



### **Student Identity**

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**Class : 2G**

**Major : D-IV Business Information System**

### **Topic**

- The concept of Form Upload with PHP and Jquery.
- Introduction to the concept of cookies.
- Introduction to session concepts.

### **Objectives**

Students are expected to:

1. Students are able to create upload forms using PHP and jQuery.
2. Understand the basic concepts of cookies and its use.
3. Understand the basic concept of session and its use.

### **Introduction**

#### **File Upload**

File upload in PHP is the process of uploading files from a user's computer to a web server. File uploads are useful in many cases such as when users want to upload a profile picture, document, or other media to a website. To do this, it can use the HTML element `<input type="file">` along with PHP to manage the upload process.

Here are the general steps to implement file uploads in PHP:

- Create an HTML form to upload a file:

```
<!DOCTYPE html>
<html>
<head>
    <title>File Upload</title>
</head>
<body>
    <form action="upload.php" method="post" enctype="multipart/form-data">
        <input type="file" name="fileToUpload" id="fileToUpload">
        <input type="submit" value="Upload File" name="submit">
    </form>
</body>
</html>
```

- Create a PHP script (**upload.php**) to manage file uploads:

```
<?php
if (isset($_POST["submit"])) {
    $targetDirectory = "uploads/"; // Direktori tujuan untuk menyimpan file
    $targetFile = $targetDirectory . basename($_FILES["fileToUpload"]["name"]);

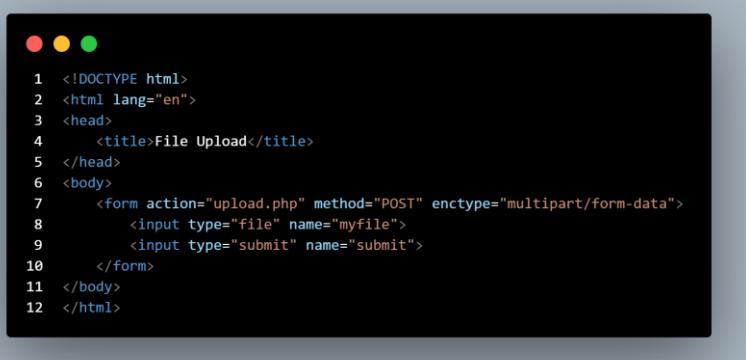
    if (move_uploaded_file($_FILES["fileToUpload"]["tmp_name"], $targetFile)) {
        echo "File berhasil diunggah.";
    } else {
        echo "Gagal mengunggah file.";
    }
}
```

Above, we take some important steps:

- Create an HTML form with an **element <input type="file">** that allows users to select the file they want to upload.
- Set the form **enctype** attribute to "**multipart/form-data**" so that the file can be uploaded.
- When the user clicks the "Upload File" button, the form data will be sent to **the upload.php**.
- In **upload.php**, we check if the user has clicked the submit button (**\$\_POST["submit"]**) and then specify the destination directory to save the file to.
- **move\_uploaded\_file()** is used to move files from a temp directory to a predefined destination directory.
- The corresponding message (success or failure) will be displayed to the user.

Make sure you have an **uploads** directory on your server, and give it the appropriate permissions so that PHP can store files there.

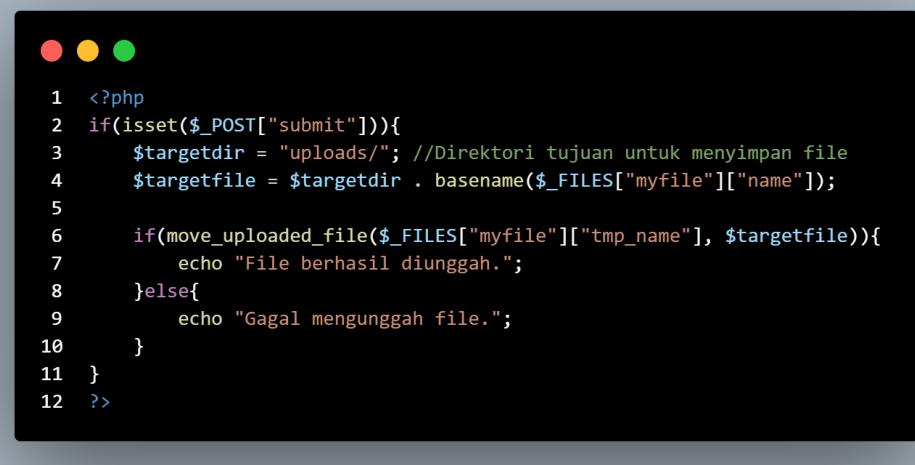
## Practical Section 1. Files

| Step | Description  |
|------|--|
| 1    | Create a new file in the <b>dasarWeb</b> directory, naming it <b>form_upload.php</b> .   |
| 2    | Type into the <b>form_upload.php</b> code file below.<br><pre>&lt;html&gt;   &lt;head&gt;     &lt;title&gt;File Upload&lt;/title&gt;   &lt;/head&gt;   &lt;body&gt;     &lt;form action="upload.php" method="POST" enctype="multipart/form-data"&gt;       &lt;input type="file" name="myfile"&gt;       &lt;input type="submit" name="submit"&gt;     &lt;/form&gt;   &lt;/body&gt; &lt;/html&gt;</pre>  <pre> 1  &lt;!DOCTYPE html&gt; 2  &lt;html lang="en"&gt; 3  &lt;head&gt; 4      &lt;title&gt;File Upload&lt;/title&gt; 5  &lt;/head&gt; 6  &lt;body&gt; 7      &lt;form action="upload.php" method="POST" enctype="multipart/form-data"&gt; 8          &lt;input type="file" name="myfile"&gt; 9          &lt;input type="submit" name="submit"&gt; 10     &lt;/form&gt; 11  &lt;/body&gt; 12  &lt;/html&gt;</pre> |

- 3 Create a new file named **upload.php** that will be used for processing **form\_upload.php**.

```
<?php
if(isset($_POST["submit"])){
    $targetdir = "uploads/"; //Direktori tujuan untuk menyimpan file
    $targetfile = $targetdir . basename($_FILES["myfile"]["name"]);

    if(move_uploaded_file($_FILES["myfile"]["tmp_name"], $targetfile)){
        echo "File berhasil diunggah.";
    }
    else{
        echo "Gagal mengunggah file.";
    }
}
?>
```



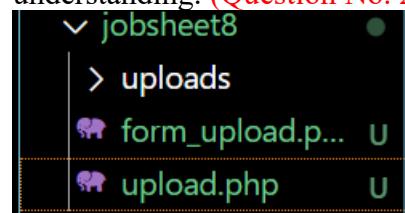
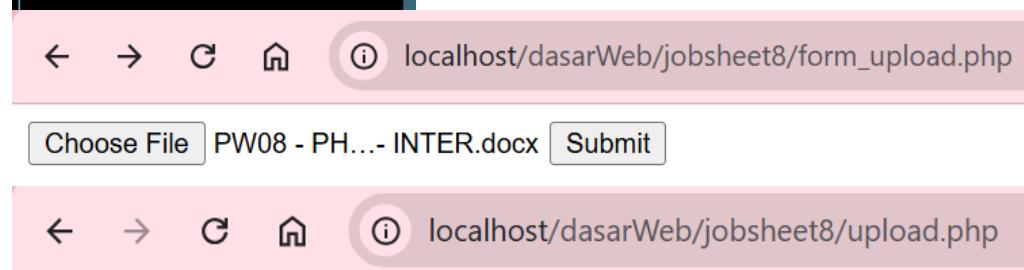
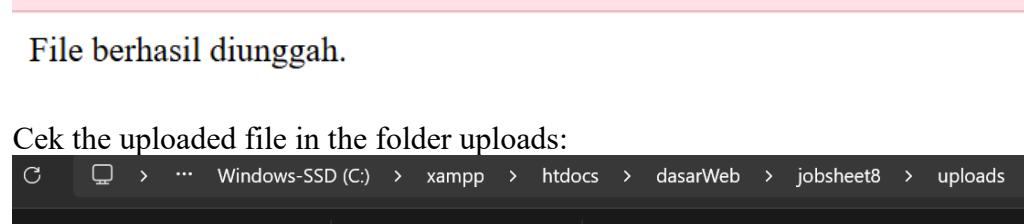
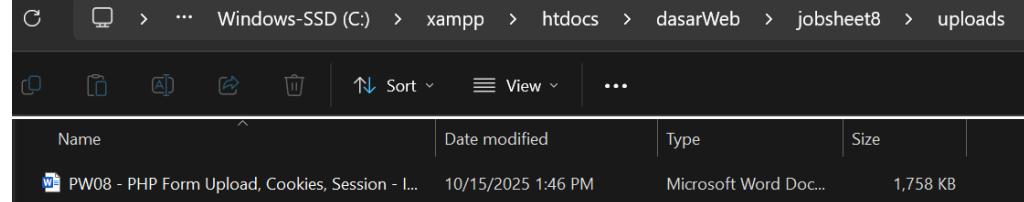
- 4 Save the file, then open a browser and run **localhost/dasarWeb/form\_upload.php**. Select a file and click the Submit button. Observe what happens and record your understanding. (Question No. 1)

A screenshot of a web browser window. The address bar shows the URL `localhost/dasarWeb/jobsheet8/form_upload.php`. Below the address bar is a form with a "Choose File" button containing the text "PW08 - PH...- INTER.docx". To the right of the file input is a "Submit" button. The browser's navigation buttons (back, forward, home) are visible on the left.

**Warning:** move\_uploaded\_file(uploads/PW08 - PHP Form Upload, Cookies, Session - INTER.docx): Failed to open stream: No such file or directory in C:\xampp\htdocs\dasarWeb\jobsheet8\upload.php on line 6

**Warning:** move\_uploaded\_file(): Unable to move "C:\xampp\tmp\php2D1D.tmp" to "uploads/PW08 - PHP Form Upload, Cookies, Session - INTER.docx" in C:\xampp\htdocs\dasarWeb\jobsheet8\upload.php on line 6  
Gagal mengunggah file.

An error message appears because the file failed to upload. The warning message `move_uploaded_file(): Failed to open stream: No such file or directory` indicates that the folder “uploads/” was not found in the project directory (`C:\xampp\htdocs\dasarWeb\jobsheet8`). The `move_uploaded_file()` function attempts to move the file from the temporary folder to the uploads folder, but fails because the folder has not been created. As a result, the file is not saved and the message “Failed to upload file” appears.

|   |  |
|---|--|
| 5 | <p>Next, create a folder named <b>uploads</b> in the <b>dasarWeb</b>. Re-run <b>localhost/dasarWeb/form_upload.php</b>. Select a file and click the Submit button. Observe what happens and record your understanding. (Question No. 2)</p>    <p>File berhasil diunggah.</p> <p>Cek the uploaded file in the folder uploads:</p>  <p>The upload process is now complete. The selected file has been moved from another directory to the uploads/ folder. The browser displays the message “File uploaded successfully!”. The newly uploaded file is visible in the uploads folder means that the move_uploaded_file() function is working correctly.</p> |
| 6 | <p>Change the contents of the <b>upload.php</b> file with the following code</p> <pre>&lt;?php if(isset(\$_POST["submit"])){     \$targetdir = "uploads/"; //Direktori tujuan untuk menyimpan file     \$targetfile = \$targetdir . basename(\$_FILES["myfile"]["name"]);     \$fileType = strtolower(pathinfo(\$targetfile, PATHINFO_EXTENSION));      \$allowedExtensions = array("jpg", "jpeg", "png", "gif");     \$maxsize = 5*1024*1024;      if (in_array(\$fileType, \$allowedExtensions) &amp;&amp; \$_FILES["myfile"]["size"]&lt;=\$maxsize){         if(move_uploaded_file(\$_FILES["myfile"]["tmp_name"], \$targetfile)){             echo "File berhasil diunggah.";         }         else{             echo "Gagal mengunggah file.";         }     }     else{         echo "File tidak valid atau melebihi ukuran maksimum yang diizinkan";     } } ?&gt;</pre>  |

```

1 <?php
2 if(isset($_POST["submit"])){
3     $targetdir = "uploads/"; //Direktori tujuan untuk menyimpan file
4     $targetfile = $targetdir . basename($_FILES["myfile"]["name"]);
5     $fileType = strtolower(pathinfo($targetfile, PATHINFO_EXTENSION));
6
7     $allowedExtensions = array("jpg", "jpeg", "png", "gif");
8     $maxsize = 5 * 1024 * 1024;
9
10    if (in_array($fileType, $allowedExtensions) && $_FILES["myfile"]["size"] <= $maxsize) {
11        if (move_uploaded_file($_FILES["myfile"]["tmp_name"], $targetfile)){
12            echo "File berhasil diunggah.";
13        }
14        else{
15            echo "Gagal mengunggah file.";
16        }
17    }
18    else{
19        echo "File tidak valid atau melebihi ukuran maksimum yang diizinkan";
20    }
21 }
22 ?>

```

- 7 Save the file, open a browser and run [localhost/dasarWeb/form\\_upload.php](http://localhost/dasarWeb/form_upload.php)  
 Select a file with the .pdf extension or .docx. Click the Submit button.  
 Observe what happens and record your understanding.

(Question No. 3)

Submit a pdf file



Choose File Lovie Jecho...bsheet7.pdf Submit

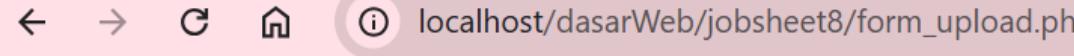


**File tidak valid atau melebihi ukuran maksimum yang diizinkan**

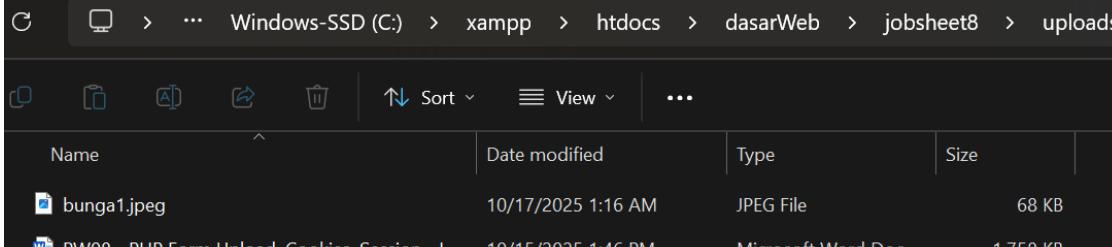
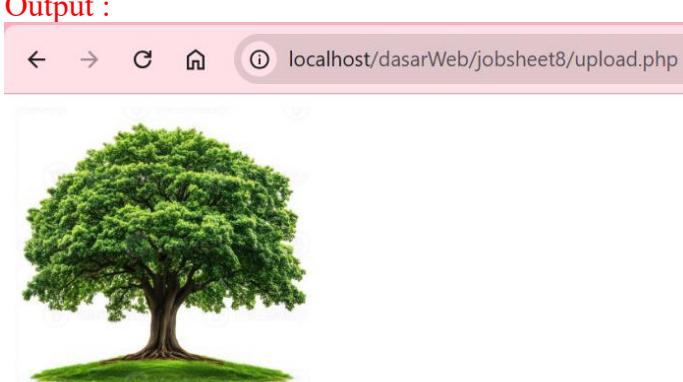
The file failed to upload because the uploaded file format does not match the list of extensions allowed in the \$allowedExtensions array. The PHP script checks the file extension, and if it does not match, the file fails to be moved to the uploads/ folder and an error message is displayed.

- 8 Next run [localhost/dasarWeb/form\\_upload.php](http://localhost/dasarWeb/form_upload.php) again.  
 Select a file with the extension .jpg, .jpeg, .png, or .gif. Click the Submit button.  
 Observe what happens and record your understanding.

(Question No. 4)



Choose File bunga1.jpeg Submit

|   |  |
|---|--|
|   | <p>localhost/dasarWeb/jobsheet8/upload.php</p> <p>File berhasil diunggah.</p>  <p>The file was successfully uploaded because the file format matches the list of extensions allowed in the \$allowedExtensions array, one of which is jpeg. The PHP script will check the file extension, and if it matches, the file will be moved to the uploads/ folder. Then a success message will be displayed.</p>  |
| 9 | <p>Add script from step 6 to display thumbnail image files with a width of 200 and height following the changes automatically after the image file is successfully uploaded. Screen shoot the additional code. Explain your understanding after adding the program code.</p> <p>(Question No. 5)</p>  <p><b>Output :</b></p>  <p>src='uploads/... will shows the location of the newly uploaded file. Since the file is stored in the uploads/ folder, the source image path is directed there. basename(\$_FILES["myfile"]["name"]) will only retrieve the file name (without the temporary directory path). For example, from C:\xampp\htdocs\dasarWeb\jobsheet8\uploads to tree1.jpg . htmlspecialchars(...) used to prevent harmful characters (such as quotation marks or special symbols) from interfering with HTML. width='200' will set the image width to display as a thumbnail with a width of 200 pixels. The height will automatically adjust to the proportions of the original image. As a result, users can immediately see newly uploaded images without manually opening the folder.</p> |

10

Next, change the contents of the **upload.php** file with the following code.

```
<?php
if(isset($_POST["submit"])){
    $targetdir = "uploads/"; //Direktori tujuan untuk menyimpan file
    $targetfile = $targetdir . basename($_FILES["myfile"]["name"]);
    $fileType = strtolower(pathinfo($targetfile, PATHINFO_EXTENSION));

    $allowedExtensions = array("txt", "pdf", "doc", "docx");
    $maxsize = 3*1024*1024;

    if (in_array($fileType, $allowedExtensions) && $_FILES["myfile"]["size"]<=$maxsize)
    {
        if(move_uploaded_file($_FILES["myfile"]["tmp_name"], $targetfile)){
            echo "File berhasil diunggah";
        }
        else{
            echo "Gagal mengunggah file.";
        }
    }
    else{
        echo "File tidak valid atau melebihi ukuran maksimum yang diizinkan";
    }
}
?>
```

```
1  <?php
2  if(isset($_POST["submit"])){
3      $targetdir = "uploads/"; //Direktori tujuan untuk menyimpan file
4      $targetfile = $targetdir . basename($_FILES["myfile"]["name"]);
5      $fileType = strtolower(pathinfo($targetfile, PATHINFO_EXTENSION));
6
7      $allowedExtensions = array("txt", "pdf", "doc", "docx");
8      $maxsize = 3*1024*1024;
9
10     if (in_array($fileType, $allowedExtensions) && $_FILES["myfile"]["size"] <= $maxsize) {
11         if(move_uploaded_file($_FILES["myfile"]["tmp_name"], $targetfile)){
12             echo "<img src='uploads/" . htmlspecialchars(basename($_FILES["myfile"]["name"])) . "' width='200'>";
13             echo "File berhasil diunggah";
14         }
15         else{
16             echo "Gagal mengunggah file.";
17         }
18     }
19     else{
20         echo "File tidak valid atau melebihi ukuran maksimum yang diizinkan";
21     }
22 }
23 ?>
```

11

Save the file, open a browser and run **localhost/dasarWeb/form\_upload.php**. Select a file with an extension of .txt, .pdf, .doc, or .docx that is more than 5 MB in size. Click the Submit button. Observe what happens and record your understanding. (Question No. 6)

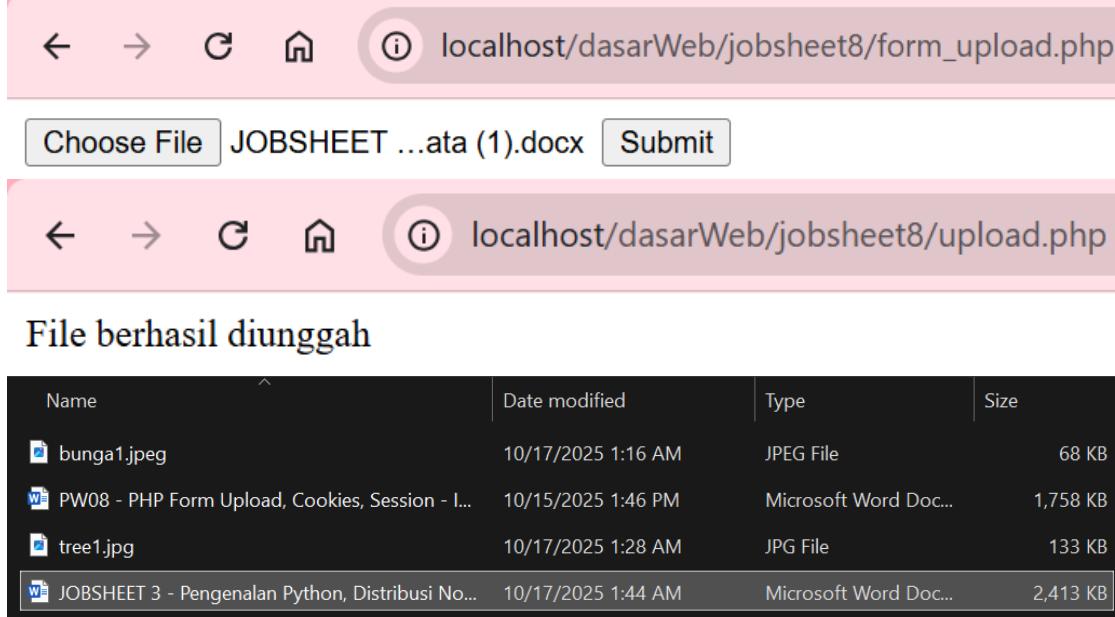
localhost/dasarWeb/jobsheet8/form\_upload.php

Lovie Jecho...bsheet7.pdf

localhost/dasarWeb/jobsheet8/upload.php

File tidak valid atau melebihi ukuran maksimum yang diizinkan

The file failed to upload and an error message appeared because the script limits the maximum file size. By setting a maximum size limit (\$maxsize) and specific file

|   | extensions, the system can prevent large files or files with incompatible formats from being stored on the server. Because the file I submitted exceeded the maxsize, it failed to save to the folder.  |                       |               |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |
|---|---|-----------------------|---------------|------|------|-------------|--------------------|-----------|-------|---|--------------------|-----------------------|----------|-----------|--------------------|----------|--------|---|--------------------|-----------------------|----------|
| 12  | <p>Next run <a href="localhost/dasarWeb/form_upload.php">localhost/dasarWeb/form_upload.php</a> again. Select a file with the extension .txt, .pdf, .doc, or .docx that is less than 3 MB in size. Click the Submit button. Observe what happens and record your understanding.</p> <p>(Question No. 7)</p>  <table border="1"> <thead> <tr> <th>Name</th> <th>Date modified</th> <th>Type</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>bunga1.jpeg</td> <td>10/17/2025 1:16 AM</td> <td>JPEG File</td> <td>68 KB</td> </tr> <tr> <td>PW08 - PHP Form Upload, Cookies, Session - I...</td> <td>10/15/2025 1:46 PM</td> <td>Microsoft Word Doc...</td> <td>1,758 KB</td> </tr> <tr> <td>tree1.jpg</td> <td>10/17/2025 1:28 AM</td> <td>JPG File</td> <td>133 KB</td> </tr> <tr> <td>JOBSITE 3 - Pengenalan Python, Distribusi No...</td> <td>10/17/2025 1:44 AM</td> <td>Microsoft Word Doc...</td> <td>2,413 KB</td> </tr> </tbody> </table> <p>The file was successfully uploaded because its size is within the allowed limit. The script displays a success message and the file is saved in the uploads/ folder.</p> | Name                  | Date modified | Type | Size | bunga1.jpeg | 10/17/2025 1:16 AM | JPEG File | 68 KB | PW08 - PHP Form Upload, Cookies, Session - I... | 10/15/2025 1:46 PM | Microsoft Word Doc... | 1,758 KB | tree1.jpg | 10/17/2025 1:28 AM | JPG File | 133 KB | JOBSITE 3 - Pengenalan Python, Distribusi No... | 10/17/2025 1:44 AM | Microsoft Word Doc... | 2,413 KB |
| Name  | Date modified   | Type                  | Size          |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |
| bunga1.jpeg                                     | 10/17/2025 1:16 AM  | JPEG File             | 68 KB         |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |
| PW08 - PHP Form Upload, Cookies, Session - I... | 10/15/2025 1:46 PM  | Microsoft Word Doc... | 1,758 KB      |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |
| tree1.jpg                                       | 10/17/2025 1:28 AM  | JPG File              | 133 KB        |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |
| JOBSITE 3 - Pengenalan Python, Distribusi No... | 10/17/2025 1:44 AM  | Microsoft Word Doc... | 2,413 KB      |      |      |             |                    |           |       |   |                    |                       |          |           |                    |          |        |   |                    |                       |          |

## Practical Section 2. Multi Upload File

| Step | Description   |
|------|---|
| 1    | Create a new file named <a href="#">form_multiupload.php</a> .  |
| 2    | <p>Type the following code into <a href="#">form_multiupload.php</a>.</p> <pre>&lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt;     &lt;title&gt;Multiupload Dokumen&lt;/title&gt; &lt;/head&gt; &lt;body&gt;     &lt;h2&gt;Unggah Dokumen&lt;/h2&gt;     &lt;form action="proses_upload.php" method="post" enctype="multipart/form-data"&gt;         &lt;input type="file" name="files[]" multiple="multiple" accept=".pdf, .doc, .docx" /&gt;         &lt;input type="submit" value="Unggah" /&gt;     &lt;/form&gt; &lt;/body&gt; &lt;/html&gt;</pre> |

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Multiupload Dokumen</title>
5   </head>
6 <body>
7   <h2>Unggah Dokumen</h2>
8   <form action="proses_upload.php" method="post" enctype="multipart/form-data">
9     <input type="file" name="files[]" multiple="multiple" accept=".pdf, .doc, .docx" />
10    <input type="submit" value="Unggah" />
11  </form>
12 </body>
13 </html>
```

- 3 Create a new file named **proses\_upload.php**. Type the following code.

```
<?php
// Lokasi penyimpanan file yang diunggah
$targetDirectory = "documents/";

// Periksa apakah direktori penyimpanan ada, jika tidak maka buat
if (!file_exists($targetDirectory)) {
    mkdir($targetDirectory, 0777, true);
}

if ($_FILES['files']['name'][0]) {
    $totalFiles = count($_FILES['files']['name']);

    // Loop melalui semua file yang diunggah
    for ($i = 0; $i < $totalFiles; $i++) {
        $fileName = $_FILES['files']['name'][$i];
        $targetFile = $targetDirectory . $fileName;

        // Pindahkan file yang diunggah ke direktori penyimpanan
        if (move_uploaded_file($_FILES['files']['tmp_name'][$i], $targetFile)) {
            echo "File $fileName berhasil diunggah.<br>";
        } else {
            echo "Gagal mengunggah file $fileName.<br>";
        }
    }
} else {
    echo "Tidak ada file yang diunggah.";
}
```

```
1 <?php
2 // Lokasi penyimpanan file yang diunggah
3 $targetDirectory = "documents/";
4
5 // Periksa apakah direktori penyimpanan ada, jika tidak maka buat
6 if (!file_exists($targetDirectory)) {
7     mkdir($targetDirectory, 0777, true);
8 }
9
10 if ($_FILES['files']['name'][0]) {
11     $totalFiles = count($_FILES['files']['name']);
12
13     // Loop melalui semua file yang diunggah
14     for ($i = 0; $i < $totalFiles; $i++) {
15         $fileName = $_FILES['files']['name'][$i];
16         $targetFile = $targetDirectory . $fileName;
17
18         // Pindahkan file yang diunggah ke direktori penyimpanan
19         if (move_uploaded_file($_FILES['files']['tmp_name'][$i], $targetFile)) {
20             echo "File $fileName berhasil diunggah.<br>";
21         } else {
22             echo "Gagal mengunggah file $fileName.<br>";
23         }
24     }
25 } else {
26     echo "Tidak ada file yang diunggah.";
27 }
28 ?>
```

|   |   |
|---|---|
| 4 | <p>Save the file, open the browser and run <a href="localhost/dasarWeb/form_multiupload.php">localhost/dasarWeb/form_multiupload.php</a>. Select multiple files at once to upload. What do you understand from the script in the file? Record your understanding.</p> <p>(Question No. 8)</p>  <h2>Unggah Dokumen</h2> <p>Choose Files 5 files Unggah</p>  <p>File Lovie Jechonia_10_Jobsheet1.pdf berhasil diunggah.<br/>   File Lovie Jechonia_10_Jobsheet2.docx berhasil diunggah.<br/>   File Lovie Jechonia_10_Jobsheet2.pdf berhasil diunggah.<br/>   File Lovie Jechonia_10_Jobsheet3.docx berhasil diunggah.<br/>   File Lovie Jechonia_10_Jobsheet3.pdf berhasil diunggah.</p>  <p>This program is designed to upload multiple files simultaneously using the multi-upload feature in PHP. The input file is given the multiple attribute and name="files[]" so that the file data is sent in array form. In the PHP file, the program uses a for loop to process each file in the \$_FILES array. The move_uploaded_file() function is used to move files from the temporary directory to the documents/ folder. As a result, all selected document files will be uploaded to the server simultaneously, and a success message will be displayed for each file.</p> |
| 5 | <p>Change the code for multi upload of images.<br/>   Screen shoot the code changes and provide an explanation of the code.</p> <p>(Question No. 9)</p>   |

```

1 <!-- Question no 9 -->
2 <?php
3 // Direktori penyimpanan file gambar
4 $targetDirectory = "images/";
5
6 // Cek apakah folder penyimpanan sudah ada, kalau belum buat baru
7 if (!file_exists($targetDirectory)) {
8     mkdir($targetDirectory, 0777, true);
9 }
10
11 if ($_FILES['files']['name'][0]) {
12     $totalFiles = count($_FILES['files']['name']);
13
14     // Jenis file yang diperbolehkan hanya gambar
15     $allowedExtensions = array("jpg", "jpeg", "png", "gif");
16
17     for ($i = 0; $i < $totalFiles; $i++) {
18         $fileName = $_FILES['files']['name'][$i];
19         $fileTmp = $_FILES['files']['tmp_name'][$i];
20         $targetFile = $targetDirectory . $fileName;
21         $fileType = strtolower(pathinfo($targetFile, PATHINFO_EXTENSION));
22
23         // Validasi ekstensi gambar
24         if (in_array($fileType, $allowedExtensions)) {
25             if (move_uploaded_file($fileTmp, $targetFile)) {
26                 echo "Gambar $fileName berhasil diunggah.<br>";
27             } else {
28                 echo "Gagal mengunggah gambar $fileName.<br>";
29             }
30         } else {
31             echo "File $fileName bukan gambar yang valid.<br>";
32         }
33     }
34 } else {
35     echo "Tidak ada file yang diunggah.";
36 }
37 ?>

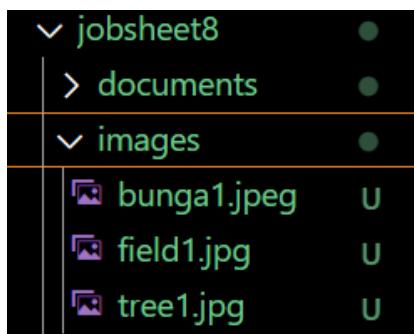
```

← → ⌂ ⌂ localhost/dasarWeb/jobsheet8/proses\_upload.php

Gambar bunga1.jpeg berhasil diunggah.

Gambar field1.jpg berhasil diunggah.

Gambar tree1.jpg berhasil diunggah.



This program is a modification of the previous multi-upload script, but is limited to uploading image files with the extensions .jpg, .jpeg, .png, or .gif. After the files are successfully moved to the images/ folder, this code uses a for loop to process all selected files at once and check which image files have been successfully uploaded.

### Practical Section 3. Upload Files with PHP and Jquery

| Step | Description  |
|------|--|
| 1    | Create a new file named <b>form_upload_ajax.php</b>                  |
| 2    | Type the following code on the <b>form_upload_ajax.php</b>           |
| 3    | Create a new file named <b>upload.js</b> . Write the following code. |

```
● ● ●
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Unggah File Dokumen</title>
5   </head>
6 <body>
7   <form id="upload-form" action="upload_ajax.php" method="post" enctype="multipart/form-data">
8     <input type="file" name="file" id="file">
9     <input type="submit" name="submit" value="Unggah">
10   </form>
11   <div id="status"></div>
12
13   <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
14   <script src="upload.js"></script>
15
16 </body>
17 </html>
```

```
$(document).ready(function(){
    $('#upload-form').submit(function(e){
        e.preventDefault();

        var formData = new FormData(this);

        $.ajax({
            type: 'POST',
            url: 'upload_ajax.php',
            data: formData,
            cache: false,
            contentType: false,
            processData: false,
            success: function(response){
                $('#status').html(response);
            },
            error: function(){
                $('#status').html('Terjadi kesalahan saat mengunggah file.');
            }
        });
    });
});
```

```
● ○ ●

1  $(document).ready(function(){
2      $('#upload-form').submit(function(e){
3          e.preventDefault();
4
5          var formData = new FormData(this);
6
7          $.ajax({
8              type: 'POST',
9              url: 'upload_ajax.php',
10             data: formData,
11             cache: false,
12             contentType: false,
13             processData: false,
14             success: function(response){
15                 $('#status').html(response);
16             },
17             error: function(){
18                 $('#status').html('Terjadi kesalahan saat mengunggah file.');
19             }
20         });
21     });
22 });
```

- |   |  |
|---|--|
| 4 | Create a new file named <b>upload_ajax.php</b> . Write the following code. |
|---|--|

```

<?php
if (isset($_FILES['file'])) {
    $errors = array();
    $file_name = $_FILES['file']['name'];
    $file_size = $_FILES['file']['size'];
    $file_tmp = $_FILES['file']['tmp_name'];
    $file_type = $_FILES['file']['type'];
    @$file_ext = strtolower("." . end(explode('.', $_FILES['file']['name'])));
    $extensions = array("pdf", "doc", "docx", "txt");

    if (in_array($file_ext, $extensions) === false) {
        $errors[] = "Ekstensi file yang diizinkan adalah PDF, DOC, DOCX, atau TXT.";
    }

    if ($file_size > 2097152) {
        $errors[] = 'Ukuran file tidak boleh lebih dari 2 MB';
    }

    if (empty($errors) == true) {
        move_uploaded_file($file_tmp, "documents/" . $file_name);
        echo "File berhasil diunggah.";
    } else {
        echo implode(" ", $errors);
    }
}

```

```

● ○ ●
1  <?php
2  if (isset($_FILES['file'])) {
3      $errors = array();
4      $file_name = $_FILES['file']['name'];
5      $file_size = $_FILES['file']['size'];
6      $file_tmp = $_FILES['file']['tmp_name'];
7      $file_type = $_FILES['file']['type'];
8      @$file_ext = strtolower("." . end(explode('.', $_FILES['file']['name'])));
9      $extensions = array("pdf", "doc", "docx", "txt");
10
11     if (in_array($file_ext, $extensions) === false) {
12         $errors[] = "Ekstensi file yang diizinkan adalah PDF, DOC, DOCX, atau TXT.";
13     }
14
15     if ($file_size > 2097152) {
16         $errors[] = 'Ukuran file tidak boleh lebih dari 2 MB';
17     }
18
19     if (empty($errors) == true) {
20         move_uploaded_file($file_tmp, "documents/" . $file_name);
21         echo "File berhasil diunggah.";
22     }
23     else {
24         echo implode(" ", $errors);
25     }
26 }
27 ?>

```

5

Save the file, then open a browser and run  
**localhost/dasarWeb/form\_upload\_ajax.php**.  
- Upload a file in the form of an image.

|   |   |
|---|---|
|   | <p></p> <ul style="list-style-type: none"> <li>- Upload a PDF file that is &gt; 4 MB in size.</li> </ul> <p></p> <ul style="list-style-type: none"> <li>- Upload .docx files with a size of &lt; 2 MB.</li> </ul> <p></p> <p>Observe what is happening and explain your understanding.</p> <p><b>(Question No. 10)</b></p> <p>The upload is performed using AJAX so that the process does not refresh the page. jQuery retrieves data from the form (FormData) and sends it to upload_ajax.php asynchronously. PHP then validates the file type and size before saving it to the documents/ folder.</p>   |
| 6 | <p>Change the code to be able to do multi-upload image files.<br/>Screenshot the code changes and explain the code.</p> <p><b>(Question No. 11)</b></p> <p><b>Form_upload_ajax</b></p> <pre> 1  &lt;!DOCTYPE html&gt; 2  &lt;html&gt; 3  &lt;head&gt; 4      &lt;title&gt;Multi Upload Gambar&lt;/title&gt; 5      &lt;script src="https://code.jquery.com/jquery-3.6.0.min.js"&gt;&lt;/script&gt; 6      &lt;script src="upload_multi.js"&gt;&lt;/script&gt; 7  &lt;/head&gt; 8  &lt;body&gt; 9      &lt;h2&gt;Unggah Beberapa Gambar Sekaligus&lt;/h2&gt; 10 11     &lt;form id="upload-form" enctype="multipart/form-data"&gt; 12         &lt;input type="file" name="files[]" id="files" multiple accept=".jpg,.jpeg,.png,.gif"&gt;&lt;br&gt;&lt;br&gt; 13         &lt;input type="submit" value="Unggah"&gt; 14     &lt;/form&gt; 15 16     &lt;div id="status"&gt;&lt;/div&gt; 17 &lt;/body&gt; 18 &lt;/html&gt; </pre> <p><b>Upload.js</b></p> |

```
1  $(document).ready(function(){
2      $('#upload-form').submit(function(e){
3          e.preventDefault();
4
5          var formData = new FormData(this);
6
7          $.ajax({
8              type: 'POST',
9              url: 'upload_ajax_multi.php',
10             data: formData,
11             cache: false,
12             contentType: false,
13             processData: false,
14             success: function(response){
15                 $('#status').html(response);
16             },
17             error: function(){
18                 $('#status').html('Terjadi kesalahan saat mengunggah file.');
19             }
20         });
21     });
22 });
```

## Upload\_ajax.php

```
1  <?php
2  $targetDir = "uploads/";
3
4  if (!file_exists($targetDir)) {
5      mkdir($targetDir, 0777, true);
6  }
7
8  if (!empty($_FILES['files']['name'][0])) {
9      $allowedTypes = array("jpg", "jpeg", "png", "gif");
10     $count = count($_FILES['files']['name']);
11
12     for ($i = 0; $i < $count; $i++) {
13         $fileName = basename($_FILES['files']['name'][$i]);
14         $targetFile = $targetDir . $fileName;
15         $fileType = strtolower(pathinfo($targetFile, PATHINFO_EXTENSION));
16
17         if (in_array($fileType, $allowedTypes)) {
18             if (move_uploaded_file($_FILES['files']['tmp_name'][$i], $targetFile)) {
19                 echo "Gambar $fileName berhasil diunggah.<br>";
20                 echo "<img src='$targetFile' width='150'>";
21             } else {
22                 echo "Gagal mengunggah gambar $fileName.<br>";
23             }
24         } else {
25             echo "File $fileName bukan gambar yang valid.<br>";
26         }
27     }
28 } else {
29     echo "Tidak ada file yang diunggah.";
30 }
31 ?>
```

Output:

← → C ⌂ ① localhost/dasarWeb/jobsheet8/form\_upload\_ajax.php

### Unggah Beberapa Gambar Sekaligus

3 files

### Unggah Beberapa Gambar Sekaligus

3 files

Gambar bunga1.jpeg berhasil diunggah.



Gambar field1.jpg berhasil diunggah.



Gambar tree1.jpg berhasil diunggah.



The input has been changed to an array (files[]) and given the multiple attribute, allowing users to upload multiple images at once. The PHP script upload\_ajax\_multi.php uses a for loop to process each file, validate the image extension, and then save it to the uploads/ folder. Once successfully uploaded, each image is displayed directly on the page as a 150 pixel thumbnail without the need to reload the page.

### Practical Section 4. Decorate Upload Files

| Step | Description  |
|------|--|
| 1    | Modify the code of file <b>form_upload_ajax.php</b> in Practical Section 3 |

```

<!DOCTYPE html>
<html>

<head>
    <link rel="stylesheet" type="text/css" href="upload.css">
    <title>Unggah File Dokumen</title>
</head>

<body>
    <div class="upload-form-container">
        <h2>Unggah File Dokumen</h2>
        <form id="upload-form" action="upload.php" method="post" enctype="multipart/form-data">
            <div class="file-input-container">
                <input type="file" name="file" id="file" class="file-input">
                <label for="file" class="file-label">Pilih File</label>
            </div>
            <button type="submit" name="submit" class="upload-button" id="upload-button" disabled>Unggah</button>
        </form>
        <div id="status" class="upload-status"></div>
    </div>

    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
    <script src="upload.js"></script>
</body>

</html>

```

```

1  <!DOCTYPE DOCTYPE html>
2  <html>
3  <head>
4      <link rel="stylesheet" type="text/css" href="upload.css">
5      <title>Unggah File Dokumen</title>
6  </head>
7  <body>
8      <div class="upload-form-container">
9          <h2>Unggah File Dokumen</h2>
10         <form id="upload-form" action="upload.php" method="post" enctype="multipart/form-data">
11             <div class="file-input-container">
12                 <input type="file" name="file" id="file" class="file-input">
13                 <label for="file" class="file-label">Pilih File</label>
14             </div>
15             <button type="submit" name="submit" class="upload-button" id="upload-button" disabled>Unggah</button>
16         </form>
17         <div id="status" class="upload-status"></div>
18     </div>
19
20
21     <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
22     <script src="upload.js"></script>
23 </body>
24 </html>

```

2 Also modify the **upload.js** file as shown in the following code.

```

$(document).ready(function(){
    $('#file').change(function(){
        if (this.files.length > 0) {
            $('#upload-button').prop('disabled', false).css('opacity', 1);
        } else {
            $('#upload-button').prop('disabled', true).css('opacity', 0.5);
        }
    });
});

$('#upload-form').submit(function(e){
    e.preventDefault();

    var formData = new FormData(this);

    $.ajax({
        type: 'POST',
        url: 'upload_ajax.php',
        data: formData,
        cache: false,
        contentType: false,
        processData: false,
        success: function(response){
            $('#status').html(response);
        },
        error: function(){
            $('#status').html('Terjadi kesalahan saat mengunggah file.');
        }
    });
});
});
```

```

1  $(document).ready(function(){
2      $('#file').change(function(){
3          if (this.files.length > 0) {
4              $('#upload-button').prop('disabled', false).css('opacity', 1);
5          } else {
6              $('#upload-button').prop('disabled', true).css('opacity', 0.5);
7          }
8      });
9
10     $('#upload-form').submit(function(e){
11         e.preventDefault();
12         var formData = new FormData(this);
13
14         $.ajax({
15             type: 'POST',
16             url: 'upload_ajax.php',
17             data: formData,
18             cache: false,
19             contentType: false,
20             processData: false,
21             success: function(response){
22                 $('#status').html(response);
23             },
24             error: function(){
25                 $('#status').html('Terjadi kesalahan saat mengunggah file.');
26             }
27         });
28     });
29 });
```

3

Create a new file named **upload.css**. Type the following code:

```
.upload-form-container {
    max-width: 400px;
    margin: 0 auto;
    padding: 20px;
    border: 1px solid #ccc;
    border-radius: 5px;
    text-align: center;
}

h2 {
    margin: 0;
    font-size: 24px;
    color: #333;
}

.file-input-container {
    display: flex;
    justify-content: center;
    align-items: center;
    margin: 20px 0;
}

.file-input {
    display: none;
}

.file-label {
    background: #3498db;
    color: #fff;
    padding: 10px 20px;
    border-radius: 5px;
    cursor: pointer;
}

.upload-button {
    background: #2ecc71;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    opacity: 0.5; /* Opacity to make it appear faded */
}

.upload-button:disabled {
    background: #ccc; /* Change color when disabled */
    cursor: not-allowed; /* Change cursor style when disabled */
}

.upload-status {
    margin-top: 20px;
    font-weight: bold;
}
```

```

● ○ ●

1 .upload-form-container {
2     max-width: 400px;
3     margin: 0 auto;
4     padding: 20px;
5     border: 1px solid #ccc;
6     border-radius: 5px;
7     text-align: center;
8 }
9 h2 {
10    margin: 0;
11    font-size: 24px;
12    color: #333;
13 }
14 .file-input-container {
15     display: flex;
16     justify-content: center;
17     align-items: center;
18     margin: 20px 0;
19 }
20 .file-input {
21     display: none;
22 }
23 .file-label {
24     background: #3498db;
25     color: #fff;
26     padding: 10px 20px;
27     border-radius: 5px;
28     cursor: pointer;
29 }
30 .upload-button {
31     background: #2ecc71;
32     color: #fff;
33     padding: 10px 20px;
34     border: none;
35     border-radius: 5px;
36     cursor: pointer;
37     opacity: 0.5; /* Opacity to make it appear faded */
38 }
39 .upload-button:disabled {
40     background: #ccc; /* Change color when disabled */
41     cursor: not-allowed; /* Change cursor style when disabled */
42 }
43 .upload-status {
44     margin-top: 20px;
45     font-weight: bold;
46 }

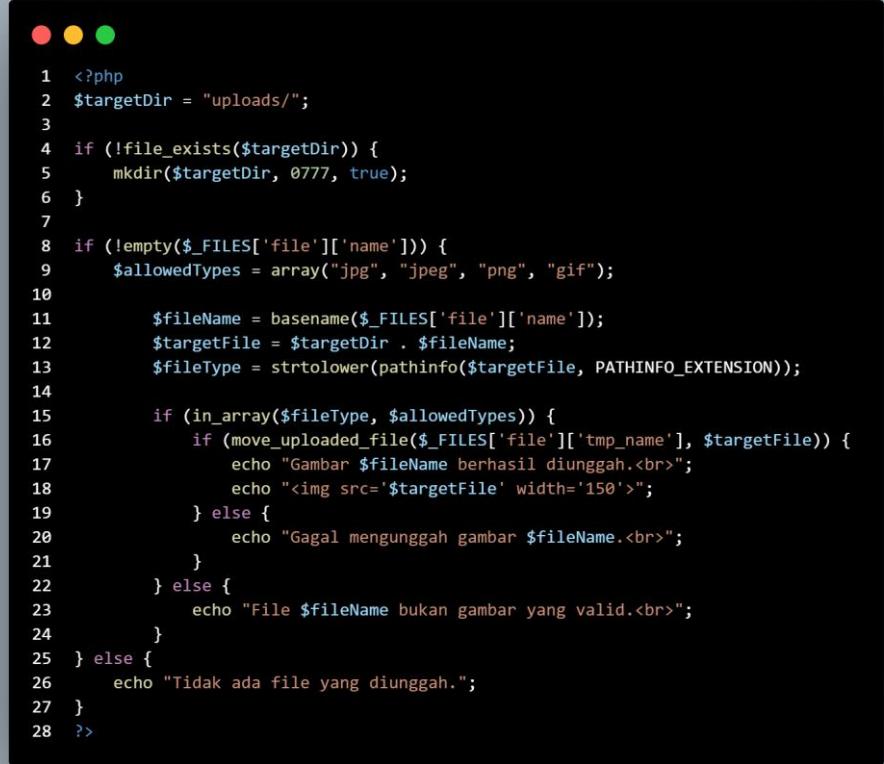
```

4

Save the file. Open a browser and run [localhost/dasarWeb/form\\_upload\\_ajax.php](#). What do you understand from the program code above? Record your understanding.

(Question No. 12)

**Modify file upload\_ajax.php**



```

1 <?php
2 $targetDir = "uploads/";
3
4 if (!file_exists($targetDir)) {
5     mkdir($targetDir, 0777, true);
6 }
7
8 if (!empty($_FILES['file']['name'])) {
9     $allowedTypes = array("jpg", "jpeg", "png", "gif");
10
11     $fileName = basename($_FILES['file']['name']);
12     $targetFile = $targetDir . $fileName;
13     $fileType = strtolower(pathinfo($targetFile, PATHINFO_EXTENSION));
14
15     if (in_array($fileType, $allowedTypes)) {
16         if (move_uploaded_file($_FILES['file']['tmp_name'], $targetFile)) {
17             echo "Gambar $fileName berhasil diunggah.<br>";
18             echo "<img src='$targetFile' width='150'>";
19         } else {
20             echo "Gagal mengunggah gambar $fileName.<br>";
21         }
22     } else {
23         echo "File $fileName bukan gambar yang valid.<br>";
24     }
25 } else {
26     echo "Tidak ada file yang diunggah.";
27 }
28 ?>

```



localhost/dasarWeb/jobsheet8/form\_upload\_ajax.php

Unggah File Dokumen

Pilih File

Unggah



localhost/dasarWeb/jobsheet8/form\_upload\_ajax.php

Unggah File Dokumen

Pilih File

Unggah

Gambar gambar.jpg berhasil diunggah.



form\_upload\_ajax.php for the upload form display. This form is made more attractive with CSS. Users press the “Select File” button to select a file from their computer, then the “Upload” button to send the file to the server.

upload.js for the jQuery script for uploading via AJAX. FormData(this) retrieves the file from the form. \$.ajax() sends the file to upload\_ajax.php asynchronously (without refreshing the page). If successful, the response from PHP is immediately displayed in the #status element.

upload.css for the CSS file for the display. Adds borders, padding, and button colors to make the form more attractive. The Select File and Upload buttons are given a special

|  |  |
|--|--|
|  | style to make them look modern. The Upload button automatically changes color when active/inactive.<br>upload_ajax.php is a PHP file that processes single image file uploads. |
|--|--|

## Introduction to Cookies

A *cookie* is a value that is sent and embedded by a server on the client's computer. *Cookies* are small files that are generally less than 100 bytes, so they won't affect your browsing speed. *Cookies* contain Description relating to the user. *Cookies* are useful for making it easier for users, such as "remembering" users every time they visit the same website.

The Description stored in *cookies* is simple data about user habits. A simple example is when a user visits a website that offers a view with English and Indonesian versions. If the user selects Indonesian, the *cookies* will automatically save the configuration. This configuration will be remembered, so that if the user visits the website again, the user does not need to select the language type again.

*Cookies* have an expiration date, meaning that any data stored on the user's computer could at some point be lost or destroyed. Based on their age, *cookies* are divided into two types, namely *session cookies* and *persistent cookies*. *Session cookies* are a type of *cookie* that is stored temporarily and will disappear when the user closes the browser. These *session cookies* are usually used in the "shopping cart" feature of online shopping sites. *Persistent cookies* are a type of *cookie* that is permanently stored on the computer until the user decides to delete it. *Persistent cookies* are generally used in the "remember me" feature when logging in.

PHP has functions that can be used to create and retrieve cookie values. Cookies must be declared before the page is displayed, which means they are written before the <html> tag. *Cookies* are created using the **setcookie()** function. Here is the basic syntax of the **setcookie()** function:

```
<?php  
    setcookie(name, value, expire);  
?>
```

Description:

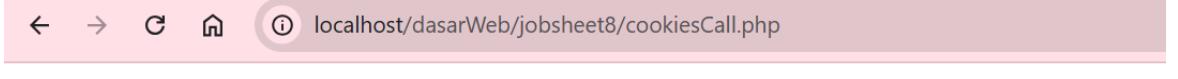
- **name**, is the name of the *cookie* or variable that identifies the *cookie*
- **value**, contains the value stored in the *cookie*
- **expire**, is the period of time that *cookies* will be stored on the computer

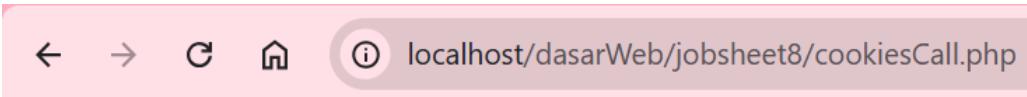
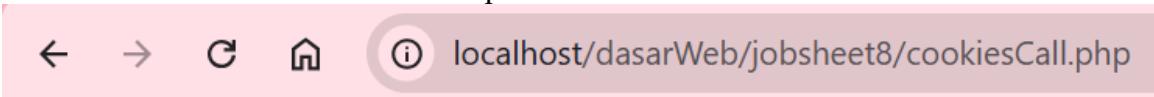
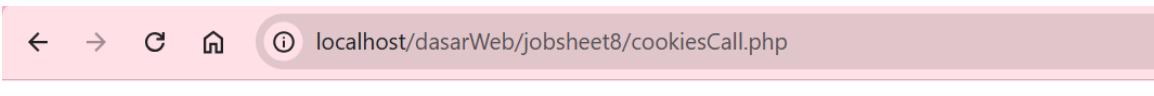
After knowing how to create *cookies*, then the value of the cookies that have been created can be retrieved using the **\$\_COOKIE** variable. The following is the syntax for retrieving the value of *cookies*:

```
<?php  
    $_COOKIE['user'];  
?>
```

## Practical Section 5. Creating Cookies

| Step | Description |
|------|-------------|
|------|-------------|

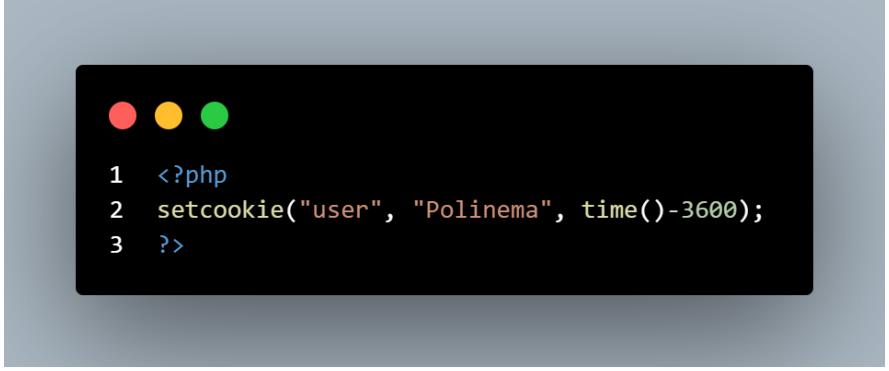
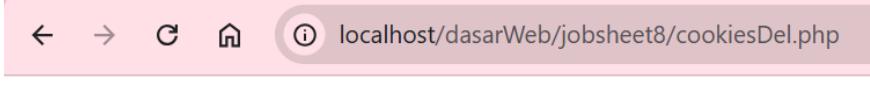
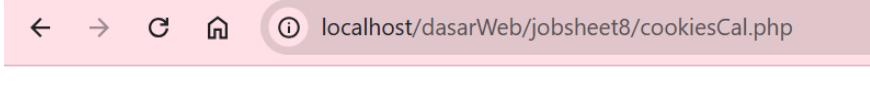
|   |  |
|---|--|
| 1 | <p>Create a new file named <b>cookiesCreate.php</b>, then type the following code.</p> <pre> 1 &lt;?php 2     setcookie("user", "Polinema", time() + 3600); 3 ?&gt; </pre>   |
| 2 | <p>Create a new file named <b>cookiesCall.php</b>, then type the following code.</p> <pre> 1 &lt;?php 2     echo \$_COOKIE['user']; 3 ?&gt; </pre>   |
| 3 | <p>Open a <i>browser</i> and run the program code in step 2 by typing<br/> <b>localhost/dasarWeb/cookiesCall.php</b></p>  <p><b>Warning:</b> Undefined array key "user" in C:\xampp\htdocs\dasarWeb\jobsheet8\cookiesCall.php on line 2</p>  |
| 4 | <p>Observe and explain your observations<br/> <b>(Question No. 13)</b></p> <p>This happens because we call cookiesCall first, when we should call cookiesCreate first to perform the input. So PHP tries to access <code>\$_COOKIE["user"]</code>, but the <code>\$_COOKIE</code> array does not have that index because it has not been set, resulting in an Undefined array key warning. The cookie must be created first and then called (via cookiesCall.php).</p> |
| 5 | <p>Open a <i>browser</i> and run the program code step 1 by typing<br/> <b>localhost/dasarWeb/cookiesCreate.php</b></p>    |
| 6 | <p>Repeat step 3.</p>  |

|    |  |
|----|--|
|    |  <p>Polinema</p>   |
| 7  | <p>Observe and explain the results displayed<br/> <b>(Question No. 14)</b></p> <p>Now, because we have called cookiesCreate first before cookiesCall, the expected output appears, which is polinema. So, in the cookiesCreate file, a cookie named user is created with the value “Polinema” using the setcookie() function. The cookie is set to be valid for 3600 seconds or 1 hour and is stored in the user's browser. When the cookiesCall.php page is run, the system reads the cookie through the \$_COOKIE variable. If the cookie is available, Polinema will appear.</p>  |
| 8  | <i>Restart your computer.</i>  |
| 9  | Once the computer is turned on, restart Apache on the laragon.   |
| 10 | Open the same browser as before then repeat step 3.  |
| 11 | <p>Observe and explain the results displayed.<br/> <b>(Question No. 15)</b></p> <p>First of all the code setcookie("user", "Polinema", time()+3600); means the cookie named user is stored in browser and will last for 1 hour from the time it's created. When we restart the computer the browser session and server (Apache) memory are cleared. However, cookies are stored on the client (browser) and persist until their expiration time. So :</p> <p>If the browser preserves cookies across restarts, and the 1 hour expiry time has not passed, then the cookie still exists and the output is still Polinema.</p>  <p>Polinema</p> <p>But if the cookie expired or the 1 hour passed then PHP will not find it, and will display Warning: Undefined array key “user” just the same when cookiesCall is run before cookiesCreate.</p>  <p><b>Warning:</b> Undefined array key "user" in C:\xampp\htdocs\dasarWeb\jobsheet8\cookiesCall.php on line 2</p> |

### Practical Section 6. Deleting the Value of Cookies

In this Practical Section, it will be discussed how to delete the value of *cookies*. If in the previous Practical Section the *cookies* were set with an *expiration time() +3600*, then to delete the cookie value is as follows:

| Step | Description |
|------|-------------|
|------|-------------|

|   |   |
|---|---|
| 1 | <p>Create a new file with <b>cookiesDel.php</b> name, then type the following code.</p> <pre> 1 &lt;?php 2     setcookie("user", "Polinema", time()-3600); 3 ?&gt;</pre>   |
| 2 | <p>Open a <i>browser</i> and run the program code by typing <b>localhost/dasarWeb/cookiesDel.php</b></p>    |
| 3 | <p>Open a <i>browser</i> and run the program code from the part 5 Practical Section by typing <b>localhost/dasarWeb/cookiesCall.php</b></p>  <p><b>Not Found</b></p> <p>The requested URL was not found on this server.</p> <hr/> <p><i>Apache/2.4.58 (Win64) OpenSSL/3.1.3 PHP/8.2.12 Server at localhost Port 80</i></p>                        |
| 4 | <p>Observe and describe the results from steps 2 and 3, then draw conclusions.<br/> <b>(Question No. 16)</b></p> <p>This occurs because the code in cookiesDel means that we created a “user” cookie with an expiration time of one hour ago. In the context of PHP and the browser, the expiration time has passed. Therefore, the cookie is immediately deleted from the browser's storage and the cookie input cannot be read.</p> |

### Practical Section 7. Application of *Cookies* to the Shopping Cart Feature

One example of the use of *cookies* is the "shopping cart" feature on the online store web application. The shopping cart contains the items that the user will buy. *Cookies* are used to remember the number of items selected by the user. Here is an example of the use of *cookies* in the shopping cart feature:

| Step | Description   |
|------|---|
| 1    | Create a new file with <b>FormBeli.html</b> name, then type the following code. |

```
1 <html>
2   <head>
3   </head>
4   <body>
5     <form action="prosesBeli.php" method="POST">
6       <p> Jumlah Novel yang dibeli :
7         <input type="text" name="beliNovel" value= "0" size="2"> </p>
8       <p> Jumlah Buku Teks yang dibeli :
9         <input type="text" name="beliBuku" value= "0" size="2"> </p>
10      <input type="submit">
11    </form>
12  </body>
13 </html>
```



```
1 <html>
2   <head>
3   </head>
4   <body>
5     <form action="prosesBeli.php" method="POST">
6       <p> Jumlah Novel yang dibeli :
7         <input type="text" name="beliNovel" value="0" size="2"></p>
8       <p> Jumlah Buku Teks yang dibeli :
9         <input type="text" name="beliBuku" value="0" size="2"></p>
10      <input type="submit">
11    </form>
12  </body>
13 </html>
```

2

Create a new file named **prosesBeli.php**, then type the following code.

```
1 <?php
2   if(isset($_POST["beliNovel"]) && isset($_POST["beliBuku"])){
3     setcookie("beliNovel", $_POST["beliNovel"]);
4     setcookie("beliBuku", $_POST["beliBuku"]);
5     header("location:keranjangBelanja.php");
6   }
7 ?>
```



```
1 <?php
2   if(isset($_POST["beliNovel"]) && isset($_POST["beliBuku"])){
3     setcookie("beliNovel", $_POST["beliNovel"]);
4     setcookie("beliBuku", $_POST["beliBuku"]);
5     header("location: keranjangBelanja.php");
6   }
7 ?>
```

- 3 Create a new file named **keranjangBelanja.php**, then type the following code.

```

1 <html>
2   <head>
3   </head>
4   <body>
5     <h2> Keranjang Belanja </h2>
6
7     <?php
8       $beliNovel=$_COOKIE['beliNovel'];
9       $beliBuku = $_COOKIE['beliBuku'];
10
11      echo "Jumlah Novel:" . $beliNovel .<br>;
12      echo "Jumlah Buku :" . $beliBuku ;
13
14    </body>
15 </html>
```



```

1 <html>
2   <head>
3   </head>
4   <body>
5     <h2>Keranjang Belanja</h2>
6     <?php
7       $beliNovel=$_COOKIE['beliNovel'];
8       $beliBuku = $_COOKIE['beliBuku'];
9
10      echo "Jumlah Novel: ". $beliNovel ."<br>";
11      echo "Jumlah Buku : ". $beliBuku ;
12
13    </body>
14 </html>
```

- 4 Open a *browser* and run the program code step 3 by typing  
**localhost/dasarWeb/keranjangBelanja.php**

localhost/dasarWeb/jobsheet8/keranjangBelanja.php

## Keranjang Belanja

**Warning:** Undefined array key "beliNovel" in C:\xampp\htdocs\dasarWeb\jobsheet8\keranjangBelanja.php on line 7

**Warning:** Undefined array key "beliBuku" in C:\xampp\htdocs\dasarWeb\jobsheet8\keranjangBelanja.php on line 8  
 Jumlah Novel:  
 Jumlah Buku :

- 5 Observe and explain the results displayed.  
**(Question No. 17)**

|    |  |
|----|--|
|    | An error occurs because we opened keranjangBelanja.php first, while the beliNovel and beliBuku cookies have not been created by prosesBeli.php. Here, PHP tries to read cookie values that do not exist, so it displays a warning that the array key has not been defined.   |
| 6  | Run the program code step 1 by typing <a href="localhost/dasarWeb/formBeli.html">localhost/dasarWeb/formBeli.html</a>  |
| 7  | Fill in the number of novels and textbooks you want to buy and then click the "submit" button.<br> <p>Jumlah Novel yang dibeli : <input type="text" value="3"/></p> <p>Jumlah Buku Teks yang dibeli : <input type="text" value="1"/></p> <p>Submit</p> <p>← → ⌂ ⌂ localhost/dasarWeb/jobsheet8/formBeli.html</p>                                 |
| 8  | Observe and explain the results displayed.<br><span style="color: red;">(Question No. 18)</span><br>When the formBeli.php page is opened for the first time, a form will appear for entering the number of novels and books to be purchased. After the user presses the submit button, the data is sent to prosesBeli.php to create a cookie, then redirected to the keranjangBelanja.php page which displays the purchase amount. |
| 9  | Close the browser then reopen the browser then re-run the program code step 3 by typing <a href="localhost/dasarWeb/keranjangBelanja.php">localhost/dasarWeb/keranjangBelanja.php</a><br> <h2>Keranjang Belanja</h2> <p>Jumlah Novel: 3</p> <p>Jumlah Buku : 1</p> <p>← → ⌂ ⌂ localhost/dasarWeb/jobsheet8/keranjangBelanja.php</p>            |
| 10 | Observe and explain the results displayed.<br><span style="color: red;">(Question No. 19)</span><br>Even after closing the browser and reopening a new tab, the data in keranjangBelanja.php still appears exactly the same because the data is stored in cookies, not in regular variables. The setcookie() function stores data in the browser (client), not on the server or in temporary variables.                            |

### Session Introduction

*Session* is one of the facilities in PHP that is used to store data as a result of being stored in variables, so that the data can be accessed by the user as long as the *session* variable is not emptied or deleted.

*Sessions* are almost the same in principle as *cookies*, the difference is the position of the data storage. If *cookies* store data on the *client*, the session *data* will be stored on the server side. So *sessions* are relatively safer to use to store confidential value variables such as *usernames* and *passwords* at the time of login. Examples of using *sessions* include storing valid login Description in only one session and storing records of ordering goods in the *e-commerce*/online transaction system. The following table describes the comparison of *cookies* and *sessions*:

Comparison of *Cookies* and *Sessions*

|                | Storing Description | Storage Location | Can be summoned | Global | Can be called up at another time | Browser Restricted | User editable |
|----------------|---------------------|------------------|-----------------|--------|----------------------------------|--------------------|---------------|
| <i>Cookies</i> | Yes                 | <i>Client</i>    | Yes             | Yes    | Yes                              | Yes                | Yes           |
| <i>Session</i> | Yes                 | <i>Server</i>    | Yes             | Yes    | Not                              | Not                | Not           |

To create a *session* in PHP the **session\_start()** function is used. Here is the basic syntax for starting a *session*:

```
<?php
    session_start();
?>
```

Once the *session* starts, the *session* variable can be used. The variable in question is the PHP global variable **\$SESSION**. Here's the syntax of using the **\$SESSION** global variable:

```
<?php
    $_SESSION['nameVariable'];
?>
```

## Practical Section 8. Creating a *Session*

| Step | Description  |
|------|--|
| 1    | Create a new file named <b>sessionCreate.php</b> , then type the following code. |

```
1 <?php
2     session_start();
3 ?>
4
5 <!DOCTYPE html>
6 <html>
7     <body>
8         <?php
9             $_SESSION["favcolor"] = "green";
10            $_SESSION["favanimal"] = "cat";
11            echo "Session variables are set.";
12        ?>
13    </body>
14 </html>
```



```
1 <?php
2 session_start();
3 ?>
4
5 <!DOCTYPE html>
6 <html lang="en">
7 <body>
8     <?php
9         $_SESSION["favcolor"] = "green";
10        $_SESSION["favanimal"] = "cat";
11        echo "Session variables are set.";
12    ?>
13 </body>
14 </html>
```

- 2 Create a new file named **sessionCall.php**, then type the following code.

```
1 <?php
2     session_start();
3 ?>
4 <!DOCTYPE html>
5 <html>
6     <body>
7         <?php
8             echo "Favorite color is " . $_SESSION["favcolor"] . ".<br>";
9             echo "Favorite animal is " . $_SESSION["favanimal"] . ".";
10        ?>
11    </body>
12 </html>
```

```

1 <?php
2 session_start();
3 ?>
4 <!DOCTYPE html>
5 <html lang="en">
6 <body>
7 <?php
8 echo "Favorite color is " . $_SESSION["favcolor"] . ".<br>";
9 echo "Favorite animal is " . $_SESSION["favanimal"] . ".";
10 ?>
11 </body>
12 </html>

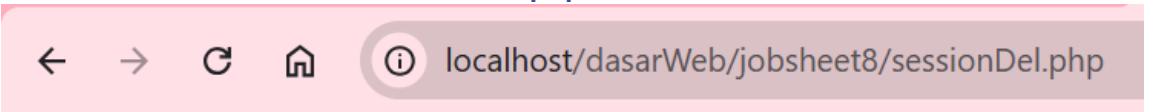
```

- |   |   |
|---|---|
|   | <pre> 1 &lt;?php 2 session_start(); 3 ?&gt; 4 &lt;!DOCTYPE html&gt; 5 &lt;html lang="en"&gt; 6 &lt;body&gt; 7 &lt;?php 8 echo "Favorite color is " . \$_SESSION["favcolor"] . ".&lt;br&gt;"; 9 echo "Favorite animal is " . \$_SESSION["favanimal"] . "."; 10 ?&gt; 11 &lt;/body&gt; 12 &lt;/html&gt; </pre>  |
| 3 | <p>Open a <i>browser</i> and run the program code in step 2 by typing <b>localhost/dasarWeb/sessionCall.php</b></p> <p><b>localhost/dasarWeb/jobsheet8/sessionCall.php</b></p> <p><b>Warning:</b> Undefined array key "favcolor" in C:\xampp\htdocs\dasarWeb\jobsheet8\sessionCall.php on line 8<br/>Favorite color is .</p> <p><b>Warning:</b> Undefined array key "favanimal" in C:\xampp\htdocs\dasarWeb\jobsheet8\sessionCall.php on line 9<br/>Favorite animal is .</p>  |
| 4 | <p>Open a <i>browser</i> and run the program code step 1 by typing <b>localhost/dasarWeb/sessionCreate.php</b></p> <p><b>localhost/dasarWeb/jobsheet8/sessionCreate.php</b></p> <p>Session variables are set.</p>   |
| 5 | <p>Repeat step 3</p> <p><b>localhost/dasarWeb/jobsheet8/sessionCall.php</b></p> <p>Favorite color is green.<br/>Favorite animal is cat.</p>   |
| 6 | <p>Observe and explain the results displayed <b>(Question No. 20)</b></p> <p>This case is exactly the same as the cookie discussed earlier. The only difference is that now it is not an unset cookie, but a session variable that has never been created. The sessionCreate.php file functions to create and store session data, while sessionCall.php is used to display the session values that have been created. If sessionCall.php is run first, PHP will display an Undefined array key warning because the session data does not yet exist. After sessionCreate.php is executed, the data is stored on the server and can be accessed by sessionCall.php without needing to be re-entered. Sessions are server-side</p> |

and will remain active as long as the user's session has not ended. Cookies store data in the browser (client) and can last a long time. Sessions store data on the server (server-side) and only last as long as the user's session is active.

## Practical Section 9. Removing Session Values

PHP provides a **session\_destroy()** function that can be used to delete *sessions*.

| Step | Description   |
|------|---|
| 1    | <p>Create a new file named <b>sessionDel.php</b>, then type the following code.</p>  <pre> 1 &lt;?php 2 session_start(); 3 ?&gt; 4 5 &lt;!DOCTYPE html&gt; 6 &lt;html&gt; 7 &lt;body&gt; 8 &lt;?php 9 session_unset(); 10 session_destroy(); 11 12 echo "All session variables are now removed, and the session is destroyed." 13 ?&gt; 14 &lt;/body&gt; 15 &lt;/html&gt; </pre> |
| 2    | <p>Open a <i>browser</i> and run the program code by typing <b>localhost/dasarWeb/sessionDel.php</b></p>  <p>All session variables are now removed, and the session is destroyed.</p>   |
| 3    | <p>Open a <i>browser</i> and run the program code from the Practical Section 8 by typing <b>localhost/dasarWeb/sessionCall.php</b></p>  |

|   |  |
|---|--|
|   | <p>localhost/dasarWeb/jobsheet8/sessionCall.php</p> <p><b>Warning:</b> Undefined array key "favcolor" in C:\xampp\htdocs\dasarWeb\jobsheet8\sessionCall.php on line 8<br/>Favorite color is .</p> <p><b>Warning:</b> Undefined array key "favanimal" in C:\xampp\htdocs\dasarWeb\jobsheet8\sessionCall.php on line 9<br/>Favorite animal is .</p>  |
| 4 | <p>Observe and explain the results displayed.<br/><b>(Question No. 21)</b></p> <p>When we run sessionDel, the following two functions are executed:<br/>session_unset() will deletes all variables stored in \$_SESSION.<br/>session_destroy() will deletes the session file on the server and terminates the active session (deletes the ID).</p> <p>As a result, the session is empty and no longer exists, as shown in the previous practical example that displayed the output. Then, when we run sessionCall again, PHP does not find the favcolor and favanimal keys in the \$_SESSION array because they have been deleted, so a warning appears.</p> |

## Practical Section 10. Implementation of Session on the Login Feature

| Step | Description  |
|------|--|
| 1    | <p>Create a new file named <b>sessionLoginForm.html</b>, then type the following code</p> <pre>&lt;html&gt;   &lt;head&gt;     &lt;title&gt;File Upload&lt;/title&gt;   &lt;/head&gt;   &lt;body&gt;     &lt;form action="sessionLoginProcess.php" method="POST"&gt;       &lt;table&gt;         &lt;tr&gt;           &lt;td&gt;Username&lt;/td&gt;           &lt;td&gt;&lt;input type="text" name="username" size="20"&gt;&lt;/td&gt;         &lt;/tr&gt;         &lt;tr&gt;           &lt;td&gt;Password&lt;/td&gt;           &lt;td&gt;&lt;input type="password" name="password" size="20"&gt;&lt;/td&gt;         &lt;/tr&gt;         &lt;tr&gt;           &lt;td&gt;&amp;nbsp;&lt;/td&gt;           &lt;td&gt;&lt;input type="submit" name="login" value="Login"&gt;&lt;/td&gt;         &lt;/tr&gt;       &lt;/table&gt;     &lt;/form&gt;   &lt;/body&gt; &lt;/html&gt;</pre> |

```

1 <html>
2   <head>
3     <title>File Upload</title>
4   </head>
5   <body>
6     <form action="sessionLoginProcess.php" method="POST">
7       <table>
8         <tr>
9           <td>Username</td>
10          <td><input type="text" name="username" size="20"></td>
11        </tr>
12        <tr>
13          <td>Password</td>
14          <td><input type="password" name="password" size="20"></td>
15        </tr>
16        <tr>
17          <td>&nbsp;</td>
18          <td><input type="submit" name="login" value="Login"></td>
19        </tr>
20      </table>
21    </form>
22  </body>
23 </html>

```

2 Create a file named **sessionLoginProcess.php**, then type the following code.

```

<?php
$username = $_POST['username'];
$password = $_POST['password'];

if($username=="admin" && $password=="1234"){
    session_start();
    $_SESSION["username"] = $username;
    $_SESSION["status"] = 'login';
    echo "Anda berhasil login. Silahkan menuju <a href='homeSession.php'>Halaman Home</a>";
}
else{
    echo "Gagal login. Silahkan login lagi <a href='sessionLoginForm.html'>Halaman Login</a>";
}
?>

```

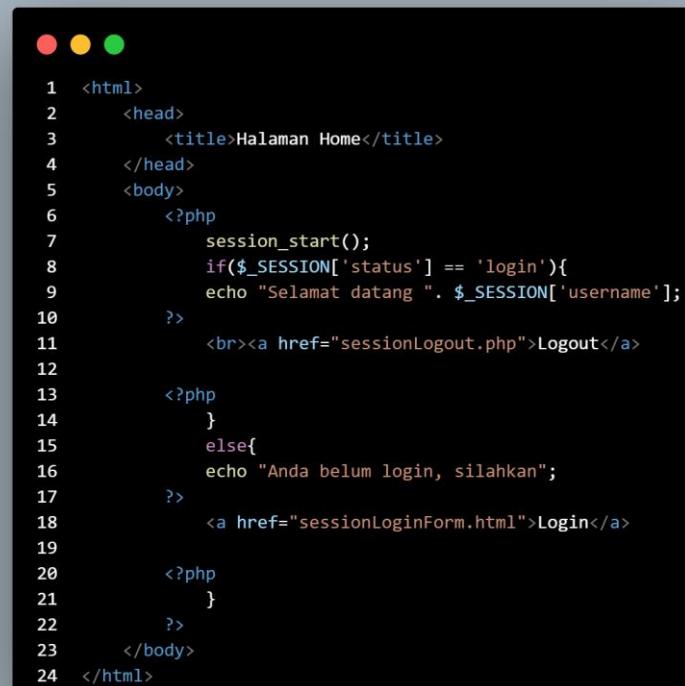
```

1 <?php
2 $username = $_POST['username'];
3 $password = $_POST['password'];
4
5 if($username=="admin" && $password=="1234"){
6     session_start();
7     $_SESSION["username"] = $username;
8     $_SESSION["status"] = 'login';
9     echo "Anda berhasil login. Silahkan menuju <a href='homeSession.php'>Halaman Home</a>";
10 }
11 else{
12     echo "Gagal login. Silahkan login lagi <a href='sessionLoginForm.html'>Halaman Login</a>";
13 }
14 ?>

```

3 Create a file named **homeSession.php**, then type the following code.

```
<html>
    <head>
        <title>Halaman Home</title>
    </head>
    <body>
        <?php
            session_start();
            if($_SESSION['status']=='login'){
                echo "Selamat datang " . $_SESSION['username'];
            }>
                <br><a href="sessionLogout.php">Logout</a>
            <?php
            }
            else{
                echo "Anda belum login, silahkan";
            }>
                <a href="sessionLoginForm.html">Login</a>
            <?php
            }
        ?>
    </body>
</html>
```



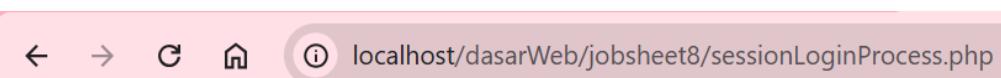
```
1  <html>
2      <head>
3          <title>Halaman Home</title>
4      </head>
5      <body>
6          <?php
7              session_start();
8              if($_SESSION['status'] == 'login'){
9                  echo "Selamat datang " . $_SESSION['username'];
10             ?>
11                 <br><a href="sessionLogout.php">Logout</a>
12
13             <?php
14             }
15             else{
16                 echo "Anda belum login, silahkan";
17             ?>
18                 <a href="sessionLoginForm.html">Login</a>
19
20             <?php
21             }
22         ?>
23     </body>
24 </html>
```

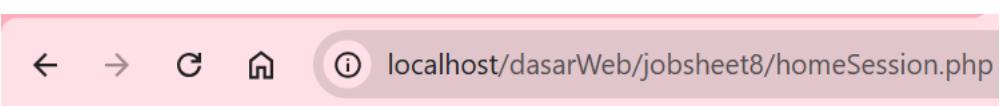
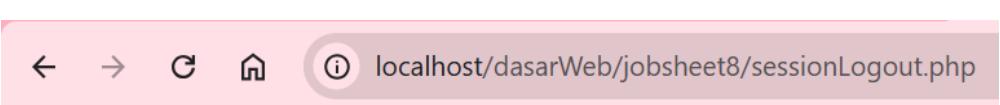
4

Create a file named **sessionLogout.php**, then type the following code.

```
<?php
    session_start();
    session_destroy();

    echo "Anda berhasil logout";
?>
```

|   |  |
|---|--|
|   |  <pre> 1 &lt;?php 2 session_start(); 3 session_destroy(); 4 5 echo "Anda berhasil logout"; 6 ?&gt; </pre>   |
| 5 | <p>Open a <i>browser</i> and run the program code by typing <b>localhost/dasarWeb/sessionLoginForm.html</b></p>  |
| 6 | <p>Log in using your email username and password "0000".</p>  <p>Username <input type="text" value="lovietonimba@gmail.com"/><br/>     Password <input type="password" value="...."/><br/> <input type="button" value="Login"/></p>  <p>Gagal login. Silahkan login lagi <a href="#">Halaman Login</a></p>   |
| 7 | <p>Observe and explain the results displayed<br/> <b>(Question No. 22)</b></p> <p>When entering the username "admin" but the password is incorrect, the system will display a login failure message. This occurs because the login verification process in sessionLoginProcess.php will only be successful if the username and password match the values specified in the code, namely username = 'admin' and password = "1234". Since these conditions are not met, the session is not created and the user is considered not logged in. The user is asked to return to the login form page to try again with the correct data.</p> |
| 8 | <p>Re-run the program code by typing <b>localhost/dasarWeb/sessionLoginForm.html</b><br/>     Log in using the username "admin" and password "1234".</p>  <p>Username <input type="text" value="admin"/><br/>     Password <input type="password" value="...."/><br/> <input type="button" value="Login"/></p>   |

|    |   |
|----|---|
|    | <br><br>  |
| 9  | <p>Observe and explain the results displayed<br/> <b>(Question No. 23)</b></p> <p>When entering the username “admin” and password “1234”, the login process is successful because the values entered match the conditions specified in the sessionLoginProcess.php file. The system then runs session_start() and creates two session variables, namely \$_SESSION[‘username’] and \$_SESSION[‘status’]. After a successful login, the user is directed to the homeSession.php page which displays the message “Welcome admin” and a Logout button. The session remains active as long as the browser is open. After the user clicks Logout, all session data is deleted using session_destroy(), and the system displays the message “You have successfully logged out.”</p>   |
| 10 | <p>Describe the sequence of the process from login to logout (also mention the order in which the files are processed)<br/> <b>(Question No. 24)</b></p> <ol style="list-style-type: none"> <li>1) sessionLoginForm.html<br/> The user opens this HTML page. It displays a login form asking for username and password. When the user clicks the Login button, the form data is sent via POST to sessionLoginProcess.php.</li> <li>2) sessionLoginProcess.php<br/> This PHP file receives the input data from the login form and checks if the username and password are correct. If the login data is valid, then starts a session with session_start(). Then stores session variables: \$_SESSION["username"] and \$_SESSION["status"]="login". And it displays a success message and a link to homeSession.php. But if invalid, it shows a “Login failed” message and a link back to the login form.</li> <li>3) homeSession.php<br/> When the user opens this page, session_start() is called again to access the existing session. The script checks, if(\$_SESSION['status'] == 'login') If true then displays: “Selamat datang admin” and a link to Logout. But if it’s false (no active session) then it will asks the user to log in again.</li> <li>4) sessionLogout.php<br/> When the user clicks the Logout link, this file is executed starts the session again (session_start()). Then removes all session data using session_destroy(); and displays a message: “Anda berhasil logout.” After this all session data is deleted from the server.</li> </ol> |

**Github link :** <https://github.com/Lovie-Tonimba/semester3-PemrogramanWeb.git>