

# Rising Waters: A Machine Learning Approach to Flood Prediction

## CHAPTER-12

### 12.1 SOURCE CODE:

#### Home.html:

```
<!DOCTYPE html>
<html>
<head>
  <title>Severe Flood Prediction</title>
  <style>
    body {
      margin: 0;
      font-family: Arial, sans-serif;
      background: linear-gradient(to right, #1e3c72, #2a5298);
      color: white;
      text-align: center;
    }

    .container {
      margin-top: 180px;
    }

    h1 {
      font-size: 40px;
    }

    button {
      padding: 12px 30px;
      font-size: 16px;
      border: none;
      border-radius: 5px;
      background-color: #ffffff;
      color: #2a5298;
      cursor: pointer;
    }

    button:hover {
      background-color: #ddd;
    }
  </style>
</head>
<body>
```

A large, semi-transparent watermark logo is centered in the background. It features a yellow pot (kalash) with a green leaf on top. Inside the pot is a red square with a white 'G'. Above the pot is a circular emblem with a deity. Below the pot is a yellow banner with the text 'Gayathri Educational Society' and 'ESTD-2001'. Above the pot is a white banner with Telugu text 'తమనోమా జ్యోతిర్గమయ'.

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```
<div class="container">
  <h1>Severe Flood Prediction System</h1>
  <br>
  <a href="/predict_page">
    <button>Start Prediction</button>
  </a>
</div>

</body>
</html>
```

### Predict.html:

```
<!DOCTYPE html>
<html>
<head>
  <title>Enter Weather Details</title>

  <style>
    body {
      margin: 0;
      font-family: Arial, sans-serif;
      background: #f4f6f9;
    }

    .form-container {
      width: 450px;
      margin: 80px auto;
      background: white;
      padding: 30px;
      border-radius: 10px;
      box-shadow: 0px 0px 15px rgba(0,0,0,0.2);
    }

    h2 {
      text-align: center;
      margin-bottom: 25px;
      color: #2a5298;
    }

    label {
```

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```
        font-weight: bold;
    }

    input {
        width: 100%;
        padding: 8px;
        margin: 6px 0 15px 0;
        border-radius: 5px;
        border: 1px solid #ccc;
    }

    button {
        width: 100%;
        padding: 10px;
        border: none;
        background-color: #2a5298;
        color: white;
        font-size: 16px;
        border-radius: 5px;
        cursor: pointer;
    }

    button:hover {
        background-color: #1e3c72;
    }

    .back {
        margin-top: 15px;
        text-align: center;
    }

    .back a {
        text-decoration: none;
        color: #2a5298;
    }

</style>
</head>

<body>

<div class="form-container">
```



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<h2>Enter Weather Details</h2>

<form action="/predict" method="POST">

<label>Cloud Cover (%)</label>

<input type="number" name="cloud\_cover" step="any" required>

<label>Annual Rainfall (mm)</label>

<input type="number" name="annual" step="any" required>

<label>Jan-Feb Rainfall (mm)</label>

<input type="number" name="jan\_feb" step="any" required>

<label>Mar-May Rainfall (mm)</label>

<input type="number" name="mar\_may" step="any" required>

<label>Jun-Sep Rainfall (mm)</label>

<input type="number" name="jun\_sep" step="any" required>

<button type="submit">Predict Flood</button>

</form>

<div class="back">

<a href="/">< Back to Home</a>

</div>

</div>

</body>

</html>

### Result.html:

<!DOCTYPE html>

<html>

<head>

<title>Prediction Result</title>

<style>

body {

margin: 0;

font-family: Arial, sans-serif;

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```
        background: #f4f6f9;
        text-align: center;
    }

    .result-box {
        width: 500px;
        margin: 150px auto;
        padding: 40px;
        border-radius: 10px;
        box-shadow: 0px 0px 15px rgba(0,0,0,0.2);
        background-color: white;
    }

    h1 {
        font-size: 28px;
    }

    .btn {
        margin-top: 20px;
        padding: 10px 25px;
        border: none;
        background-color: #2a5298;
        color: white;
        font-size: 15px;
        border-radius: 5px;
        cursor: pointer;
    }

    .btn:hover {
        background-color: #1e3c72;
    }
</style>
</head>

<body>
<div class="result-box">

    <h1 style="color: {{color}};">
        {{prediction}}
    </h1>
```

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```
<a href="/predict_page">  
  <button class="btn">Predict Again</button>  
</a>
```

```
</div>
```

```
</body>
```

```
</html>
```

