

## FLASK CODE

```
import numpy as np
import pickle
import pandas as pd
from flask import Flask, request, render_template
app = Flask(__name__)
model = pickle.load(open('xb.pkl', 'rb'))
@app.route('/')
def home():
    return render_template('index.html')
@app.route('/predict', methods=["POST", "GET"])
def predict():
    return render_template("inner-page.html")
@app.route('/submit', methods=["POST", "GET"])
def submit():
    #reading the inputs given by the user
    input_feature = []
    for x in request.form.values():
        x_stripped = x.strip()
        if x_stripped: # Check if the stripped string is not empty
            try:
                float_value = float(x_stripped)
                input_feature.append(int(float_value))
            except ValueError:
                return render_template("output.html", result="Invalid input. Please
enter valid numbers.")

    if len(input_feature) != 9: # Assuming there are 21 features as per the
provided 'names'
        return render_template("output.html", result="Invalid input. Please
provide all required features.")

    names = ['Hb(g/dL)', 'Cycle (R/I)', 'FSH(mIU/mL)', 'TSH (mIU/L)', 'RBS (mg/dL)',
'Weight gain(Y/N)', 'hair growth (Y/N)', 'BP_Diastolic (mmHg)', 'Follicel No.(L)']
    data = pd.DataFrame ([input_feature], columns=names)

    prediction = model.predict(data)
```

```

prediction = int(prediction)

if prediction == 0:
    return render_template("output.html", result="We are pleased to confirm
that the result is negative for PCOS.")
else:
    return render_template("output.html", result="we are sorry to inform that
the results are positive for PCOS")
if __name__ == "__main__":
    app.run(debug=True, port=1111)

```

#### INDEX.HTML:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Proactive Health</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
        }
        header {
            background-color: #f8f9fa;
            padding: 10px 20px;
            display: flex;
            justify-content: space-between;
            align-items: center;
            border-bottom: 1px solid #ddd;
        }
        header .contact-info {
            display: flex;
            align-items: center;
            gap: 15px;
        }
        header .contact-info span {
            display: flex;

```

```
        align-items: center;
        gap: 5px;
    }
    header nav {
        display: flex;
        gap: 15px;
    }
    header nav a {
        text-decoration: none;
        color: #000;
        font-weight: bold;
    }
    .banner {
        text-align: center;
        background: url('https://via.placeholder.com/1200x400') no-repeat
center center;
        background-size: cover;
        color: #fff;
        padding: 60px 20px;
    }
    .banner h1 {
        font-size: 2.5em;
    }
    .banner p {
        font-size: 1.2em;
        margin-top: 10px;
    }
    .banner .get-started {
        margin-top: 20px;
    }
    .banner .get-started a {
        background-color: #007bff;
        color: #fff;
        padding: 10px 20px;
        text-decoration: none;
        border-radius: 5px;
    }
    .content {
        padding: 20px;
```

```

    }
    .content h2 {
        text-align: center;
        margin-bottom: 20px;
    }
    .content .process {
        display: flex;
        gap: 20px;
    }
    .content .process img {
        width: 50%;
    }
    .content .process .text {
        width: 50%;
    }
    .content .process .text h3 {
        margin-bottom: 10px;
    }
    .content .process .text p {
        margin-bottom: 10px;
    }
</style>
</head>
<body>

<header>
    <div class="contact-info">
        <span>
medical@gmail.com</span>
        <span>
+919222293333</span>
    </div>
    <nav>
        <a href="index.html">Home</a>
        <a href="#">About</a>
        <a href="#">Contact</a>
        <a href="inner-page.html">Let's check the Status</a>
    </nav>
</header>
<div class="banner">

```

```

    <h1>Welcome to Proactive Health</h1>
    <p>We are a team here to check out the Proactive Health Status on PCOS
Prediction</p>
    <div class="get-started">
        <a href="inner-page.html">Get Started</a>
    </div>
</div>

<div class="content">
    <h2>The Process involved in the project</h2>
    <div class="process">
        
        <div class="text">
            <h3>Data Preparation and Preprocessing</h3>
            <p>In the initial phase of a classification project, the focus is on data
collection, cleaning, and preprocessing. This involves gathering relevant data,
handling missing values, encoding categorical variables, and scaling features.
The goal is to ensure that the dataset is in a suitable format for training a
classification model. This phase is critical for building a strong foundation for
the project.</p>
        </div>
    </div>
</div>

</body>
</html>

```

INNER-PAGE.HTML:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Proactive Health - Form</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;

```

```
}  
header {  
    background-color: #f8f9fa;  
    padding: 10px 20px;  
    display: flex;  
    justify-content: space-between;  
    align-items: center;  
    border-bottom: 1px solid #ddd;  
}  
header nav {  
    display: flex;  
    gap: 15px;  
}  
header nav a {  
    text-decoration: none;  
    color: #000;  
    font-weight: bold;  
}  
header nav a:last-child {  
    color: #007bff;  
    background-color: #e7f0ff;  
    padding: 5px 10px;  
    border-radius: 5px;  
}  
.container {  
    display: flex;  
    justify-content: center;  
    padding: 20px;  
    background-color: #f0f2f5;  
}  
.form-container {  
    background-color: #fff;  
    padding: 20px;  
    border-radius: 5px;  
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);  
    max-width: 600px;  
    width: 100%;  
}  
.form-container h2 {
```

```
        text-align: center;
        margin-bottom: 20px;
    }
    .form-group {
        margin-bottom: 15px;
    }
    .form-group label {
        display: block;
        margin-bottom: 5px;
    }
    .form-group input,
    .form-group select {
        width: calc(100% - 10px);
        padding: 8px;
        border: 1px solid #ccc;
        border-radius: 4px;
    }
    .form-group input[type="submit"] {
        background-color: #28a745;
        color: #fff;
        border: none;
        cursor: pointer;
        padding: 10px 20px;
        font-size: 16px;
    }
    .form-group input[type="submit"]:hover {
        background-color: #9869c2;
    }
</style>
</head>
<body>
```

```
<header>
  <div class="logo">
    <h1>Health</h1>
  </div>
  <nav>
    <a href="index.html">Home</a>
    <a href="#">About</a>
```

```

    <a href="#">Contact</a>
  </nav>
</header>

<div class="container">
  <div class="form-container">
    <h2>PCOS Prediction Form</h2>
    <form >
      <div class="form-group">
        <label for="hemoglobin">Hemoglobin</label>
        <input type="float" id="hemoglobin" name="hemoglobin"
required="required">
      </div>
      <div class="form-group">
        <label for="cycle">Cycle (R/I)</label>
        <input type="float" id="cycle" name="cycle" required="required">
      </div>
      <div class="form-group">
        <label for="fsh">FSH (mIU/mL)</label>
        <input type="float" id="fsh" name="fsh">
      </div>
      <div class="form-group">
        <label for="thyroid">Thyroid Hormone (mIU/L)</label>
        <input type="float" id="thyroid" name="thyroid"
required="required">
      </div>
      <div class="form-group">
        <label for="randomBloodSugar">Random Blood Sugar
(mg/dl)</label>
        <input type="float" id="randomBloodSugar"
name="randomBloodSugar" required="required">
      </div>
      <div class="form-group">
        <label for="weightGain">Weight gain (Y/N)</label>
        <select id="weightGain" name="weightGain"
required="required">
          <option value="yes">Yes</option>
          <option value="no">No</option>
        </select>
      </div>
    </form>
  </div>
</div>

```



```

    <div class="form-group">
      <label for="hairGrowth">Hair growth (Y/N)</label>
      <select id="hairGrowth" name="hairGrowth" required="required">
        <option value="yes">Yes</option>
        <option value="no">No</option>
      </select>
    </div>
    <div class="form-group">
      <label for="bpDiastolic">BP Diastolic (mmHg)</label>
      <input type="float" id="bpDiastolic" name="bpDiastolic"
required="required">
    </div>
    <div class="form-group">
      <label for="follicleNo">Follicle No. (L)</label>
      <input type="float" id="follicleNo" name="follicleNo"
required="required">
    </div>
    <div class="form-group">
      <input type="submit" value="Submit">
    </div>
  </form>
</div>
</div>

</body>
</html>

```

OUTPUT.HTML:

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Health Status</title>
  <style>
    body {
      background-color: #E0F7FA;
      font-family: Arial, sans-serif;
      text-align: center;
    }
  </style>

```

```
    margin: 0;
    padding: 0;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
}
.container {
    background-image: url('your-image-url.jpg'); /* Replace with the actual
image URL */
    background-size: cover;
    background-position: center;
    width: 100%;
    height: 100%;
    display: flex;
    justify-content: center;
    align-items: center;
    flex-direction: column;
    color: #000;
}
.title {
    font-size: 2em;
    margin-bottom: 20px;
}
.message {
    font-size: 1.5em;
    background: rgba(255, 255, 255, 0.8);
    padding: 10px 20px;
    border-radius: 10px;
}
</style>
</head>
<body>
    <div class="container">
        <div class="title">Health Status</div>
        <div class="message">

    </div>
```

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