

Project Development Phase

Sprint – 2 Source Code

Date	08 November 2022
Team ID	PNT2022TMID24925
Project Name	Virtual Eye - Life Guard For Swimming Pools To Detect Active Drowning
Maximum Marks	8 Marks

Base.html:

```
<html lang="en">

<head>

<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" 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">


</head>

<body style="background-color:rgba(0,0,0,0.5);">

<header id="head" class="header">

<section id="navbar">


<h1 align ="CENTER" style="font-style:italic; color:blue"></i>Virtual Eye</h1>

<div style ="background-color:rgba(0,0,0,0.5)"; nav--items >

    <h5 style=" margin-left: 20px; "><a style="color: aqua;"href="{{
url_for('index')}}">Home</a></h5>

    <h5 style="margin-top: -32px; margin-left: 100px;"><a style="color: aqua;"href="{{
url_for('logout')}}">Logout</a></h5>
```

</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</h2>

<p><h5><i style="color: yellow;">Emotion Detection Through Facial Feature Recognition</i></h5></p>

</div>

<div class="col-sm-6">

<div style="margin-top: 400px; margin-left: -550px;">

<h4 style="color:yellow;">Upload Image Here</h4>

<form action = "http://localhost:5000/" id="upload-file" method="post"
enctype="multipart/form-data">

<label for="imageUpload" class="upload label">

</label>

<input class="btn btn info btn-lg" type="file" name="image" id="imageUpload" accept=".png,
.jpg, .jpeg,.pdf">

<div style="margin-top: -250px; margin-left: 350px;">

<button style="background-color: aquamarine;" type="button" class="btn btn info btn-lg"
id="btn-predict">Analyse</button></div>

</form>

<div class="image-section" style="display:none;">


```

<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJISAWiGgFAW/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+76PVCmYI"
crossorigin="anonymous"></script>

<script src="https://kit.fontawesome.com/8b9cdc2059.js" cross
origin="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 align="CENTER" style="font-style:italic; color:blue;"></i>Virtual Eye</h1>

<div style ="background-color:rgba(0,0,0,0.5);" nav--items" >

    <h5 style=" margin-left: 20px; "><a a style="color: aqua;"href="{{
url_for('index')}}">Home</a></h5>

    <h5 style="margin-top: -32px; margin-left: 100px;"><a style="color: aqua;"href="{{
url_for('login')}}">Login</a></h5>

```

```
<h5 style="margin-top: -32px; margin-left: 170px;"><a style="color: aqua;" href="{url_for('register')}}">Register</a></h5>
```

```
<h5 style="margin-top: -32px; margin-left: 270px;"><a a style="color: aqua;" href="{url_for('login')}}">Demo</a></h5>
```

```
</div>
```

```
</section>
```

```
<section id="slider">
```

```
<div id="carouselExampleIndicators" class="carousel" data ride="carousel">
```

```
<ol class="carousel-indicators ">
```

```
<li data-target="#carouselExampleIndicators" data-slide to="0" class="active "></li>
```

```
<li data-target="#carouselExampleIndicators" data-slide to="1"></li>
```

```
<li data-target="#carouselExampleIndicators" data-slide to="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" aria hidden="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" aria hidden="true"></span>
```

```
<span class="sr-only">Next</span>
```

```
</a>
```

```
</div>
```

```
</section>
```

```
</header>
```

```
<section id="about">
```

```
<div class="top">
```

```
<h3 class="title text-muted">
```

```
</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. Usually such systems 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 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.

```
</p>
```

```
</div>
```

```
</div>
```

```
</section>
```

```
<section id="footer">
```

```
<marquee><p>Copyright © 2022. All Rights Reserved</p></marquee>
```

```
</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 forspan 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;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 type="submit">Login</button></a>
</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-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYI"
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 defersrc="../static/js/JScript.js"></script>

<title>Prediction</title>

</head>

<body bgcolor="pink">

<header id="head" class="header">

<section id="navbar">

    <h1 align="CENTER" style="font-style:italic; font-size: 30px; color:blue"></i>Virtual
    Eye</h1>

    <div style ="background-color:rgba(0,0,0,0.5); height: 50px;"nav--items" >

        <h5 style=" margin-left: 20px;font-size: 20px; "><a a style="color: aqua;"href="{{
        url_for('index')}}">Home</a></h5>

        <h5 style="margin-top: -55px; margin-left: 100px;font-size: 20px;"><a style="color:
        aqua;"href="{{ url_for('logout')}}">Logout</a></h5>

    </div>

</section>

</header>

<!-- dataset/Training/metal/metal326.jpg -->

```

</br>

<section id="prediction">

<h2 style="font-family:'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif ; border-color: blue;">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 style="font-family:Georgia, 'Times New Roman', Times, serif ;">

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" style="border-radius: 10px; height :25px; background-color: aquamarine;" value="Click Me! For a Demo">

</form>

</div>

<h5 style="text-color:Red">

<b style="text-color:Red">

{{prediction}}

</h5>

</div>

</div>

</section>

</br></br>

<section id="footer">

<marquee><p>Copyright Â© 2021. All Rights Reserved</p></marquee>

</section>

</body>

</html