DEVELOPMENT PART 2

WAMP:

WampServer, short for Windows, Apache, MySQL, and PHP, is a popular open-source software stack primarily designed for Windows operating systems. It provides a convenient and straightforward way for web developers to create a local web development environment on their Windows-based computers. This environment enables developers to build, test, and debug web applications without the need for a live web server, making it an essential tool in the web development process.

The core components of WampServer include Apache, the web server that handles HTTP requests; MySQL, a relational database management system for data storage; and PHP, a server-side scripting language used to create dynamic web applications. By bundling these components, WampServer simplifies the installation and configuration process, allowing developers to set up their development environment quickly.

WampServer offers several key advantages, including the ability to switch between different versions of PHP to match project requirements, an easy-to-use user interface for configuring server settings, and the ability to run local web applications with ease. Whether you're a beginner looking to learn web development or an experienced developer working on new projects, WampServer can significantly streamline your workflow by providing a complete, local web server environment on your Windows machine.

PHPMYADMIN:

phpMyAdmin is a versatile and widely-used tool for managing MySQL databases through a user-friendly web-based interface. It offers a wealth of features that streamline database administration and development tasks. With phpMyAdmin, users can perform a wide range of actions, from creating and altering database structures to executing SQL queries and managing user privileges. This makes it an invaluable resource for web developers, database administrators, and anyone working with MySQL databases.

One of phpMyAdmin's standout features is its ability to simplify database management tasks. Users can effortlessly create new databases, tables, and fields, and they can efficiently import and export data in various formats. The SQL query editor allows for custom data retrieval and manipulation, providing fine-grained control over the database's content. Furthermore, the tool's user management capabilities enable administrators to set access permissions and secure their databases.

Another advantage of phpMyAdmin is its database design functionality. Users can visually design database structures, define relationships between tables, and set data types and constraints. This makes the tool especially useful for those who need to plan and implement complex database schemas. Additionally, phpMyAdmin's support for multiple languages and its extensive community of users contribute to its widespread adoption and accessibility across different regions and cultures.

CODE:

```
<!DOCTYPE html>

<html>

<head>

<style>
```

```
    body{


 background-image: url("https://r1.ilikewallpaper.net/ipad-pro-wallpapers/download-151361/dark-flavours.jpg");
  background-repeat: no-repeat;


      color: white;
      margin-left: 150px;
      margin-right: 150px;
   }
 </style>
</head>
<body>


<center>
<h1 style="padding-top: 10px">AIR QUALITY INFORMATION</h1>
<br>
<p style="font-size: 30px">
Air quality management (AQM) is the process of protecting and improving air quality. It involves identifying and assessing air pollution sources, developing and implementing strategies to reduce emissions, and monitoring air quality to ensure that standards are met.Poor air quality can have a significant impact on human health and the environment. It can cause a variety of health problems, including respiratory problems, heart disease, cancer, and neurological problems. It can also damage plants and animals, and can contribute to climate change.Air quality management is an important process for protecting human health and the environment. By taking steps to reduce air pollution, we can create cleaner and healthier communities for everyone.


</p><br>



<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "airquality";
```

```
$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect_error) {

  die("Connection failed: " . $conn->connect_error);

}

$sql = "SELECT temperature, humidity, pollution_level, particulate_matter FROM air";

$result = $conn->query($sql);


if ($result->num_rows > 0) {

  echo "<table cellpadding=30px; border='2' style='border-collapse: collapse;'font-size:
90px;><tr><th>temperature</th><th>humidity</th><th>pollution_level</th><th>particulate_matter<
/th></tr>";

  while($row = $result->fetch_assoc()) {

    echo
"<tr><td>".$row["temperature"]."</td><td>".$row["humidity"]."</td><td>".$row["pollution_level"].
"</td><td>".$row["particulate_matter"]."</td></tr>";

  }

  echo "</table>";

} else {

  echo "0 results";

}

$conn->close();

?>

</center>

</body>

</html>
```

EXPLANATION:

1. Database Connection:

   - This section establishes a connection to a MySQL database. It specifies the database server (`localhost`), the username (`root`), and an empty password (in this example, no password). The database name is set to `"airquality"`.

   - It uses the `mysqli` library to create a database connection object (`$conn`).

2. Connection Error Handling:

   - The `if ($conn->connect_error)` condition checks if there was an error in establishing the database connection. If an error occurs, the script terminates and displays an error message with the reason for the connection failure.

3. SQL Query:

- The SQL query selects specific columns (temperature, humidity, pollution_level, and particulate_matter) from a table named "air." This table is assumed to be within the specified database.

4. Query Execution and Result Handling:

- The `query` method is used to execute the SQL query. The result is stored in the `$result` variable.

5. Display Data in HTML Table:

- If there are rows in the result set (i.e., if `$result->num_rows` is greater than 0), it generates an HTML table with column headers (Temperature, Humidity, Pollution Level, Particulate Matter).

- Inside a loop, it fetches each row of data using `$result->fetch_assoc()`, and for each row, it generates an HTML table row (`<tr>`) with the corresponding data in the table cells (`<td>`).

- The loop iterates through all the rows in the result set.

6. No Results Message:

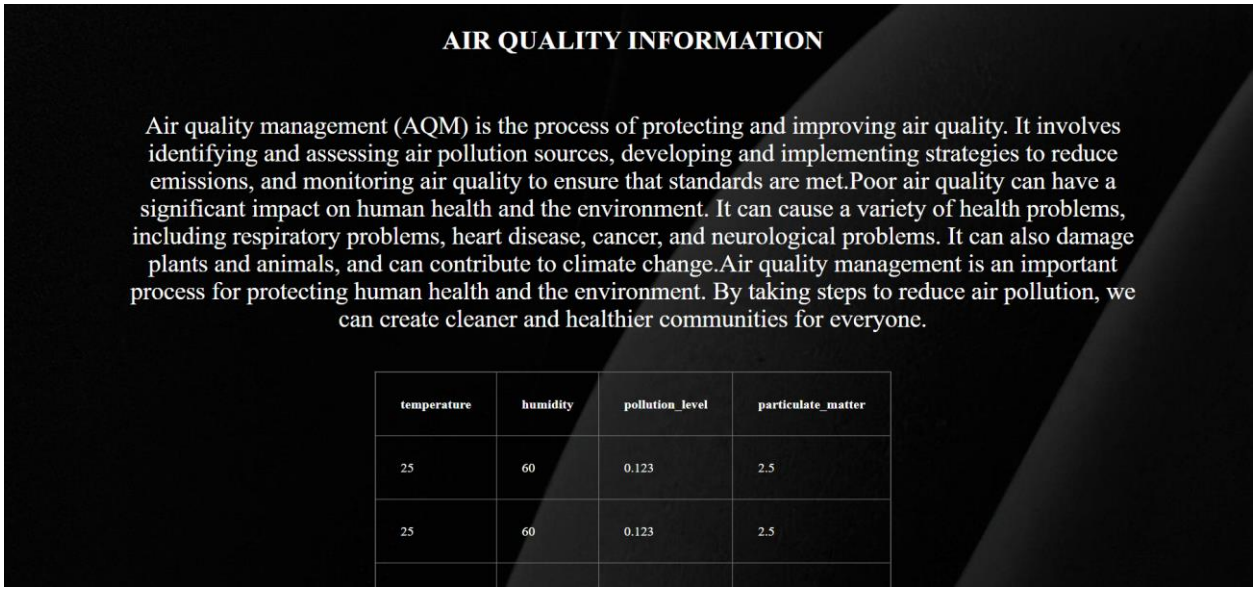
- If there are no results (i.e., no rows in the result set), it displays a message indicating "0 results."

7. Database Connection Closure:

- The `$conn->close()` method is used to close the database connection when the data retrieval and display are complete.

This PHP code connects to a MySQL database, retrieves data from a specific table, and formats the data into an HTML table for display on a web page. The data displayed in the HTML table depends on what's stored in the "air" table of the "airquality" database.

OUTPUT:



process for protecting human health and the environment. By taking steps to reduce air pollution, we can create cleaner and healthier communities for everyone.

temperature	humidity	pollution_level	particulate_matter
25	60	0.123	2.5
25	60	0.123	2.5
24	59	0.113	2.4
24	59	0.113	2.4
24	59	0.113	2.4
25	61	0.119	2.3
25	61	0.119	2.3

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

temperature	humidity	pollution_level	particulate_matter 1
25	60	0.123	2.5
25	60	0.123	2.5
24	59	0.113	2.4
24	59	0.113	2.4
24	59	0.113	2.4
25	61	0.119	2.3
25	61	0.119	2.3