

# Tutorial 10 – PHP Sessions

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# PHP Sessions

## **On the internet, there is one problem:**

the web server does not know who you are or what you do, because the HTTP address doesn't maintain state.

## **Here PHP session comes in handy**

# PHP Sessions

**A session is a way to store information (in variables) to be used across multiple pages.**

**Unlike a cookie, the information is not stored on the users computer.**

**Session variables solve this problem by storing user information to be used across multiple pages (e.g. username, favorite color, etc).**

**By default, session variables last until the user closes the browser.**

# PHP Session

**Session variables hold information about one single user, and are available to all pages in one application.**

**Tip:** If you need a permanent storage, you may want to store the data in a database.

# How do PHP sessions work?

## In a typical situation:

- (1) The session id is sent to the user when his session is created.
- (2) It is stored in a cookie (called, by default, **PHPSESSID**)
- (3) That cookie is sent by the browser to the server with each request
- (4) The server (PHP) uses that cookie, containing the session\_id, to know which file corresponds to that user.

# How do PHP sessions used?

To start a session you need to use **session\_start()**

The **session\_start()** function must be the very first thing in your document.

Before any HTML tags.

```
<?php
// Start the session
session_start();
?>
<!DOCTYPE html>
<html>
<body>
```

## How do PHP sessions used? (2)

If for example you want to save the *name* of the user during his/her session.

set a variable with the PHP global variable: `$_SESSION`.

```
<?php
// Set session variables
$_SESSION["name"] = "Anna Conda";
$_SESSION["location"] = "Madagascar";
echo "Session variables are set.";
?>
```

## How do PHP sessions used? (3)

To retrieve session variables you need to open the session in the beginning of the page: **session\_start();**

As all session variable values are stored in the global **\$\_SESSION** variable, get the values as follows:

```
<?php
// Echo session variables that were set on previous page
echo "Favorite color is " . $_SESSION["name"] . "<br>";
echo "Favorite animal is " . $_SESSION["location"] . ".";
?>
```



# How do PHP sessions used? (4)

**To modify session variables just override their values:**

```
<?php
// to change a session variable, just overwrite it
$_SESSION["location"] = "Doha, Qatar";
print_r($_SESSION);
?>
```

# How do PHP sessions used? (5)

To remove all global session variables and destroy the session, use `session_unset()` and `session_destroy()`:

```
<?php
// remove all session variables
session_unset();

// destroy the session
session_destroy();
```

Note: you still need to ~~start session~~ <sup>start session</sup> in beginning of the page.

If you want to remove just one session variable use `unset($_SESSION["location"])`

# Other functions

Another way to show all the session variable values for a user session is to use **print\_r()** .

```
<?php  
print_r($_SESSION);  
?>
```

# PHP Cookies

A cookie is created with the **setcookie()** function.

```
<?php
$cookie_name = "user";
$cookie_value = "John Doe";
setcookie($cookie_name, $cookie_value, time() + (86400 * 30), "/"); // 86400 = 1 day
?>
```

# PHP Cookies

```
<?php
$cookie_name = "user";
$cookie_value = "John Doe";
setcookie($cookie_name, $cookie_value, time() + (86400 * 30), "/"); // 86400 = 1 day
?>
```

# References

- [https://www.w3schools.com/php/php\\_sessions.asp](https://www.w3schools.com/php/php_sessions.asp)
- <https://stackoverflow.com/questions/1535697/how-do-php-sessions-work-not-how-are-they-used>
- Other SOEN287 slides about PHP sessions