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MODUL 11 PEMROGRAMAN BERBASIS WEB

PENGENALAN AJAX DAN JSON

Source code: https://github.com/afrzl/Pemrograman-Berbasis-Web/blob/679b7769f7643be352912b492e5b2a1030cd5b14/P11

1. **Membuat Aplikasi AJAX Sederhana**

Source Code:

a. showtime.html

```html
<!DOCTYPE html>
<html lang="en-ID">
  <head>
    <title>Ajax Demonstration</title>
    <meta charset="utf-8" />
  </head>
  <style>
    .displaybox {
      display: table-cell;
      vertical-align: middle;
      width: 250px;
      height: 40px;
      background-color: #ffffff;
      border: 2px solid #000000;
      padding: 10px;
      font: 1.5em normal verdana, helvetica, arial, sans-
serif;
    }
  </style>
  <script>
    var ajaxRequest

    function ajaxResponse() {
      // check to see if we're done
      if (ajaxRequest.readyState != 4) {
        return
      } else {
        // check to see if successful
        if (ajaxRequest.status == 200) {
          var plholder = document.getElementById('showtime')
          plholder.innerHTML = ajaxRequest.responseText
        } else {
          alert('Request failed: ' + ajaxRequest.statusText)
        }
      }
    }

    function getServerTime() {
      ajaxRequest = new XMLHttpRequest()
```

```
        var svcUrl = 'telltime.php'
        ajaxRequest.onreadystatechange = ajaxResponse
        ajaxRequest.open('GET', svcUrl)
        ajaxRequest.send(null)
    }

    // Write a function to auto-update the time
    function autoUpdateTime() {
        setInterval(getServerTime, 1000)
    }
  </script>

  <body onload="autoUpdateTime()">
    <h1>Ajax Demonstration</h1>
    <h2>Getting the server time without refreshing the
page</h2>
    <form>
      <input type="button" value="Get Server Time"
onclick="getServerTime()" />
    </form>
    <br />
    <div id="showtime" class="displaybox"></div>
  </body>
</html>
```

b. telltime.php

```php
<?php
date_default_timezone_set('Asia/Jakarta');
echo date('Y-m-d H:i:s');
```

Output:

Ajax Demonstration

Getting the server time without refreshing the page

Get Server Time

2024-05-27 15:24:26

2. **Memproses data JSON dari API**

Source Code:

```php
<?php
//menggunakan file get contents
$data = file_get_contents('https://reqres.in/api/users?page=1');
var_dump($data);

//menggunakan curl
echo '<br/><br/>Menggunakan cURL<br/>';
$ch = curl_init();
```

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```php
curl_setopt($ch, CURLOPT_URL,
'https://reqres.in/api/users?page=1');
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
$output = curl_exec($ch);
curl_close($ch);
echo $output;
// $data = json_decode($output, true);
// echo '<br/><br/>';
// var_dump($data);

$parse_data = json_decode($data, true);
echo '<br/><br/>';
var_dump($parse_data);
echo '<br/><br/>';
?>
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>php11A</title>
    <style>
    table,
    th,
    td {
        padding: 10px;
        border: 1px solid black;
        border-collapse: collapse;
    }
    </style>
</head>

<body>
    <table>
        <thead>
            <tr>
                <th>ID</th>
                <th>Email</th>
                <th>First Name</th>
                <th>Last Name</th>
                <th>Avatar</th>
            </tr>
        </thead>
        <tbody>
            <?php foreach ($parse_data['data'] as $value) { ?>
            <tr>
                <td><?= $value['id'] ?></td>
                <td><?= $value['email'] ?></td>
                <td><?= $value['first_name'] ?></td>
```

```html
            <td><?= $value['last_name'] ?></td>
            <td><img src="<?= $value['avatar'] ?>"
alt=""></td>
        </tr>
        <?php } ?>
    </tbody>
  </table>
</body>

</html>
```

Output:

3. Membuat Aplikasi AJAX untuk Pencarian

Source Code:

a. php11F.php

```html
<!DOCTYPE html>
<html lang='en-GB'>

<head>
    <title>PHP11 F</title>
```

```
    <style>
    table,
    th,
    td {
        border: 1px solid black;
        border-collapse: collapse;
        padding: 5px;
    }

    nav {
        background-color: #010417;
        overflow: hidden;
    }

    nav ul {
        list-style: none;
        width: 100%;
        margin: 0;
    }

    nav li {
        float: left;
        margin: 0;
    }

    nav a {
        display: flex;
        height: 30px;
        padding: 5px 1.5em;
        color: white !important;
        text-decoration: none !important;
    }

    .active,
    nav a:hover {
        background-color: #c74451;
    }
    </style>
</head>

<body>
    <h1>PHP and Databases</h1>
    <?php include 'php11F_header.php'; ?>

    <?php
    session_start();
    if (!isset($_SESSION['username'])) {
        header('Location: php11D.php');
    }
    require '../DB_CON.php';
    try {
```

```php
        $pdo = new PDO($dsn, $db_username, $db_password,
$opt);
        $stmt = $pdo->query('select * from meetings order by
slot');

        $pdo = null;
    } catch (PDOException $e) {
        exit('PDO Error: ' . $e->getMessage() . '<br>');
    }
    ?>

    <h2>Data in meeting table</h2>
    <?php if (isset($_GET['msg'])) {
        echo "<p style='color: " .
            $_GET['color'] .
            "'>" .
            $_GET['msg'] .
            '</p>';
    } ?>
    Rows retrieved: <?= $stmt->rowCount() ?><br><br>

    <a href='php09E.php'><button style="margin-bottom:
10px">Tambah Data</button></a>
    <form action="">
        Cari Nama: <input type="text" id="txt1"
onkeyup="showHint(this.value)">
    </form>
    <p>Suggestions: <span id="txtHint"></span></p>

    <table style='margin-top: 10px'>
        <thead>
            <tr>
                <th>Slot</th>
                <th>Name</th>
                <th>Email</th>
                <th></th>
            </tr>
        </thead>
        <tbody>
            <?php while ($row = $stmt->fetch()) { ?>
            <tr>
                <td><?= $row['slot'] ?></td>
                <td><?= $row['name'] ?></td>
                <td><?= $row['email'] ?></td>
                <td><a style="margin-right: 15px"
href="php09G.php?slot=<?= $row[
                    'slot'
                ] ?>"><img src="edit.svg" style="width: 30px;
height: 30px"></img></a>
                    <a onclick="return confirm(`Apakah kamu
yakin akan menghapus data?`)" href="php09H.php?slot=<?= $row[
                        'slot'
```

```
                            ] ?>"><img src="delete.svg" style="width:
30px; height: 30px"></img></a>
                        </td>
                </tr>
                <?php } ?>
            </tbody>
        </table>

        <script src="page11A_suggestion.js"></script>
    </body>

</html>
```

b. php11_header.php

```
<header>
    <nav>
        <ul>
            <li><a class="active" href="#">Data
Meeting</a></li>
            <li><a href="php11F_logout.php">Logout</a></li>
        </ul>
    </nav>
</header>
```

c. php11_logout.php

```
<?php
session_start();

session_unset();
session_destroy();

header('Location: php11D.php');
```

d. php11D.php

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Login</title>
</head>

<body>

    <?php
    session_start();
    if (isset($_SESSION['username'])) {
        header('Location: php11F.php');
    }

    $message = $_GET['msg'] ?? '';
```

```php
        echo '<p style="color: red">' . $message . '</p>';
        ?>
        <form action="php11D_action.php" method="post">
            <table>
                <tr>
                    <td><label>Username:</label></td>
                    <td><input type="text" name="username"></td>
                </tr>
                <tr>
                    <td><label>Password:</label></td>
                    <td><input type="password"
name="password"></td>
                </tr>
                <tr>
                    <td><input type="submit" value="Login"></td>
                    <td></td>
                </tr>
            </table>
        </form>
</body>

</html>
```

e. php11D_action.php

```php
<?php
require '../DB_CON.php';
$username = $_POST['username'];
$password = $_POST['password'];

$pdo = new PDO($dsn, $db_username, $db_password, $opt);
$query = 'SELECT * FROM users WHERE username = :username LIMIT
1';

$stmt = $pdo->prepare($query);
$stmt->bindparam(':username', $username, PDO::PARAM_STR);
$stmt->execute();

if ($stmt->rowCount() > 0) {
    $user = $stmt->fetch(PDO::FETCH_ASSOC);
    if (password_verify($password, $user['password'])) {
        session_start();
        $_SESSION['username'] = $_POST['username'];
        header('Location: php11F.php');
    } else {
        $message = urlencode('Password salah');
        header('Location: php11D.php?msg=' . $message);
    }
} else {
    $message = urlencode('Akun tidak ditemukan');
    header('Location: php11D.php?msg=' . $message);
}
```

```php
$pdo = null;
```

f. page11B_gethint.php

```php
<?php

include '../DB_CON.php';

try {
    //Code 6
    $keyword = '%' . $_GET['keyword'] . '%';
    try {
        $pdo = new PDO($dsn, $db_username, $db_password,
$opt);
        $query = 'SELECT * FROM meetings WHERE name LIKE
:keyword';
        $stmt = $pdo->prepare($query);
        $stmt->bindparam(':keyword', $keyword,
PDO::PARAM_STR);
        $stmt->execute();
        $stmt = $stmt->fetchAll();

        $pdo = null;
    } catch (PDOException $e) {
        exit('PDO Error: ' . $e->getMessage() . '<br>');
    }

    // lookup all hints if query result is not empty
    if ($stmt) {
        echo json_encode($stmt);
    } else {
        // Output "no suggestion" if no hint was found or
output correct values
        $response[] = [
            'name' => 'no suggestion',
        ];

        echo json_encode($response);
    }

    $pdo = null;
} catch (PDOException $e) {
    exit('PDO Error: ' . $e->getMessage() . '<br>');
}
```

g. page11A_suggestion.js

```javascript
function showHint(str) {
  let text = document.getElementById("txtHint");
  if (str.length == 0) {
    text.innerText = "";
    return;
  }
```

```javascript
xhttp = new XMLHttpRequest();

//Code 4b
xhttp.onreadystatechange = function () {
  if (this.readyState == 4 && this.status == 200) {
    //   Typical action to be performed when the document is ready:
    let res = JSON.parse(xhttp.responseText);
    let output = res
      .map(function (e) {
        return e.name;
      })
      .join(", ");
    text.innerText = output;
  }
};

xhttp.open("GET", "page11B_gethint.php?keyword=" + str, true);
xhttp.send();
}
```

Output:

PHP and Databases

Data Meeting	Logout

Data in meeting table

Rows retrieved: 6

[Tambah Data]
Cari Nama: v|

Suggestions: povefyk@mailinator.com, vogagubam@mailinator.com

Slot	Name	Email		
1	wufozud@mailinator.com	sagodefit@mailinator.com	✏	🗑
16	jikiwytu@mailinator.com	vyxuj@mailinator.com	✏	🗑
21	pumagy@mailinator.com	vorewubo@mailinator.com	✏	🗑
68	povefyk@mailinator.com	guxer@mailinator.com	✏	🗑
88	tanaren@mailinator.com	tuwoguloc@mailinator.com	✏	🗑
89	vogagubam@mailinator.com	bagijeh@mailinator.com	✏	🗑