Application Building

Run the application Code

Date	19 November 2022
Team ID	PNT2022TMID33136
Project Name	VirtualEye - Life Guard For Swimming Pools To Detect Active Drowning
Maximum Marks	8 Marks

app.py :

```python
# import necessary packages
import cvlib as cv
from cvlib.object_detection import draw_bbox
# import necessary packages
from flask import Flask, render_template, request
import requests
import os
from sys import exit
import cvlib as cv
from cvlib.object_detection import draw_bbox
import cv2
import time
import numpy as np
import math
import argparse
import playsound

import mysql.connector

app = Flask(__name__)

conn=mysql.connector.connect(host="localhost", user="root", password="", database="login")
cursor=conn.cursor()

@app.route('/')
def index():
    return render_template('index.html')

@app.route('/login')
def login():  # put application's code here
    return render_template('login.html')

@app.route('/register')
def register():
    return render_template('register.html')

@app.route('/home')
def home():
```

```python
    return render_template('index1.html')


@app.route('/login_validation', methods=['POST'])
def login_validation():
    email=request.form.get('email')
    password=request.form.get('password')

    cursor.execute("""SELECT * FROM `users` WHERE `email` LIKE'{}' AND `password` LIKE
'{}'""".format(email,password))
    users = cursor.fetchall()

    if len(users)>0:
        return render_template('index1.html')
    else:
        return render_template('login.html', prediction_text = "1" )

@app.route('/add_user', methods=['POST'])
def add_user():
    name= request.form.get('name')
    email = request.form.get('email')
    password = request.form.get('password')

    cursor.execute("""INSERT INTO `users`(`id`, `name`, `email`, `password`) VALUES
(NULL,'{}','{}','{}')""".format(name,email,password))
    conn.commit()
    return render_template('login.html', prediction_text = "0")


@app.route('/step2')
def step2():

    print("Begin")

    webcam = cv2.VideoCapture("garden.mp4")
    padding = 20

    if not webcam.isOpened():
        print("Could not open webcam")
        exit()


    t0 = time.time() #gives time in seconds after 1970
    #print('t0=',t0)
#variable dcount stands for how many seconds the person has been standing still for
    centre0 = np.zeros(2)
    isDrowning = False

#this loop happens approximately every 1 second, so if a person doesn't move,
#or moves very little for 10seconds, we can say they are drowning

# loop through frames
    while webcam.isOpened():

    # read frame from webcam
        status, frame = webcam.read()
```

```python
    if not status:
        break
#small_frame = cv2.resize(frame,(0,0),fx = 0.5,fy = 0.5)
# apply object detection
    bbox, label, conf = cv.detect_common_objects(frame, confidence=0.25, model='yolov3-tiny')

    print(bbox, label, conf)


    if(len(bbox)>0):
        bbox0 = bbox[0]
    #centre = np.zeros(s)
        centre = [0,0]


    #for i in range(0, len(bbox)):
        #centre[i] =[(bbox[i][0]+bbox[i][2])/2,(bbox[i][1]+bbox[i][3])/2 ]

        centre =[(bbox0[0]+bbox0[2])/2,(bbox0[1]+bbox0[3])/2 ]

    #make vertical and horizontal movement variables
        hmov = abs(centre[0]-centre0[0])
        vmov = abs(centre[1]-centre0[1])

    #there is still need to tweek the threshold
    #this threshold is for checking how much the centre has moved

        x=time.time()

        threshold = 10
        #print("hmov=",hmov)
        if(hmov>threshold or vmov>threshold):
            print(x-t0, 'sif')
            t0 = time.time()
            isDrowning = False

        else:
            print(x-t0, 'selse')
            if((time.time() - t0) > 10):
                isDrowning = True

        print('bbox: ', bbox, 'centre:', centre, 'centre0:', centre0)
        print('Is he/she drowning: ', isDrowning)
                #print('End of the program')


        centre0 = centre
        # draw bounding box over detected objects
        # draw bounding box over detected objects
    out = draw_bbox(frame, bbox, label, conf, write_conf=True)
        # display output
    cv2.imshow("Real-time object detection", out)
    if(isDrowning == True):
        webcam.release()
        cv2.destroyAllWindows()
        return render_template('index1.html', prediction_text = "1")
# press "Q" to stop
```

```
        if cv2.waitKey(1) & 0xFF == ord('q'):
            break

# release resources
    webcam.release()
    cv2.destroyAllWindows()
if __name__ == '__main__':
        app.run(debug=True)
```

Index.html(Before prediction):

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

  <head>

    <meta charset="utf-8">
    <meta name="author" content="templatemo">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@100;300;400;500;700;900&display=
swap" rel="stylesheet">

    <title>Drowning Detection</title>

    <!-- Bootstrap core CSS -->

    <link type="text/css" rel="stylesheet" href="{{ url_for('static',
filename='bootstrap/css/bootstrap.min.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/fontawesome.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/templatemo-liberty-
market.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/owl.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/animate.css') }}" />
    <link type="text/css" rel="stylesheet" href="https://unpkg.com/swiper@7/swiper-bundle.min.css"
/>

  </head>

<body>

  <!-- ***** Preloader Start ***** -->
  <div id="js-preloader" class="js-preloader">
   <div class="preloader-inner">
    <span class="dot"></span>
    <div class="dots">
     <span></span>
     <span></span>
     <span></span>
    </div>
   </div>
  </div>
  <!-- ***** Preloader End ***** -->
```

```html
<!-- ***** Header Area Start ***** -->
<header class="header-area header-sticky">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <nav class="main-nav">
          <!-- ***** Logo Start ***** -->
          <a href="index.html" class="logo">
           <img src="{{ url_for('static', filename='images/Untitled.png') }}" alt="">
          </a>
          <!-- ***** Logo End ***** -->
          <!-- ***** Menu Start ***** -->
          <ul class="nav">
            <li><a href="/" class="active">Home</a></li>
            <li><a href="/login">Sign In</a></li>
            <li><a href="/register">Sign Up</a></li>
            <li><a href="/login">Drown Detect</a></li>
          </ul>
          <a class='menu-trigger'>
            <span>Menu</span>
          </a>
          <!-- ***** Menu End ***** -->
        </nav>
      </div>
    </div>
  </div>
</header>
<!-- ***** Header Area End ***** -->

<!-- ***** Main Banner Area Start ***** -->
<div class="main-banner">
  <div class="container">
    <div class="row">
      <div class="col-lg-6 align-self-center">
        <div class="header-text">
         <h6>Let's Start.</h6>
         <h2>Drowning Detection</h2>
         <p>It is an active drowning detection system using artificial intelligence.</p>
         <div class="buttons">
         <div class="main-button">
            <a href="/login">Detect</a>
         </div>
         </div>
        </div>
      </div>
      <div class="col-lg-5 offset-lg-1">
        <div class="owl-banner owl-carousel">
         <div class="item">
           <img src="{{ url_for('static', filename='images/banner-01.png') }}" alt="">
         </div>
         <div class="item">
           <img src="{{ url_for('static', filename='images/banner-02.png') }}" alt="">
         </div>
        </div>
      </div>
    </div>
  </div>
```

```
      </div>
     </div>
     <!-- ***** Main Banner Area End ***** -->




     <!-- Scripts -->
     <!-- Bootstrap core JavaScript -->
     <script src="{{ url_for('static', filename='jquery/jquery.min.js') }}"></script>
     <script src="{{ url_for('static', filename='bootstrap/js/bootstrap.min.js') }}" ></script>

     <script src="{{ url_for('static', filename='js/isotope.min.js') }}"></script>
     <script src="{{ url_for('static', filename='js/owl-carousel.js') }}"></script>

     <script src="{{ url_for('static', filename='js/tabs.js') }}"></script>
     <script src="{{ url_for('static', filename='js/popup.js') }}"></script>
     <script src="{{ url_for('static', filename='js/custom.js') }}"></script>

</body>
</html>
```

Index1.html(After prediction) :

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

  <head>

    <meta charset="utf-8">
    <meta name="author" content="templatemo">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@100;300;400;500;700;900&display=
swap" rel="stylesheet">

    <title>Drowning Detection</title>

    <!-- Bootstrap core CSS -->

    <link type="text/css" rel="stylesheet" href="{{ url_for('static',
filename='bootstrap/css/bootstrap.min.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/fontawesome.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/templatemo-liberty-
market.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/owl.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/animate.css') }}" />
    <link type="text/css" rel="stylesheet" href="https://unpkg.com/swiper@7/swiper-bundle.min.css"
/>

  </head>

<body>
```

```html
<!-- ***** Preloader Start ***** -->
<div id="js-preloader" class="js-preloader">
  <div class="preloader-inner">
    <span class="dot"></span>
    <div class="dots">
     <span></span>
     <span></span>
     <span></span>
    </div>
   </div>
  </div>
</div>
<!-- ***** Preloader End ***** -->

<!-- ***** Header Area Start ***** -->
<header class="header-area header-sticky">
  <div class="container">
     <div class="row">
        <div class="col-12">
           <nav class="main-nav">
              <!-- ***** Logo Start ***** -->
              <a href="index.html" class="logo">
               <img src="{{ url_for('static', filename='images/Untitled.png') }}" alt="">
              </a>
              <!-- ***** Logo End ***** -->
              <!-- ***** Menu Start ***** -->
              <ul class="nav">
                 <li><a href="/" >Home</a></li>
                 <li><a href="/login">Sign In</a></li>
                 <li><a href="/register">Sign Up</a></li>
                 <li><a href="/home" class="active">Drown Detect</a></li>
              </ul>
              <a class='menu-trigger'>
                 <span>Menu</span>
              </a>
              <!-- ***** Menu End ***** -->
           </nav>
        </div>
     </div>
  </div>
</header>
<!-- ***** Header Area End ***** -->

<!-- ***** Main Banner Area Start ***** -->
<div class="main-banner">
 <div class="container">
   <div class="row">
    <div class="col-lg-6 align-self-center">
     <div class="header-text">
       <h6>Let's Start.</h6>
       <h2>Drowning Detection</h2>
       <p>It is an active drowning detection system using artificial intelligence.</p>
       <div class="buttons">
       <div class="main-button">
          <a href="/step2">Detect</a>
       </div>
       </div>
     </div>
```

```html
            </div>
          </div>
          <div class="col-lg-5 offset-lg-1">
            <div class="owl-banner owl-carousel">
              <div class="item">
                <img src="{{ url_for('static', filename='images/banner-01.png') }}" alt="">
              </div>
              <div class="item">
                <img src="{{ url_for('static', filename='images/banner-02.png') }}" alt="">
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
    <!-- ***** Main Banner Area End ***** -->



    <div class="currently-market">
      <div class="container">
        <div class="row">
          <div class="col-lg-6">
            <div class="section-heading">
              <div class="line-dec"></div>
              <h2><em>Current</em> Drowning Details.</h2>
            </div>
          </div>
          <div class="col-lg-12">
            <div class="row grid">
              <div class="col-lg-6 currently-market-item all msc">
                <div class="item">
                  {% if prediction_text == "0" %}
                  <h2>" The Person is Swimming "</h2>
                  {% elif prediction_text == "1" %}
                  <div class="left-image">
                    <img src="{{ url_for('static', filename='images/avatar.png') }}" alt="" style="border-radius:
20px; min-width: 195px;">
                  </div>
                  <div class="right-content">
                    <h4>1 Person Drowing</h4>
                  </div>
                </div>
              </div>
            </div>
          </div>
          {% endif %}
        </div>
      </div>
    </div>

    <!-- Scripts -->
    <!-- Bootstrap core JavaScript -->
    <script src="{{ url_for('static', filename='jquery/jquery.min.js') }}"></script>
    <script src="{{ url_for('static', filename='bootstrap/js/bootstrap.min.js') }}" ></script>

    <script src="{{ url_for('static', filename='js/isotope.min.js') }}"></script>
```

```
  <script src="{{ url_for('static', filename='js/owl-carousel.js') }}"></script>

  <script src="{{ url_for('static', filename='js/tabs.js') }}"></script>
  <script src="{{ url_for('static', filename='js/popup.js') }}"></script>
  <script src="{{ url_for('static', filename='js/custom.js') }}"></script>

</body>
</html>
```

Login.html

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

  <head>

    <meta charset="utf-8">
    <meta name="author" content="templatemo">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@100;300;400;500;700;900&display=
swap" rel="stylesheet">

    <title>Drowning Detection</title>

    <!-- Bootstrap core CSS -->

    <link type="text/css" rel="stylesheet" href="{{ url_for('static',
filename='bootstrap/css/bootstrap.min.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/bootstrap.min.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/style1.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/fontawesome.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/templatemo-liberty-
market.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/owl.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/animate.css') }}" />
    <link type="text/css" rel="stylesheet" href="https://unpkg.com/swiper@7/swiper-bundle.min.css"
/>

  </head>

<body>

  <!-- ***** Preloader Start ***** -->
  <div id="js-preloader" class="js-preloader">
    <div class="preloader-inner">
      <span class="dot"></span>
      <div class="dots">
        <span></span>
        <span></span>
        <span></span>
      </div>
```

```html
      </div>
    </div>
    <!-- ***** Preloader End ***** -->

    <!-- ***** Header Area Start ***** -->
    <header class="header-area header-sticky">
      <div class="container">
        <div class="row">
          <div class="col-12">
            <nav class="main-nav">
              <!-- ***** Logo Start ***** -->
              <a href="index.html" class="logo">
               <img src="{{ url_for('static', filename='images/Untitled.png') }}" alt="">
              </a>
              <!-- ***** Logo End ***** -->
              <!-- ***** Menu Start ***** -->
              <ul class="nav">
                <li><a href="/" >Home</a></li>
                <li><a href="/login" class="active">Sign In</a></li>
                <li><a href="/register">Sign Up</a></li>
                <li><a href="/login">Drown Detect</a></li>
              </ul>
              <a class='menu-trigger'>
                <span>Menu</span>
              </a>
              <!-- ***** Menu End ***** -->
            </nav>
          </div>
        </div>
      </div>
    </header>
    <!-- ***** Header Area End ***** -->

    <!-- ***** Main Banner Area Start ***** -->
    <div class="main-banner">
      <div class="container">
        <div class="row">
          <div class="col-lg-6 align-self-center">
            <div class="header-text">
              <h6>Let's </h6>
              <h2>Sign In</h2>
              <p>  Welcome You Back!</p>
            </div>
          </div>
          <div class="col-lg-6">
            <div class="owl-banner owl-carousel">
              <div class="col-md-11 col-md-offset-1">
                    <div class="booking-form">
                    <form class="form" method="post" action="/login_validation">
                     <div class="row">
                        <div class="col-md-12">
                           <div class="form-group">
                              <span class="form-label">Email</span>
                                <input type="email" class="form-control" name="email"
placeholder="Enter Your Email" required="true">
                              <span class="select-arrow"></span>
                           </div>
```

```
                </div>
              </div>

              <div class="row">
                <div class="col-md-12">
                  <div class="form-group">
                    <span class="form-label">Password</span>
                      <input type="password" class="form-control" name="password"
placeholder="Enter Your Password" required="true">
                      <span class="select-arrow"></span>
                  </div>
                </div>
              </div>
                <div class="form-btn">
                  <button class="submit-btn">Sign In</button>
                </div>
              <p class="mt-2" style="color:#000"> Not a member? <a href="/register">Create
Account</a> </p>
            </form>

          </div>
          <!Booking form>
      </div>
    </div>
   </div>
 </div>
 <!-- ***** Main Banner Area End ***** -->



 <!-- Scripts -->
 <!-- Bootstrap core JavaScript -->
 <script src="{{ url_for('static', filename='jquery/jquery.min.js') }}"></script>
 <script src="{{ url_for('static', filename='bootstrap/js/bootstrap.min.js') }}" ></script>

 <script src="{{ url_for('static', filename='js/isotope.min.js') }}"></script>
 <script src="{{ url_for('static', filename='js/owl-carousel.js') }}"></script>

 <script src="{{ url_for('static', filename='js/tabs.js') }}"></script>
 <script src="{{ url_for('static', filename='js/popup.js') }}"></script>
 <script src="{{ url_for('static', filename='js/custom.js') }}"></script>

</body>
</html>
```

Register.html

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

  <head>

    <meta charset="utf-8">
    <meta name="author" content="templatemo">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
```

```html
    <link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@100;300;400;500;700;900&display=
swap" rel="stylesheet">

    <title>Drowning Detection</title>

    <!-- Bootstrap core CSS -->

    <link type="text/css" rel="stylesheet" href="{{ url_for('static',
filename='bootstrap/css/bootstrap.min.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/bootstrap.min.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/style1.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/fontawesome.css') }}"
/>
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/templatemo-liberty-
market.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/owl.css') }}" />
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='css/animate.css') }}" />
    <link type="text/css" rel="stylesheet" href="https://unpkg.com/swiper@7/swiper-bundle.min.css"
/>

  </head>

<body>

  <!-- ***** Preloader Start ***** -->
  <div id="js-preloader" class="js-preloader">
   <div class="preloader-inner">
    <span class="dot"></span>
    <div class="dots">
     <span></span>
     <span></span>
     <span></span>
    </div>
   </div>
  </div>
  <!-- ***** Preloader End ***** -->

  <!-- ***** Header Area Start ***** -->
  <header class="header-area header-sticky">
   <div class="container">
     <div class="row">
        <div class="col-12">
           <nav class="main-nav">
             <!-- ***** Logo Start ***** -->
             <a href="index.html" class="logo">
              <img src="{{ url_for('static', filename='images/Untitled.png') }}" alt="">
             </a>
             <!-- ***** Logo End ***** -->
             <!-- ***** Menu Start ***** -->
             <ul class="nav">
                <li><a href="/" >Home</a></li>
                <li><a href="/login">Sign In</a></li>
                <li><a href="/register" class="active">Sign Up</a></li>
                <li><a href="/login">Drown Detect</a></li>
             </ul>
```

```html
                    <a class='menu-trigger'>
                        <span>Menu</span>
                    </a>
                    <!-- ***** Menu End ***** -->
                </nav>
            </div>
        </div>
    </div>
</header>
<!-- ***** Header Area End ***** -->

<!-- ***** Main Banner Area Start ***** -->
<div class="main-banner">
    <div class="container">
        <div class="row">
            <div class="col-lg-6 align-self-center">
                <div class="header-text">
                    <h6>Let's</h6>
                    <h2>Sign Up</h2>
                    <p>Create Your Account With Us.</p>
                </div>
            </div>
            <div class="col-lg-6">
                <div class="owl-banner owl-carousel">
                    <div class="col-md-11 col-md-offset-1">
                        <div class="booking-form">
                         <form class="form" method="post" action="/add_user">
                           <div class="row">
                              <div class="col-md-12">
                                  <div class="form-group">
                                     <span class="form-label">Name</span>
                                        <input type="text" class="form-control" name="name"
placeholder="Enter Your Name" required="true">
                                        <span class="select-arrow"></span>
                                    </div>
                                </div>
                            </div>
                          <div class="row">
                             <div class="col-md-12">
                                 <div class="form-group">
                                    <span class="form-label">Email</span>
                                       <input type="email" class="form-control" name="email"
placeholder="Enter Your Email" required="true">
                                       <span class="select-arrow"></span>
                                   </div>
                               </div>
                           </div>
                            <div class="row">
                              <div class="col-md-12">
                                  <div class="form-group">
                                     <span class="form-label">Password</span>
                                        <input type="password" class="form-control" name="password"
placeholder="Enter Your Password" required="true">
                                        <span class="select-arrow"></span>
                                    </div>
                                </div>
                            </div>
```

```html
                        <div class="form-btn">
                            <button class="submit-btn">Sign Up</button>
                        </div>
                        <div class="form-btn">
                            <p class="mt-2" style="color:#000" > Already a member? <a
href="/login">Sign In</a> </p>
                        </div>

                    </form>

                </div>
                <!Booking form>



        </div>
      </div>
    </div>
  </div>
</div>
<!-- ***** Main Banner Area End ***** -->



<!-- Scripts -->
<!-- Bootstrap core JavaScript -->
<script src="{{ url_for('static', filename='jquery/jquery.min.js') }}"></script>
<script src="{{ url_for('static', filename='bootstrap/js/bootstrap.min.js') }}" ></script>

<script src="{{ url_for('static', filename='js/isotope.min.js') }}"></script>
<script src="{{ url_for('static', filename='js/owl-carousel.js') }}"></script>

<script src="{{ url_for('static', filename='js/tabs.js') }}"></script>
<script src="{{ url_for('static', filename='js/popup.js') }}"></script>
<script src="{{ url_for('static', filename='js/custom.js') }}"></script>

</body>
</html>
```

Style.css

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

<head>
    <meta charset="utf-8">
    <title>TRAVELER - Free Travel Website Template</title>
    <meta content="width=device-width, initial-scale=1.0" name="viewport">
    <meta content="Free HTML Templates" name="keywords">
    <meta content="Free HTML Templates" name="description">

    <!-- Favicon -->
    <link href="img/favicon.ico" rel="icon">

    <!-- Google Web Fonts -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
```

```html
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;500;600;700&display=swap"
rel="stylesheet">

    <!-- Font Awesome -->
    <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.10.0/css/all.min.css"
rel="stylesheet">

    <!-- Libraries Stylesheet -->
    <link href="lib/owlcarousel/assets/owl.carousel.min.css" rel="stylesheet">
    <link href="lib/tempusdominus/css/tempusdominus-bootstrap-4.min.css" rel="stylesheet" />

    <!-- Customized Bootstrap Stylesheet -->
    <link href="css/style.css" rel="stylesheet">
</head>

<body>
    <!-- Topbar Start -->
    <div class="container-fluid bg-light pt-3 d-none d-lg-block">
        <div class="container">
            <div class="row">

            </div>
        </div>
    </div>
    <!-- Topbar End -->


    <!-- Navbar Start -->
    <div class="container-fluid position-relative nav-bar p-0">
        <div class="container-lg position-relative p-0 px-lg-3" style="z-index: 9;">
            <nav class="navbar navbar-expand-lg bg-light navbar-light shadow-lg py-3 py-lg-0 pl-3 pl-
lg-5">
                <a href="" class="navbar-brand">
                    <h1 class="m-0 text-primary"><span class="text-dark">TRAVEL</span>ER</h1>
                </a>
                <button type="button" class="navbar-toggler" data-toggle="collapse" data-
target="#navbarCollapse">
                    <span class="navbar-toggler-icon"></span>
                </button>
                <div class="collapse navbar-collapse justify-content-between px-3" id="navbarCollapse">
                    <div class="navbar-nav ml-auto py-0">
                        <a href="index.html" class="nav-item nav-link active">Home</a>
                        <a href="about.html" class="nav-item nav-link">About</a>
                        <a href="service.html" class="nav-item nav-link">Services</a>
                        <a href="package.html" class="nav-item nav-link">Tour Packages</a>
                        <div class="nav-item dropdown">
                            <a href="#" class="nav-link dropdown-toggle" data-
toggle="dropdown">Pages</a>
                            <div class="dropdown-menu border-0 rounded-0 m-0">
                                <a href="blog.html" class="dropdown-item">Blog Grid</a>
                                <a href="single.html" class="dropdown-item">Blog Detail</a>
                                <a href="destination.html" class="dropdown-item">Destination</a>
                                <a href="guide.html" class="dropdown-item">Travel Guides</a>
                                <a href="testimonial.html" class="dropdown-item">Testimonial</a>
                            </div>
                        </div>
                        <a href="contact.html" class="nav-item nav-link">Contact</a>
```

```html
            </div>
          </div>
        </nav>
      </div>
    </div>
    <!-- Navbar End -->


    <!-- Carousel Start -->
    <div class="container-fluid p-0">
        <div id="header-carousel" class="carousel slide" data-ride="carousel">
          <div class="carousel-inner">
            <div class="carousel-item active">
              <img class="w-100" src="img/carousel-1.jpg" alt="Image">
              <div class="carousel-caption d-flex flex-column align-items-center justify-content-
center">
                <div class="p-3" style="max-width: 900px;">
                  <h4 class="text-white text-uppercase mb-md-3">Tours & Travel</h4>
                  <h1 class="display-3 text-white mb-md-4">Let's Discover The World
Together</h1>
                  <a href="" class="btn btn-primary py-md-3 px-md-5 mt-2">Book Now</a>
                </div>
              </div>
            </div>
            <div class="carousel-item">
              <img class="w-100" src="img/carousel-2.jpg" alt="Image">
              <div class="carousel-caption d-flex flex-column align-items-center justify-content-
center">
                <div class="p-3" style="max-width: 900px;">
                  <h4 class="text-white text-uppercase mb-md-3">Tours & Travel</h4>
                  <h1 class="display-3 text-white mb-md-4">Discover Amazing Places With
Us</h1>
                  <a href="" class="btn btn-primary py-md-3 px-md-5 mt-2">Book Now</a>
                </div>
              </div>
            </div>
          </div>
          <a class="carousel-control-prev" href="#header-carousel" data-slide="prev">
            <div class="btn btn-dark" style="width: 45px; height: 45px;">
              <span class="carousel-control-prev-icon mb-n2"></span>
            </div>
          </a>
          <a class="carousel-control-next" href="#header-carousel" data-slide="next">
            <div class="btn btn-dark" style="width: 45px; height: 45px;">
              <span class="carousel-control-next-icon mb-n2"></span>
            </div>
          </a>
        </div>
    </div>

    <!-- JavaScript Libraries -->
    <script src="https://code.jquery.com/jquery-3.4.1.min.js"></script>
    <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.bundle.min.js"></script>
    <script src="lib/easing/easing.min.js"></script>
    <script src="lib/owlcarousel/owl.carousel.min.js"></script>
    <script src="lib/tempusdominus/js/moment.min.js"></script>
```

```html
    <script src="lib/tempusdominus/js/moment-timezone.min.js"></script>
    <script src="lib/tempusdominus/js/tempusdominus-bootstrap-4.min.js"></script>

    <!-- Contact Javascript File -->
    <script src="mail/jqBootstrapValidation.min.js"></script>
    <script src="mail/contact.js"></script>

    <!-- Template Javascript -->
    <script src="js/main.js"></script>
</body>

</html>
```

Style1.Css

```css
.section {
        position: relative;
        height: 100vh;
}

.section .section-center {
        position: absolute;
        top: 50%;
        left: 0;
        right: 0;
        -webkit-transform: translateY(-50%);
        transform: translateY(-50%);
}


.booking-form {
        position: relative;
        background: #fff;
        max-width: 642px;
        width: 100%;
        margin: auto;
        padding: 45px 25px 25px;
        border-radius: 4px;
        -webkit-box-shadow: 0px 0px 10px -5px rgba(0, 0, 0, 0.4);
        box-shadow: 0px 0px 10px -5px rgba(0, 0, 0, 0.4);
}

.booking-form .form-group {
        position: relative;
        margin-bottom: 20px;
}

.booking-form .form-control {
        background-color: #fff;
        height: 65px;
        padding: 0px 15px;
        padding-top: 24px;
        color: #191a1e;
        border: 2px solid #7453fcab;
        font-size: 16px;
        font-weight: 700;
```

```css
        -webkit-box-shadow: none;
        box-shadow: none;
        border-radius: 4px;
        -webkit-transition: 0.2s all;
        transition: 0.2s all;
}

.booking-form .form-control::-webkit-input-placeholder {
        color: #fff;
}

.booking-form .form-control:-ms-input-placeholder {
        color: #fff;
}

.booking-form .form-control::placeholder {
        color: #00000099;
}

.booking-form .form-control:focus {
        background: #fff;
}

.booking-form input[type="date"].form-control:invalid {
        color: #dfe5e9;
}

.booking-form select.form-control {
        -webkit-appearance: none;
        -moz-appearance: none;
        appearance: none;
}

.booking-form select.form-control+.select-arrow {
        position: absolute;
        right: 6px;
        bottom: 6px;
        width: 32px;
        line-height: 32px;
        height: 32px;
        text-align: center;
        pointer-events: none;
        color: #dfe5e9;
        font-size: 14px;
}

.booking-form select.form-control+.select-arrow:after {
        content: '\279C';
        display: block;
        -webkit-transform: rotate(90deg);
        transform: rotate(90deg);
}

.booking-form .form-label {
        position: absolute;
        top: 6px;
        left: 20px;
```

```css
        font-weight: 700;
        text-transform: uppercase;
        line-height: 24px;
        height: 24px;
        font-size: 12px;
        color: #7453fc;
}

.booking-form .form-checkbox input {
        position: absolute !important;
        margin-left: -9999px !important;
        visibility: hidden !important;
}

.booking-form .form-checkbox label {
        position: relative;
        padding-top: 4px;
        padding-left: 30px;
        font-weight: 700;
        color: #191a1e;
}

.booking-form .form-checkbox label+label {
        margin-left: 15px;
}

.booking-form .form-checkbox input+span {
        position: absolute;
        left: 2px;
        top: 4px;
        width: 20px;
        height: 20px;
        background: #fff;
        border: 2px solid #dfe5e9;
        border-radius: 50%;
}

.booking-form .form-checkbox input+span:after {
        content: '';
        position: absolute;
        top: 50%;
        left: 50%;
        width: 0px;
        height: 0px;
        border-radius: 50%;
        background-color: #4fa3e3;
        -webkit-transform: translate(-50%, -50%);
        transform: translate(-50%, -50%);
        -webkit-transition: 0.2s all;
        transition: 0.2s all;
}

.booking-form .form-checkbox input:not(:checked)+span:after {
        opacity: 0;
}

.booking-form .form-checkbox input:checked+span:after {
```

```css
        opacity: 1;
        width: 10px;
        height: 10px;
}

.booking-form .submit-btn {
        color: #fff;
        background-color: #7453fc;
        font-weight: 400;
        height: 65px;
        font-size: 18px;
        border: none;
        width: 100%;
        border-radius: 4px;
        text-transform: uppercase
}

.booking-cta {
        margin-top: 10px;
}

.booking-cta h1 {
        font-size: 52px;
        text-transform: uppercase;
        color: #fff;
        font-weight: 400;
}

.booking-cta p {
        font-size: 22px;
        color: #fff;
}
```