

Sprint-1 Source code

Date	17 Nov 2022
Team ID	PNT2022TMID34450
Project Name	Virtual Eye - Life Guard For Swimming Pools To Detect Active Drowning

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <!--Bootstrap -->
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aowXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
  <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-
KJ3o2DKtIkVYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"
integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl"
crossorigin="anonymous"></script>

  <script src="https://kit.fontawesome.com/8b9cdc2059.js"
crossorigin="anonymous"></script>
  <link
href="https://fonts.googleapis.com/css2?family=Akronim&family=Roboto&display=
swap" rel="stylesheet">
```

```

<link rel="stylesheet" href="../static/style.css">
<!-- <script defer src="../static/js/main.js"></script> -->
<title>Virtual Eye</title>
</head>
<body>
  <header id="head" class="header">
    <section id="navbar">
      <h1 class="nav-heading"></i>Virtual Eye</h1>
      <div class="nav--items">
        <ul>
          <li><a href="{ { url_for('index') } }">Home</a></li>
          <li><a href="{ { url_for('login') } }">Login</a></li>
          <li><a href="{ { url_for('register') } }">Register</a></li>
          <li><a href="{ { url_for('login') } }">Demo</a></li>
        </ul>
      </div>
    </section>
    <section id="slider">
      <div id="carouselExampleIndicators" class="carousel" dataride="carousel">
        <ol class="carousel-indicators ">
          <li data-target="#carouselExampleIndicators" data-slide-to="0"
class="active "></li>
          <li data-target="#carouselExampleIndicators" data-slideto="1"></li>
          <li data-target="#carouselExampleIndicators" data-slideto="2"></li>
        </ol>
        <div class="carousel-inner">

          <div class="carousel-item active">
            
          </div>
          <div class="carousel-item">
            
          </div>
          <div class="carousel-item">
            
          </div>
        </div>
        <a class="carousel-control-prev" href="#carouselExampleIndicators"
role="button" data-slide="prev">
          <span class="carousel-control-prev-icon" ariahidden="true"></span>
          <span class="sr-only">Previous</span>
        </a>
        <a class="carousel-control-next" href="#carouselExampleIndicators"
role="button" data-slide="next">
          <span class="carousel-control-next-icon" ariahidden="true"></span>

```

```

<span class="sr-only">Next</span>
</a>
</div>

</section>
</header>
<section id="about">
  <div class="top">
    <h3 class="title text-muted">
      ABOUT PROJECT
    </h3>
    <div class="line"></div>
  </div>
  <div class="body">
    <div class="left">
      <h2>Problem:</h2>
      <p>
        Swimming is one of the best exercises that helps people to reduce
        stress in this urban lifestyle. Swimming pools are found larger in number in
        the hotels, weekend tourist spots and barely people have in their house
        backyard. Beginners, especially often feel it difficult to breathe under
        water and causes breathing trouble which in turn cause a drowning accident.
        Worldwide, drowning produces a higher rate of mortality without causing
        injury to children. Children under six of their age are found to be suffering
        the highest drowning mortality rates worldwide..Such kinds of deaths account
        for the third cause of unplanned death globally, with about 1.2 million
        cases yearly.
      </p>
    </div>
    <div class="left">
      <h2>Solution:</h2>
      <p>
        To overcome the conflict, a meticulous system is to be implemented
        along the swimming pools to save the human life. By studying body movement
        patterns and connecting cameras to an artificial intelligence (AI)system we
        can devise an underwater pool safety system that reduces the risk of
        drowning.
      </p>
    </div>
  </div>
  <div class="bottom">
    <p><b>
      Note : The system is not designed to replace a lifeguard or other
      human monitor, but to act as an additional tool. "It helps the lifeguard to
      detect the underwater situation where they can't easily observe.
    </b></p>

```

```

</div>
</section>
<section id="footer">
  <p>Copyright © 2021. All Rights Reserved</p>
</section>
</body>
</html>

```

base.html

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>High Quality Facial Recognition</title>
  <link
href="https://cdn.bootcss.com/bootstrap/4.0.0/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.bootcss.com/popper.js/1.12.9/umd/popper.min.js"></script>
  <script
src="https://cdn.bootcss.com/jquery/3.3.1/jquery.min.js"></script>
  <script
src="https://cdn.bootcss.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
  <link href="{ { url_for('static', filename='css/main.css') } }"
rel="stylesheet">
  <style>
    .bg-dark {
      background-color: #42678c!important;
    }
    #result {
      color: #0a1c4ed1;
    }
  </style>
</head>
<body style="background-color:black";>
  <header id="head" class="header">
    <section id="navbar">
      <h1 class="nav-heading"><i>Virtual Eye</i></h1>
      <div class="nav--items">
        <ul>
          <li><a href="{ { url_for('index') } }">Home</a></li>
          <li><a href="{ { url_for('logout') } }">Logout</a></li>

```

```

<!-- <li><a href="#about">About</a></li>
<li><a href="#services">Services</a></li> -->

</ul>
</div>
</section>
</header>
<div class="container">
<div id="content" style="margin-top:2em">
<div class="container">
<div class="row">
<div class="col-sm-6 bd" >
<h2><em style="color:white;">High Quality Facial
Recognition</em></h2>
<br>
<p><h5><i style="color:white;">Emotion Detection Through Facial
Feature Recognition</i></h5></p>

</div>
<div class="col-sm-6">
<div>
<h4 style="color:white;">Upload Image Here</h4>
<form action = "http://localhost:5000/" id="upload-file"
method="post" enctype="multipart/form-data">
<label for="imageUpload" class="upload-label">
Choose Image
</label>
<input type="file" name="image" id="imageUpload" accept=".png,
.jpg, .jpeg, .pdf">
</form>
<div class="image-section" style="display:none;">
<div class="img-preview">
<div id="imagePreview">
</div>
</div>
<div>
<button type="button" class="btn btn-info btn-lg "
id="btnpredict">Analyse</button>
</div>
</div>
<div class="loader" style="display:none;"></div>
<h3>
<span id="result"> </span>
</h3>

```

```

</div>
</div>

</div>
</div>
</div>
</div>
</body>
<footer>
  <script src="{ { url_for('static', filename='js/main.js') } }"
type="text/javascript"></script>
</footer>
</html>

```

register.html

```

<!DOCTYPE html>
<html >
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Virtual Eye</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Hind:300'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
  <link rel="stylesheet" href="{ { url_for('static', filename='css/style.css')
}}">
  <link href='https://fonts.googleapis.com/css?family=Merriweather'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Josefin+Sans'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Montserrat'
rel='stylesheet'>
  <style>
.header {
  top:0;
  margin:0px;
  left: 0px;

```

```
right: 0px;
position: fixed;
background-color: #28272c;
color: white;
box-shadow: 0px 8px 4px grey;
overflow: hidden;
padding-left: 20px;
font-family: 'Josefin Sans';
font-size: 2vw;
width: 100%;
height: 8%;
text-align: center;
}

.topnav {
overflow: hidden;
background-color: #333;
}

.topnav-right a {
float: left;
color: #f2f2f2;
text-align: center;
padding: 14px 16px;
text-decoration: none;
font-size: 18px;
}

.topnav-right a:hover {
background-color: #ddd;
color: black;
}

.topnav-right a.active {
background-color: #565961;
color: white;
}

.topnav-right {
float: right;
padding-right: 100px;
}

.login {
margin-top: -70px;
}

body {
background-color: #ffffff;
background-repeat: no-repeat;
background-size: cover;
background-position: 0px 0px;
}

.login {
```

```

margin-top:100px;
}
form {border: 3px solid #f1f1f1; margin-left:400px;margin-right:400px;}
input[type=text], input[type=email],input[type=number],input[type=password] {
width: 100%;
padding: 12px 20px;
display: inline-block;
margin-bottom:18px;
border: 1px solid #ccc;
box-sizing: border-box;
}
button {
background-color: #28272c;
color: white;
padding: 14px 20px;
margin-bottom:8px;
border: none;
cursor: pointer;
width: 100%;
}
button:hover {
opacity: 0.8;
}
.cancelbtn {
width: auto;
padding: 10px 18px;
background-color: #f44336;
}
.imgcontainer {
text-align: center;
margin: 24px 0 12px 0;
}
img.avatar {
width: 30%;
border-radius: 50%;
}
.container {
padding: 16px;
}
span.psw {
float: right;
padding-top: 16px;
}
}
/* Change styles for span and cancel button on extra small screens */
@media screen and (max-width: 300px) {
span.psw {
display: block;

```



```

float: none;
}
.cancelbtn {
width: 100%;
}
}

</style>
</head>
<body style="font-family:Montserrat;">
<div class="header">
<div style="width:50%;float:left;font-size:2vw;text-align:left;color:white;
padding-top:1%">Virtual Eye</div>
<div class="topnav-right" >

<a href="{{ url_for('home') }}">Home</a>
<a href="{{ url_for('login') }}">Login</a>
<a class="active" href="{{ url_for('register') }}">Register</a>

</div>
</div>
<div id="login" class="login">

<form action="{{url_for('afterreg')}}" method="post">
<div class="imgcontainer">

</div>
<div class="container">
<input type="text" placeholder="Enter Name" name="name"
required><br>
<input type="email" placeholder="Enter Email ID" name="_id"
required><br>
<input type="password" placeholder="Enter Password" name="psw"
required>

<button type="submit">Register</button><br>
{{pred}}
</div>
<div class="container" style="background-color:#f1f1f1">
<div class="psw">Already have an account?&nbsp;  <a href="{{
url_for('login') }}">Login</a></div >
</div>
</form>

```

```
</div>
</body>
</html>
```

login.html

```
<!DOCTYPE html>
<html >
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Virtual Eye</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Hind:300'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
  <!--link rel="stylesheet" href="{ url_for('static', filename='css/style.css')
}]">
  <link href='https://fonts.googleapis.com/css?family=Merriweather'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Josefin Sans'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Montserrat'
rel='stylesheet'>
<style>
.header {
  top:0;
  margin:0px;
  left: 0px;
  right: 0px;
  position: fixed;
  background-color: #28272c;
  color: white;
  box-shadow: 0px 8px 4px grey;
  overflow: hidden;
  padding-left:20px;
  font-family: 'Josefin Sans';
  font-size: 2vw;
  width: 100%;
  height:8%;
  text-align: center;
}
```

```
.topnav {
  overflow: hidden;
  background-color: #333;
}
.topnav-right a {
  float: left;
  color: #f2f2f2;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
  font-size: 18px;
}
.topnav-right a:hover {
  background-color: #ddd;
  color: black;
}
.topnav-right a.active {
  background-color: #565961;
  color: white;
}
.topnav-right {
  float: right;
  padding-right: 100px;
}

.login{
margin-top: -70px;
}
body {
  background-color: #ffffff;
  background-repeat: no-repeat;
  background-size: cover;
  background-position: 0px 0px;
}
.login{
  margin-top: 100px;
}
form {border: 3px solid #f1f1f1; margin-left: 400px; margin-right: 400px;}
input[type=text], input[type=email], input[type=number], input[type=password] {
  width: 100%;
  padding: 12px 20px;
  display: inline-block;
  margin-bottom: 18px;
  border: 1px solid #ccc;
  box-sizing: border-box;
}
button {
  background-color: #28272c;
```

```

    color: white;
    padding: 14px 20px;
    margin-bottom: 8px;
    border: none;
    cursor: pointer;
    width: 100%;
    font-weight: bold;
}
button:hover {
    opacity: 0.8;
}
.cancelbtn {
    width: auto;
    padding: 10px 18px;
    background-color: #f44336;
}
.imgcontainer {
    text-align: center;
    margin: 24px 0 12px 0;
}
img.avatar {
    width: 30%;
    border-radius: 50%;
}
.container {
    padding: 16px;
}
span.psw {
    float: right;
    padding-top: 16px;
}

/* Change styles for span and cancel button on extra small screens */
@media screen and (max-width: 300px) {
    span.psw {
        display: block;
        float: none;
    }
    .cancelbtn {
        width: 100%;
    }
}

</style>
</head>
<body style="font-family:Montserrat;">
<div class="header">
<div style="width:50%;float:left;font-size:2vw;text-align:left;color:white;

```

```
padding-top:1%">Virtual Eye</div>
<div class="topnav-right" style="padding-top:0.5%;">

<a href="{{ url_for('index')}}">Home</a>
<a class="active" href="{{ url_for('login')}}">Login</a>
<a href="{{ url_for('register')}}">Register</a>

</div>
</div>
<div id="login" class="login">

<form action="{{url_for('afterlogin')}}" method="post">
<div class="imgcontainer">

</div>
<div class="container">
<input type="email" placeholder="Enter registered email ID"
name="_id" required><br>

<input type="password" placeholder="Enter Password" name="psw"
required>

<button type="submit">Login</button><br>
{{pred}}
</div>
</form>

</div>
</body>
</html>
```

prediction.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```

<meta name="viewport" content="width=device-width, initial-scale=1.0">
<!--Bootstrap -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
<script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-
KJ3o2DKtIkVYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"
integrity="sha384-
JZR6Spejh4U02d8j0t6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmY1"
crossorigin="anonymous"></script>

<script src="https://kit.fontawesome.com/8b9cdc2059.js"
crossorigin="anonymous"></script>
<link
href="https://fonts.googleapis.com/css2?family=Akronim&family=Roboto&display=swap" rel="stylesheet">
<link rel="stylesheet" href="../static/style.css">

<script defer src="../static/js/JScript.js"></script>
<title>Prediction</title>
</head>
<body>
<header id="head" class="header">
<section id="navbar">
<h1 class="nav-heading"></i>Virtual Eye</h1>
<div class="nav--items">
<ul>
<li><a href="{ url_for('index') }">Home</a></li>
<li><a href="{ url_for('logout') }">Logout</a></li>
<!-- <li><a href="#about">About</a></li>
<li><a href="#services">Services</a></li> -->

</ul>
</div>
</section>
</header>
<!-- dataset/Training/metal/metal326.jpg -->

```

```

</br>
<section id="prediction">
<h2 class="title text-muted">Virtual Eye- Life Guard for Swimming Pools
to Detect Active Drowning</h1>
<div class="line" style="width: 900px;"></div>
</section>
</br>
<section id="about">

<div class="body">
<div class="left">
<p>
Swimming is one of the best exercises that helps people to reduce
stress in this urban lifestyle. Swimming pools are found larger in number in
the hotels, weekend tourist spots and barely people have in their house
backyard. Beginners, especially often feel it difficult to breathe under
water and causes breathing trouble which in turn cause a drowning accident.
Worldwide, drowning produces a higher rate of mortality without causing
injury to children. Children under six of their age are found to be suffering
the highest drowning mortality rates worldwide..Such kinds of deaths account
for the third cause of unplanned death globally, with about 1.2 million
cases yearly.
</p>
</div>
<div class="left">

<div class="prediction-input">

</br>
<form id="form" action="/result" method="post"
enctype="multipart/form-data">

<input type="submit" class="submitbtn" value="Click Me!
For a Demo">
</form>
</div>
<h5 style="text-color:Red">
<b style="text-color:Red">{{prediction}}<b>
</h5>
</div>
</div>
</section>
</br></br>

<section id="footer">
<p>Copyright © 2021. All Rights Reserved</p>

```

```
</section>
</body>
</html>
```

logout.html

```
<!DOCTYPE html>
<html >
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Virtual Eye</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Hind:300'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Merriweather'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Josefin Sans'
rel='stylesheet'>
  <link href='https://fonts.googleapis.com/css?family=Montserrat'
rel='stylesheet'>
<style>
.header {
  top:0;
  margin:0px;
  left: 0px;
  right: 0px;
  position: fixed;
  background-color: #28272c;
  color: white;
  box-shadow: 0px 8px 4px grey;
  overflow: hidden;
  padding-left:20px;
  font-family: 'Josefin Sans';
  font-size: 2vw;
  width: 100%;
  height:8%;
  text-align: center;
}
.topnav {
```



```
overflow: hidden;
background-color: #333;
}
.topnav-right a {
float: left;
color: #f2f2f2;
text-align: center;
padding: 14px 16px;
text-decoration: none;
font-size: 18px;
}
.topnav-right a:hover {
background-color: #ddd;
color: black;
}
.topnav-right a.active {
background-color: #565961;
color: white;
}
.topnav-right {
float: right;
padding-right: 100px;
}

.login{
margin-top: -70px;
}
body {
background-color: #ffffff;
background-repeat: no-repeat;
background-size: cover;
background-position: 0px 0px;
}
.main{
margin-top: 100px;
text-align: center;
}
form { margin-left: 400px; margin-right: 400px; }
input[type=text], input[type=email], input[type=number], input[type=password] {
width: 100%;
padding: 12px 20px;
display: inline-block;
margin-bottom: 18px;
border: 1px solid #ccc;
box-sizing: border-box;
}
button {
background-color: #28272c;
```

```

    color: white;
    padding: 14px 20px;
    margin-bottom: 8px;
    border: none;
    cursor: pointer;
    width: 20%;
}
button:hover {
    opacity: 0.8;
}
.cancelbtn {
    width: auto;
    padding: 10px 18px;
    background-color: #f44336;
}
.imgcontainer {
    text-align: center;
    margin: 24px 0 12px 0;
}
img.avatar {
    width: 30%;
    border-radius: 50%;
}
.container {
    padding: 16px;
}
span.psw {
    float: right;
    padding-top: 16px;
}

/* Change styles for span and cancel button on extra small screens */
@media screen and (max-width: 300px) {
    span.psw {
        display: block;
        float: none;
    }
    .cancelbtn {
        width: 100%;
    }
}

</style>
</head>
<body style="font-family:Montserrat;">
<div class="header">
<div style="width:50%;float:left;font-size:2vw;text-align:left;color:white;
padding-top:1%">Virtual eye</div>

```

```
<div class="topnav-right" style="padding-top:0.5%;">

<a href="{{ url_for('home')}}">Home</a>
<a href="{{ url_for('login')}}">Login</a>
<a href="{{ url_for('register')}}">Register</a>
</div>
</div>
<div class="main">
<h1>Successfully Logged Out!</h1>
<h3 style="color:#4CAF50">Login for more information</h3>
  <a href="{{ url_for('login') }}"><button type="submit">Login</button></a>
</form>
</div>
</body>
</html>
```