

# Intro to Web Development with PHP

## **Lesson 1**

# What is PHP?

- Computer programming software that is mostly used for building websites.
- Developed by Rasmus Lerdorf in 1994.
- Collection of small computer programs / scripts that he used to build websites.
- PHP/FI - Personal Home Page / Forms Interpreter



# What is PHP?

- 1997 - Andi Gutmans & Zeev Suraski helped to turn it into a real programming language (PHP 3.0)
- PHP: Hypertext Preprocessor
- PHP 3 Released in June 1998
- One of the most commonly used programming language used for building dynamic websites.



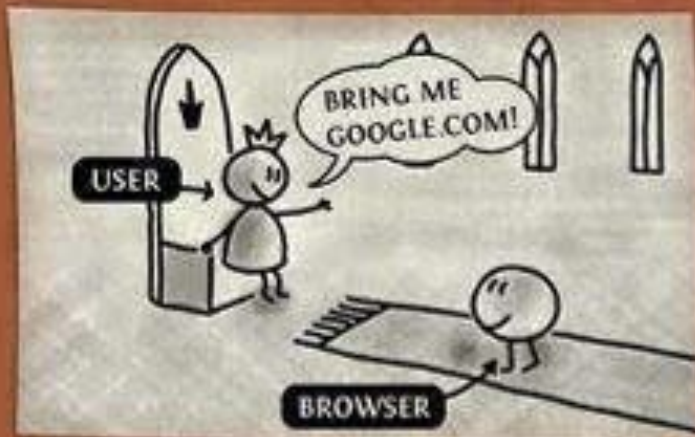
# How do I use PHP?

- Most commonly used in a web server.
- Web server is a software connected to a computer network (Internet or LAN), that is meant to share hypertext documents (HTML).
- Nowadays u can get all sorts of multimedia files from a web server.

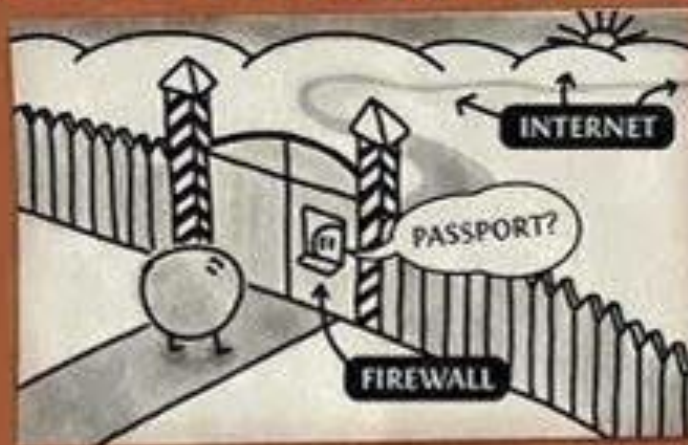




# How Web Browser Works..



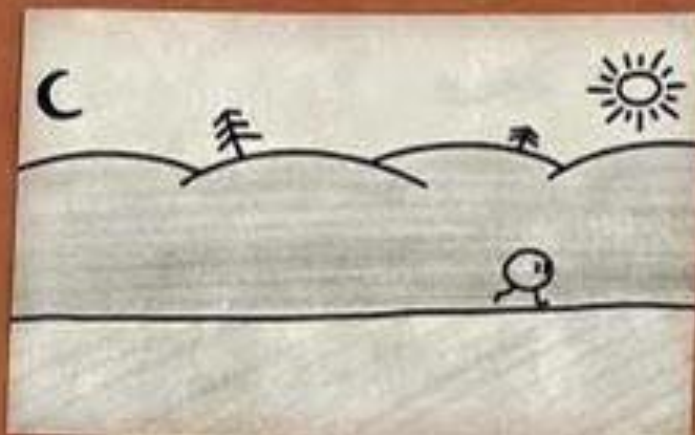
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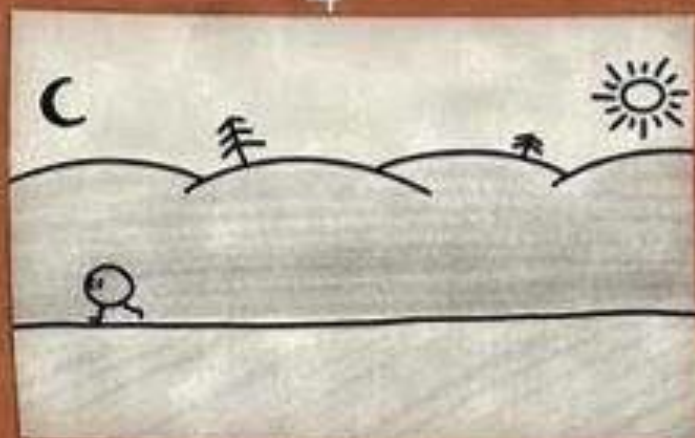
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9

# Anatomy of a HTML document

```
1 <!DOCTYPE html>
2
3 <html>
4 <head>
5     <title>Hello, World!</title>
6 </head>
7
8 <body>
9
10 <p>Hello, World!</p>
11
12 </body>
13 </html>
14
```

- Everything is a tag
- Head
- Body
- Headers
- Paragraph
- Anchor
- Lists



# Why PHP?

- HTML documents (web pages) were all hand coded.
- Updating the documents soon became very tedious.
  - Eg. Current date, Good morning.
- Want to be able to collect info on the web page as well.
  - ie. web pages needed to be dynamic & interactive.



# Why PHP?

- There has to be a easier / faster way of updating web pages.
- Let's make the web servers smarter & more dynamic.
- Let's do things with a database.





# Let's setup a web server!

- Setting up WAMP / MAMP
  - <http://wampserver.com>
  - <http://mamp.info>
- **W**indows **A**pache **M**ySQL **P**HP
- **M**ac **A**pache **M**ySQL **P**HP



# PHP is an interpreted language

- Special markups (PHP tag) let the web server know that certain portions of a web page are PHP & needs to be treated by the PHP interpreter
- Opposite of interpreted language is a compiled language (Java, C, C++)
- Must end each line with a semi-colon.



# PHP is an interpreted language

- **PHP Tags**

`<?php ?>` Normal PHP Tag

`<? ?>` Short Tag

- **Commenting:** Adding comments in the code that does not get printed out or interpreted by PHP.

`// Some Comment`

`# Other comments`

`/* More Comments */`

# Let's write some PHP!

- Download & install Visual Studio Code
  - <https://code.visualstudio.com/Download>
- Hello world with date/time (introduce PHP build-in function)
- Hello world with user input (URL parameter)
- Hello world with form GET
- Hello world with form POST
- Upload file with a form
- Show uploaded image





# What are data types?

- How do u present them?
- **Simple** data types (non-composite, scalar):
  - Strings, Integers, Boolean
- **Complex**, multi-dimensional, composite:
  - Array, Object
- Resource (file, DB connection)



# How do I store these data & pass them around?

- Within the same PHP file.
- **Variable** - container of information, info can be of any type & can be changed anytime
- **Constants** - Another kind of container where once the info is set, you cannot change it.



# How do I store these data & pass them around?

- Between different PHP files.
- **URL** parameters  
(eg. <http://localhost/hello.php?name=Michael>)
- **HTML Form** (POST/GET)
- **Cookie** - Pieces of info related to a website visitor stored in the web browser
- **Session** Variables - Information related to a website visitor stored in the web server

# When to use which method?

- Is it changeable?
- How big is the data?
- How sensitive is the data?
- Passed within the same file?
- Passed between between pages in the same site?
- Passed between different web sites (domain name)



# End of Lesson 1

