FINAL_CODE

TEMPLATES:

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">
 <!-- The above 3 meta tags *must* come first in the head; any other head content must  come *after* these tags -->
 <title>Water Quality Prediction</title>
 <link href="https://fonts.googleapis.com/css?family=Lato:400,700" rel="stylesheet">
 <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/style.css') }}" />
 <style>
 #booking
 {
font-family: 'Lato', sans-serif;
background: url(../static/background.jpg);
background-size: cover; background-
position: center; color: #2c3b40;
 }
 </style>
 <!--<img src="{{url_for('static', filename='background.png')}}" />-->
 <!-- HTML5 shim and Respond.js for IE8 support of HTML5 elements and media queries  -->
 <!-- WARNING: Respond.js doesn't work if you view the page via file:// -->
```

```html
<!--[if lt IE 9]>
 <script
src="https://oss.maxcdn.com/html5shiv/3.7.3/html5shiv.min.js"></script>
 <script src="https://oss.maxcdn.com/respond/1.4.2/respond.min.js"></script>
 <script src="https://unpkg.com/aos@2.3.1/dist/aos.js"></script>
 <!-- ==== GSAP CDN ==== -->
 <script src="https://cdnjs.cloudflare.com/ajax/libs/gsap/3.8.0/gsap.min.js"></script>
 <!-- ==== SCRIPT.JS ==== -->
 <script src="{{url_for('static', filename='script.js' )}}" defer></script>
</head>
<body style="background-color:#00ccff">
<div id="booking" class="section">
 <div class="section-center">
 <div class="container">
 <div class="row">
 <div class="col-md-4">
 <div class="booking-cta">
 <h1>Water Quality Prediction</h1>
 <p>Let's Find the potability of the water</p>
 </div>
 </div>
 <div class="col-md-7 col-md-offset-1">
 <div class="booking-form">
 <form action={{ url_for("predict") }} method="post">
 <div class="row">
 <div class="col-md-4">
 <div class="form-group">
 <span class="form-label">ph:</span>
 <input type="text" class="form-control" name="ph"  placeholder="Enter
value" required="true">

<span class="select-arrow"></span>
```

```html
</div>
</div>
<!Year>
<div class="col-md-4">
<div class="form-group">
<span class="form-label">Hardness: </span>    <input
type="text"    class="form-control"    name="Hardness"
placeholder="Enter value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<!Month>
<div class="col-md-4">
<div class="form-group">
<span class="form-label">Solids:</span>
<input type="text" class="form-control" name="Solids"  placeholder="Enter
value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<! Date>
</div>
<div class="row">
<div class="col-md-4">
<div class="form-group">
<span class="form-label">Chloramines:</span>
<input type="text" class="form-control" name="Chloramines"  placeholder="Enter
value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<!Year>
```

```html
<div class="col-md-4">
 <div class="form-group">
 <span class="form-label">Sulfate:</span>
 <input type="text" class="form-control" name="Sulfate"  placeholder="Enter value" required="true">
 <span class="select-arrow"></span>
 </div>
 </div>
 <!Month>
 <div class="col-md-4">
 <div class="form-group">
 <span class="form-label">Conductivity:</span>
 <input type="text" class="form-control" name="Conductivity"  placeholder="Enter value" required="true">
 <span class="select-arrow"></span>
 </div>
 </div>
 <! Date>
 </div>
 <div class="row">
 <div class="col-md-4">
 <div class="form-group">
 <span    class="form-label">Organic_carbon:</span>        <input type="text"    class="form-control"        name="Organic_carbon" placeholder="Enter value" required="true">
 <span class="select-arrow"></span>
 </div>
 </div>
 <!Year>
 <div class="col-md-4">
 <div class="form-group">
```

```html
    <span     class="form-label">Trihalomethanes:</span>         <input
type="text"     class="form-control"         name="Trihalomethanes"
placeholder="Enter value" required="true">
  <span class="select-arrow"></span>
 </div>
 </div>
 <!Month>
 <div class="col-md-4">
 <div class="form-group">
 <span class="form-label">Turbidity:</span>
 <input type="text" class="form-control" name="Turbidity"  placeholder="Enter
value" required="true">
 <span class="select-arrow"></span>
 </div>
 </div>
 <! Date>
 </div>
 <div class="row">
 <div class="col-md-4">
 <div class="form-group">
 <span class="form-label">nph:</span>
 <input type="text" class="form-control" name="nph"  placeholder="Enter
value" required="true">
 <span class="select-arrow"></span>
 </div>
 </div>
 <!Year>
 <div class="col-md-4">
 <div class="form-group">
 <span class="form-label">nHardness:</span>
 <input type="text" class="form-control" name="nHardness"  placeholder="Enter
value" required="true">
```

```html
<span class="select-arrow"></span>
</div>
</div>
<!Month>
<div class="col-md-4">
<div class="form-group">
<span class="form-label">wph:</span>
<input type="text" class="form-control" name="wph" placeholder="Enter value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<! Date>
</div>
<div class="row">
<div class="col-md-4">
<div class="form-group">
<span class="form-label">wHardness:</span>
<input type="text" class="form-control" name="wHardness" placeholder="Enter value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<!Year>
<div class="col-md-4">
<div class="form-group">
<span class="form-label">wSolids:</span>
<input type="text" class="form-control" name="wSolids" placeholder="Enter value" required="true">
<span class="select-arrow"></span>
</div>
</div>
```

```html
<!Month>
<div class="col-md-4">
<div class="form-group">
<span   class="form-label">wqi:</span>       <input
type="text"      class="form-control"      name="wqi"
placeholder="Enter value" required="true">
<span class="select-arrow"></span>
</div>
</div>
<! Date>
</div>
<!--Year,Month,Date end-->
<div class="form-btn">
<button class="submit-btn">Predict</button>
</div>
<!Button>
{% if prediction_text == 0 %}
<h2 >" Not Potable, the water can't be drink "</h2>
{% elif prediction_text == 1 %}
<h2 >" Potable, the water can be drink "</h2>
{% endif %}
</center>
</form>
<!--Form end-->
</div>
<!Booking form>
</div>
</div>
</div>
</div>
</div>
</p>
```

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

Style.css:

```css
body {      font-family: 'Lato',
sans-serif;    overflow: hidden;
overflow-y:              scroll;
background-color: #9E9E9E ;
} body .bg-img {   background-
repeat:              no-repeat;
background-position:    center;
padding-bottom: 100px;
} body nav
{
  background: rgba(255, 255, 255, 0.1);
} body nav .navbar-nav a {
font-size:  16px;        text-
transform:        uppercase;
color: #ff8013  !important;
transition: all 0.3s;
  -webkit-transition: all 0.3s;
  -ms-transition: all 0.3s;
  -o-transition: all 0.3s;
} body nav .navbar-nav a:hover
{   color: #fff !important;
} body nav .navbar-nav .btn-danger
{ background: #ffffff; border-
color: #ffffff;
  border-radius: 0; } body nav .navbar-nav
.btn-danger:hover    {        background:
#df6700;   border-color: #df6700;
}
```

```css
a,  a:hover  {
color: #ff8013;
}


.fh5co-banner-text-box {
position: relative;  max-
height: 120px;  display:
inline-block;    margin-
top: 250px;
}
.fh5co-banner-text-box .quote-box {
max-width: 455px;  padding: 20px
0;
}
.fh5co-banner-text-box .quote-box h2 {
font-family: 'Lato', sans-serif;    font-
weight: 700;   color: #008f40;   font-
size: 40px;
}
.fh5co-banner-text-box .quote-box h2 span { color: #f89524; font-size: 34px;
}
.fh5co-banner-text-box  .quote-box::before  {
content: "";  position: absolute;  height: 38px;
width: 38px;   left: 0;   top: 0;   background:
url("../images/right-quote.png");
background-repeat: no-repeat;
}
.fh5co-banner-text-box  .quote-box::after  {
content: "";   position: absolute;   height:
38px;     width: 38px;     background:
url("../images/left-quote.png");
```

```css
background-repeat: no-repeat;      right: 0;
bottom: 0;
}
.fh5co-banner-text-box a {
color: #f89524;    border-
color: #008f40;    border-
radius: 0;      min-width:
150px;
}
.fh5co-banner-text-box a:hover {
 background:   transparent;   border-
 color: gray;
 color: #008f40;
}

.fh5co-network,      .fh5co-about-us     {
background: url("/images/about-bg1.jpg");
background-repeat:               no-repeat;
background-position: center;   background-
size: 100%  100%;      padding: 50px 0;
padding-top: 30px;
}
.fh5co-network figure, .fh5co-about-us figure {    margin-
top: -70px !important;
}
.fh5co-network h2, .fh5co-about-us h2 {
color: #ff8013;      font-family: 'Lato',
sans-serif;  font-weight: 700;  font-size:
40px;   margin-bottom: 0;
}
```

```css
.fh5co-network h4, .fh5co-about-us h4, .fh5co-network h5, .fh5co-about-us h5,
.fh5conetwork p, .fh5co-about-us p {   color: #282828;   font-family: 'Lato', sans-serif;
font-weight: 700;
}
.fh5co-network hr, .fh5co-about-us hr {     border-color: #ff8013;

  border-width:    5px;    max-
  width: 100px;
  margin-left:  0;       border-
radius: 5px;
}
.fh5co-network figure, .fh5co-about-us figure {     text-
align: center;
}


.fh5co-about-us {   background:
transparent;        background-
repeat:              no-repeat;
background-size:       contain;
background-position: center;
}
.fh5co-about-us p {      color:
#fff;   font-family: 'Lato', sans-
serif;   font-weight: normal; }
.fh5co-about-us    hr    {
border-color:          #fff;
margin-left:        50px;
margin-top:    5px;    }
.fh5co-about-us    a    {
color:  #fff   !important;
border-color:  #4e2b0d;
```

```css
  border-radius: 0;   min-
width: 150px;

}
.fh5co-about-us a:hover {

background:  transparent;

border-color:        gray;

color: #ff8013;

}


.fh5co-content-box      {

background:    #464646;

padding-bottom: 100px;

}
.fh5co-content-box .pr-0 img {

margin-top: -128px; }
.fh5co-content-box    img    {

width: 100%;

}
.fh5co-content-box .card-img-overlay {

 color: #fff;   text-
align: center;   top:

35%;

}
.fh5co-content-box .trainers {   position:

relative;    padding: 50px 0;    margin:

70px      0;                  background:

url("../images/gym2.jpg");

background-repeat:             no-repeat;

background-position:            center;

background-color: #000;

}
```

```css
.fh5co-content-box   .trainers   .bg-50   {
background: rgba(0, 0, 0, 0.3);
}
.fh5co-content-box .trainers .card {
border:   none;        background:
transparent;
}
.fh5co-content-box .trainers .card img {
max-width: 250px;     margin:  0  auto;
max-height: 250px;
}
.fh5co-content-box .trainers .card .card-body {
background:  #ccc;       border-radius:  15px;
padding:  30px  20px;      margin-top:  30px;
padding-bottom: 50px;
}
.fh5co-content-box .trainers .card .card-body::before {
content: "";   position: absolute;   border: 20px solid
#ccc;
  border-color: transparent transparent #ccc transparent;
margin-top: -70px;   text-align: center;   margin-left: -
15px;
}
.fh5co-content-box .trainers .quote-box2 {
  color: #fff;
  max-width: 250px;
  position:      relative;
text-align:        center;
margin: auto;   margin-
bottom: 50px;
}
```

```css
.fh5co-content-box .trainers .quote-box2::before {
content: "";    position: absolute;    height: 20px;
width: 20px;    left: 0;    top: -10px;    background:
url("../images/right-quote-white.png");
background-repeat: no-repeat;    background-size:
100% 100%;
}
.fh5co-content-box .trainers .quote-box2::after {
content: "";   position: absolute;   height: 20px;
width: 20px;
  background:                 url("../images/left-quote-
white.png");   background-repeat: no-repeat;   right:
0;   bottom: -10px;   background-size: 100% 100%;
}
.fh5co-content-box .trainers::before, .fh5co-content-box .trainers::after { content: ""; position:
absolute;
  border: 5px solid #ff8013;
width: 100%;   top: -10px;
}
.fh5co-content-box .trainers::before {
bottom: -10px;   top: auto;
}
.fh5co-content-box .gallery .card {
border:  none;        background:
transparent;
}
.fh5co-content-box .gallery .card img {
border-radius: 0;   max-height: 580px;
}
.fh5co-content-box    .gallery    .card    .card-body    {
background: #ff8013;
}
```

```css
.fh5co-content-box .gallery .card .card-body h4 {
color: #fff;

}
.fh5co-content-box .gallery .card .card-body p {
font-family: 'Lato', sans-serif;     font-weight:
700;

}


footer {
  background: #101011;
  color:  #fff;
}
footer .footer1 p {    margin-
top: 30px;
} footer .footer2 h4 {    color:
#ff8013;    font-family: 'Lato',
sans-serif;    font-weight: 700;
text-align: center;      margin:
20px auto;
}
footer .footer2 .form-box {
background:           #fff;
padding:    20px    30px;
margin-top: -30px;
} footer .footer2 input[type='text'], footer .footer2 input[type='email']
{   background: transparent;   border-radius: 0;   border: none;
  border-bottom: 2px solid #000;
}
footer .footer2 input[type='text']:focus, footer .footer2 input[type='email']:focus {
box-shadow: none;   border-color: #ff8013;
}
```

```css
footer .footer2 .btn {      min-
width: 150px; border-radius: 0;
}   footer  .footer2  ::-webkit-
input-placeholder  {          /*
Chrome/Opera/Safari */   color:
#262626; } footer .footer2 ::-
moz-placeholder {    /* Firefox
19+ */  color: #262626; } footer
.footer2  :-ms-input-placeholder
{
 /* IE 10+ */    color: #262626; }
footer .footer2 :-moz-placeholder {
/* Firefox 18- */   color: #262626;
} footer .footer3 {    padding-top:
50px;  }   footer   .footer3   a   {
background: #fff;    border-radius:
50%;   height: 40px;   width: 40px;
padding: 0;    padding-top: 5px; }
footer      .footer3     a:hover     {
background:   #ff8013;   }   footer
.footer3 .nav-item li {    margin: 0
5px; }
footer .table td, footer .table th {   border:
none;
}

footer::before {    content:
"";      position: absolute;
border: 3px solid #ff8013;
width: 100%;
 left: 0;
}
```

```css
@media (max-width: 1199px) {
.fh5co-content-box .pr-0 img {
margin-top: -107px;
  }
}
@media (max-width: 991px) {
.fh5co-content-box .pr-0 img {
margin-top: -78px;
  }
  .fh5co-content-box   .card-img-overlay   {
top: 20%;
  }
}
@media (max-width: 767px) {
body   nav   .navbar-nav   {
margin-left:   0   !important;
max-width: 50px;
  }

  .fh5co-network figure, .fh5co-about-us figure {     margin-
top: 0 !important;
  }

  .fh5co-content-box    .pr-0    img   {
margin: 20px auto;
  }
  .fh5co-content-box       .col-md-5      {
padding: 0 !important;
  }
  .fh5co-content-box       .col-md-7      {
padding: 0 !important;
```

```
  }


  .gallery .card {         margin-
bottom: 25px;
  }


  .footer1 {         min-
height: 150px;
  }


  .footer2 .form-box {      margin-
top: 0 !important;   }


}
```
IMAGES:

APP.PY:

```
from flask import Flask, render_template, request
import requests import requests
# NOTE: you must manually set API_KEY below using information retrieved from your  IBM
Cloud account.
import requests
# NOTE: you must manually set API_KEY below using information retrieved from your  IBM
Cloud account.
API_KEY = "nFFWACn7pVNTQWlnb7pusoXVa63g0vFEq_8Y2x2pxZSE"
token_response        =        requests.post('https://iam.cloud.ibm.com/identity/token',
data={"apikey":  API_KEY,  "grant_type":  'urn:ibm:params:oauth:grant-type:apikey'})
mltoken  =  token_response.json()["access_token"]  header  =  {'Content-Type':
'application/json', 'Authorization': 'Bearer ' + mltoken} app = Flask(__name__)
@app.route('/')
```

```python
def index():
    return       render_template('index.html')
@app.route('/predict', methods = ['POST'])
def predict():

    ph = request.form['ph']
    Hardness = request.form['Hardness']
    Solids = request.form['Solids']
    Chloramines = request.form['Chloramines']
    Sulfate = request.form['Sulfate']
    Conductivity = request.form['Conductivity']
    Organic_carbon = request.form['Organic_carbon']
    Trihalomethanes                         =
    request.form['Trihalomethanes']       Turbidity   =
    request.form['Turbidity']  nph = request.form['nph']
    nHardness  =  request.form['nHardness']      wph   =
    request.form['wph']               wHardness       =
    request.form['wHardness']               wSolids       =
    request.form['wSolids']  wqi = request.form['wqi']

    t
    =
    [[float(ph),float(Hardness),int(Solids),float(Chloramines),float(Sulfate),float(Conductivity),float(Organic_carbon),float(Trihalomethanes),float(Turbidity),int(nph),int(nHardness),float(wph),float(wHardness),float(wSolids),float(wqi)]]

    payload_scoring = {"input_data": [{"fields":
    [["f0","f1","f2","f3","f4","f5","f6","f7","f8","f9","f10","f11","f12","f13","f14"]],     "values":t
    }]}

    response_scoring =
```

```python
requests.post('https://ussouth.ml.cloud.ibm.com/ml/v4/deployments/94d69d4c-4e12-
4662aba9-    fe193faa3d90/predictions?version=2022-11-07',    json=payload_scoring,
headers={'Authorization': 'Bearer ' + mltoken})


print("Scoring response")  payload_scoring
= {"input_data": [{"fields":
[["f0","f1","f2","f3","f4","f5","f6","f7","f8","f9","f10","f11","f12","f13","f14"]],    "values":t
}]}


pred= response_scoring.json()
output=pred['predictions'][0]['values'][0][0]
print(output)


return render_template("index.html", prediction_text = output)


if               __name__=='__main__':
app.run(debug = False)
```