Lab#9(a) Implementing an application to fetch weather details using Weather APIs.

Code Section	Description
if (isset($_GET['city'])) { ... }	This conditional block checks if the 'city' parameter is set in the URL's query string. If it's set, it proceeds to fetch weather data for the provided city using the OpenWeatherMap API.
$apiKey	Stores the API key required to access the OpenWeatherMap API.
$cityId	Retrieves the value of the 'city' parameter from the URL's query string. This will be used to specify the city for which weather data is requested.
$googleApiUrl	Constructs the URL for the OpenWeatherMap API request, including the city ID and API key.
curl_init()	Initializes a new cURL session for making HTTP requests.
curl_setopt()	Configures various options for the cURL request, such as setting the URL, following redirects, disabling SSL verification, and more.
curl_exec()	Executes the cURL request and retrieves the response from the OpenWeatherMap API.
curl_close()	Closes the cURL session.
$data = json_decode($response);	Decodes the JSON response from the OpenWeatherMap API into a PHP object. The weather data will be accessible using this object.
if (isset($_GET['city_submit'])) { ... }	Checks if the 'city_submit' parameter is set in the URL's query string, indicating that the form was submitted. If set, it displays weather information or an error message based on the retrieved data.

FACULTY OF ENGINEERING AND TECHNOLOGY
Department of Computer Engineering
01IT0701 – Advance Web Technology – Student Lab Manual

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Final Outcome:

WEATHER ONLINE

City name: [_____] [Submit]

Rajkot Weather Status

Wind: 4.48 km/h

Sky: broken clouds

Humidity:69 %

Temperature: 300.75 °C

Code Snippet:

```
<!DOCTYPE html>
<html>

<head>
  <title>Weather API</title>
</head>

<body>
  <?php
  if (isset($_GET['city'])) {
    $apiKey = "ae2baf47071839accbb2cecbfefe499c";
    $cityId = $_GET['city'];
    $googleApiUrl = "http://api.openweathermap.org/data/2.5/weather?q=" . $cityId . ",IN&APPID=" . $apiKey;
```

```php
    $ch = curl_init();

    curl_setopt($ch, CURLOPT_HEADER, 0);

curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);

curl_setopt($ch, CURLOPT_URL, $googleApiUrl);

curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 1);

curl_setopt($ch, CURLOPT_VERBOSE, 0);

curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, false);

    $response = curl_exec($ch);

curl_close($ch);

    $data = json_decode($response);

  }

  ?>

  <div style="text-align: center;">

    <h1>WEATHER ONLINE</h1>

    <form method="GET" action=' <?php echo htmlspecialchars($_SERVER['PHP_SELF']); ?>'>

      City name: <input type="text" name="city">

      <input type="submit" name="city_submit">

    </form>
<?php
    if (isset($_GET['city_submit'])) {
if (!isset(($data->message))) {

        echo "
<h2>" . $data->name . " Weather Status</h2>

<h2>Wind: " . $data->wind->speed . " km/h</h2>

<h2>Sky: " . $data->weather[0]->description . " </h2>

<h2>Humidity:" . $data->main->humidity . " %</h2>

<h2>Temperature: " . ($data->main->temp) . " °C</h2>
```

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```
";
    } else {
        echo "<h2>City Not Found. Please Check City Name Again</h2>";
    }
  }
  ?>
  </div>
</body>

</html>
```