## Project Development Phase Sprint-2 Source code

Date	09 November 2022
Team ID	PNT2022TMID24074
Project Name	Virtual Eye - Life Guard for Swimming Pools to
	Detect Active Drowning
Maximum Marks	8 Marks

```
Base.html
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initialscale=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"</pre>
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') }}"</pre>
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</h1>
```

```
<div class="nav--items">
                    <a href="{{ url for('index')}}">Home</a>
                    <a href="{{ url_for('logout')}}">Logout</a>
            </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>
                        <h5><i style="color:white;">Emotion
                                Detection Through Facial Feature
Recognition</i></h5>
                        src="https://130e178e8f8ba617604b8aedd782b7d22cfe0d1146da69a52436.ssl.cf1.rack
cdn.com/facialrecognition-use-triggers-gdpr-fine-showcase_image-10-a12991.jpg"
                            style="height:240px" class="img-rounded"
alt="Gesture">
                    </div>
                    <div class="col-sm-6">
                            <h4 style="color:white;">Upload
                                Image Here</h4>
                            <form action="http://localhost:5000/" id="upload-</pre>
file" method="post"
                                enctype="multipart/form-data">
                                <label for="imageUpload" class="uploadlabel">
                                    Choose Image
                                </label>
                                <input type="file" name="image"</pre>
id="imageUpload" accept=".png, .jpg, .jpeg,.pdf">
                            </form>
                            <div class="image-section" style="display:none;">
                                <div class="img-preview">
                                    <div id="imagePreview">
                                    </div>
                                </div>
                                    <button type="button" class="btn btninfo</pre>
btn-lg " id="btn-predict">Analyse</button>
```

```
</div>
                            </div>
                            <div class="loader" style="display:none;"></div>
                                <span id="result"> </span>
                        </div>
                    </div>
                </div>
            </div>
</body>
<footer>
    <script src="{{ url_for('static', filename='js/main.js') }}"</pre>
type="text/javascript"></script>
</footer>
</html>
Index.html
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initialscale=1.0">
    <link rel="stylesheet"</pre>
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"</pre>
        integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpG
FF93hXpG5KkN"
        crossorigin="anonymous"></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+76PVCmY1"
```

crossorigin="anonymous"></script>

```
<script src="https://kit.fontawesome.com/8b9cdc2059.js"</pre>
crossorigin="anonymous"></script>
href="https://fonts.googleapis.com/css2?family=Akronim&family=Roboto&display=s
wap" rel="stylesheet">
   <link rel="stylesheet" href="../static/style.css">
   <title>Virtual Eye</title>
</head>
   <header id="head" class="header">
       <section id="navbar">
          <h1 class="nav-heading"></i>Virtual Eye</h1>
          <div class="nav--items">
             <1115
                 <a href="{{ url for('index')}}">Home</a>
                 <a href="{{ url for('login')}}">Login</a>
                 <a href="{{ url for('register')}}">Register</a>
                 <a href="{{ url_for('login')}}">Demo</a>
          </div>
       </section>
       <section id="slider">
          <div id="carouselExampleIndicators" class="carousel"</pre>
dataride="carousel">
             slideto="0" class="active ">
                 slideto="1">
                 slideto="2">
             <div class="carousel-inner">
                 <div class="carousel-item active">
                    <img class="d-block w-100" src="../static/img/1.png"</pre>
alt="First slide">
                 </div>
                 <div class="carousel-item">
                    <img class="d-block w-100"</pre>
src="../static/img/second.jpg" alt="Second slide">
                 </div>
                 <div class="carousel-item">
                    <img class="d-block w-100"</pre>
src="../static/img/third.jpg" alt="Third slide">
                 </div>
             </div>
```

```
<a class="carousel-control-prev"</pre>
href="#carouselExampleIndicators" role="button" data- slide="prev">
                    <span class="carousel-control-prev-icon"</pre>
ariahidden="true"></span>
                    <span class="sr-only">Previous</span>
                </a>
                <a class="carousel-control-next"</pre>
href="#carouselExampleIndicators" role="button" data- slide="next">
                    <span class="carousel-control-next-icon"</pre>
ariahidden="true"></span>
                    <span class="sr-only">Next</span>
            </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>
                    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 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 of deaths
account for the third cause of unplanned death globally, with about 1.2
million cases yearly.
                </div>
            <div class="left">
                <h2>Solution:</h2>
                    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
anartificial intelligence (AI)system we can devise an underwater pool safety
system that reduces the risk of drowning. Usually such can be developed by
installing more than 16 cameras underwater and ceiling and analysing the video
feeds to detect any anomalies . but AS a POC we make use of one camera that
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streams the video underwater and analyses the position of swimmers to assess the probability of drowning ,if it is higher than an alert will be generated to attract lifeguards attention.

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.

## Logout.html

```
<link href='https://fonts.googleapis.com/css?family=Merriweather'</pre>
rel='stylesheet'>
    <link href='https://fonts.googleapis.com/css?family=Josefin Sans'</pre>
rel='stylesheet'>
    <link href='https://fonts.googleapis.com/css?family=Montserrat'</pre>
rel='stylesheet'>
    <style>
        .header {
            top: 0;
            margin: 0px;
            left: 0px;
            right: 0px;
            position:
                fixed;
            background-color:
                #28272c;
            color: white;
            boxshadow: 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 {
    backgroundcolor: #565961;
    color: white;
.topnav-right {
   float:
        right;
    paddingright: 100px;
.login {
   margin-top: -70px;
body {
   background-color: #ffffff;
    backgroundrepeat: no-repeat;
    background-size: cover;
    background-position: 0px 0px;
.main {
   margintop: 100px;
   textalign: 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: borderbox;
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>
<body style="font-family:Montserrat;">
    <div class="header">
        <div style="width:50%;float:left;font-</pre>
size:2vw;textalign: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</pre>
type="submit">Login</button></a>
                </form>
    </div>
</body>
```

## Prediction.html

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd</pre>
 popper.min.js" integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPsk
vXusvfa0b4Q" crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootst</pre>
rap.min.js" integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5
+76PVCmY1" crossorigin="anonymous"></script>
    <script src="https://kit.fontawesome.com/8b9cdc2059.js"</pre>
crossorigin="anonymous"></script>
    <link href="https://fonts.googleapis.com/css2?family=Akronim&family=</pre>
Roboto&display=swap" rel="stylesheet">
    <link rel="stylesheet" href="../static/style.css">
    <script defer src="../static/js/JScript.js"></script>
    <title>Prediction</title>
    <header id="head" class="header">
        <section id="navbar">
            <h1 class="nav-heading"></i>Virtual Eye</h1>
            <div class="nav--items">
                    <a href="{{ url for('index')}}">Home</a>
                    <a href="{{ url for('logout')}}">Logout</a>
                    <!-- <li><a href="#about">About</a>
                </div>
        </section>
    </header>
    <!-- dataset/Training/metal/metal326.jpg -->
    <section id="prediction">
        <h2 class="title text-muted">Virtual Eye- Life Guard for
            Swimming Pools to Detect Active Drowning</hl>
            <div class="line" style="width: 900px;"></div>
    </section>
    </br>
    <section id="about">
        <div class="body">
            <div class="left">
                    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
```

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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 of
deaths account for the third cause of unplanned death globally, with about 1.2
million cases yearly.
                </div>
            <div class="left">
                <div class="prediction-input">
                    <img class="d-block w-100" src="../static/img/second.jpg"</pre>
alt="Second slide">
                    </br>
                    <form id="form" action="/result" method="post"</pre>
enctype="multipart/form-data">
                        <input type="submit" class="submitbtn" value="Click</pre>
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">
        Copyright © 2021. All Rights Reserved
    </section>
</body>
```