  
    webcam.update(); // update the webcam frame  
  
    await predict();  
  
    window.requestAnimationFrame(loop);  
  
}
```

```
async function predict() {  
  
    // Prediction #1: run input through posenet  
  
    // estimatePose can take in an image, video, or canvas html element  
  
    const { pose, posenetOutput } = await model.estimatePose(webcam.canvas);  
  
    // Prediction 2: run input through teachable machine classification model  
  
    const prediction = await model.predict(posenetOutput);
```

```
for (let i = 0; i < maxPredictions; i++) {

    const classPrediction = prediction[i].className;

    const probability = prediction[i].probability.toFixed(2) * 100; // Convert probability to
percentage

    // Update the label with class prediction and probability

    labelContainer.childNodes[i].innerHTML = `${classPrediction}: ${probability}%`;

    // Create a visual bar

    const bar = document.createElement('div');

    bar.style.width = `${probability}%`;

    bar.style.height = '20px'; // Adjust the height of the bar

    // Set the bar color based on class (assuming the first class should be red)

    if (i === 0) {
```

```
bar.style.backgroundColor = 'green';
```

```
bar.style.borderRadius = '30px';
```

```
} else {
```

```
bar.style.backgroundColor = 'red'; // Color other classes as red
```

```
bar.style.borderRadius = '30px';
```

```
}
```

```
// Append the bar to the labelContainer
```

```
labelContainer.childNodes[i].appendChild(bar);
```

```
}
```

```
// finally draw the poses
```

```
drawPose(pose);
```

```
}
```

```
function drawPose(pose) {
```



```
if (webcam.canvas) {  
  
    ctx.drawImage(webcam.canvas, 0, 0);  
  
    // draw the keypoints and skeleton  
  
    if (pose) {  
  
        const minPartConfidence = 0.5;  
  
        tmPose.drawKeypoints(pose.keypoints, minPartConfidence, ctx);  
  
        tmPose.drawSkeleton(pose.keypoints, minPartConfidence, ctx);  
  
    }  
  
}  
  
}
```

About.html

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
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```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
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```
<title>Stryker Teachathon</title>
```

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

```
</head>
```

```
<body>
```

```
<nav id="navbar" class="">
```

```
<div class="nav-wrapper">
```

```
<div class="logo">
```

```
<!-- Logo Placeholder for Inlustration -->
```

```
<a href="index.html"><i class=""></i></a>
```

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</div>
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```
<ul id="menu">
```

```
<li><a href="index.html">Home</a></li>
```

```
<li><a href="demo.html">Demo</a></li>
```

```
<li><a href="about.html">About</a></li>
```

```
</ul>
```

```
<div>
```

```
</nav>
```

```
<div class="developers">
```

```
<br>
```

```
<br>
```

```
<h1 class="dev" style="color: #FAAB05;">Developers</h1>
```

```
<div class="photos">
```

```
<div>
```

```

<h1 class="names">Akhil Majety</h1>
<p class="role">IT Technical Analyst</p>
<p>Commerical International - Emerging Markets</p>
</div>
<div>
  
  <h1 class="names">Pallavi C</h1>
  <p class="role">IT Technical Analyst</p>
  <p>Commerical International - Emerging Markets</p>
</div>
</div>
</body>
```

Style.css

```
* {
  border: 0;
  box-sizing: border-box;
  margin: 0;
  padding: 0;
}

body {
  background: rgb(250, 250, 250) url('Ortho-Bg.jpg');
  font-family: Lato, Helvetica, Arial, sans-serif;
```

```
}
```

```
a {
```

```
  color: inherit;
```

```
  font-family: inherit;
```

```
  font-size: inherit;
```

```
  text-decoration: none;
```

```
}
```

```
#navbar {
```

```
  color: white;
```

```
  position: fixed;
```

```
  top: 0;
```

```
  height: 60px;
```

```
  line-height: 60px;
```

```
  width: 100vw;
```

```
  z-index: 10;
```

```
}
```

```
.nav-wrapper {
```

```
  margin: auto;
```

```
  text-align: center;
```

```
  width: 70%;
```

```
}
```

```
.logo {
```

```
  float: left;
```

```
margin-left: -180px;  
margin-top: 18px;  
}
```

```
#navbar ul {  
    display: inline-block;  
    list-style: none;  
    margin-top: -2px;  
    text-align: right;  
    transition: transform 0.5s ease-out;  
    -webkit-transition: transform 0.5s ease-out;  
    margin-top: 30px;  
}
```

```
#navbar li {  
    display: inline-block;  
}
```

```
#navbar li a {  
    color: white;  
    display: block;  
    font-size: medium;  
    height: 50px;  
    letter-spacing: 1px;  
    margin: 0 20px;  
    padding: 0 4px;  
    position: relative;  
    text-decoration: none;
```

```
text-transform: uppercase;
transition: all 0.5s ease;
-webkit-transition: all 0.5s ease;
}
```

```
#navbar li a:hover {
  /* border-bottom: 1px solid rgb(28, 121, 184); */
  color: rgb(28, 121, 184);
  transition: all 1s ease;
  -webkit-transition: all 1s ease;
}
```

```
/* Animated Bottom Line */
#navbar li a:before, #navbar li a:after {
  content: "";
  position: absolute;
  width: 0%;
  height: 1px;
  bottom: -1px;
  background: rgb(13, 26, 38);
}
```

```
#navbar li a:before {
  left: 0;
  transition: 0.5s;
}
```

```
#navbar li a:after {
```

```
background: rgb(13, 26, 38);  
right: 0;  
/* transition: width 0.8s cubic-bezier(0.22, 0.61, 0.36, 1); */  
}
```

```
#navbar li a:hover:before {  
    background: rgb(13, 26, 38);  
    width: 100%;  
    transition: width 0.5s cubic-bezier((0.22, 0.61, 0.36, 1));  
}
```

```
#navbar li a:hover:after {  
    background: transparent;  
    width: 100%;  
    /* transition: 0s; */  
}
```

```
.content{  
    margin-top: 260px;  
    text-align: left;  
    margin-left: 150px;  
}
```

```
.title{  
    color: white;  
    font-size: 50px;  
    font-weight: bold;  
    margin-left: 200px;
```

```
}
```

```
.idea{
```

```
  color: white;
```

```
  font-size:30px;
```

```
  font-weight: normal;
```

```
  width: 60%;
```

```
  text-align: center;
```

```
}
```

```
.name{
```

```
  font-weight: bold;
```

```
  margin-bottom: 5px;
```

```
}
```

```
.below-nav{
```

```
  margin-top: 80px;
```

```
  background-color: white;
```

```
  height: 550px;
```

```
  margin: 50px 90px 50px 90px;
```

```
  border-radius: 8px;
```

```
}
```

```
.vision{
```

```
  display: grid;
```

```
  grid-template-columns: 1fr 1fr;
```

```
  grid-gap: 5px;
```

```
  margin: 120px 40px 20px 100px;
```



```
}
```

```
#label-container{
```

```
    margin-top: 200px;
```

```
    font-size: larger;
```

```
}
```

```
.developers{
```

```
    margin-top: 100px;
```

```
    background-color: white;
```

```
    height: 550px;
```

```
    margin: 100px 90px 50px 90px;
```

```
    border-radius: 8px;
```

```
    text-align: center;
```

```
}
```

```
.photos{
```

```
    display: grid;
```

```
    grid-template-columns: 1fr 1fr;
```

```
    grid-gap: 0px;
```

```
    margin-top: 100px;
```

```
    text-align: center;
```

```
}
```

```
.pic{
```

```
    border-radius: 50px;
```

```
}
```

```
.role{  
  font-weight: 600;  
}  
.names{  
  padding-bottom: 5px;  
}
```