

WEB APPLICATION DEVELOPMENT



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Introduction to web application

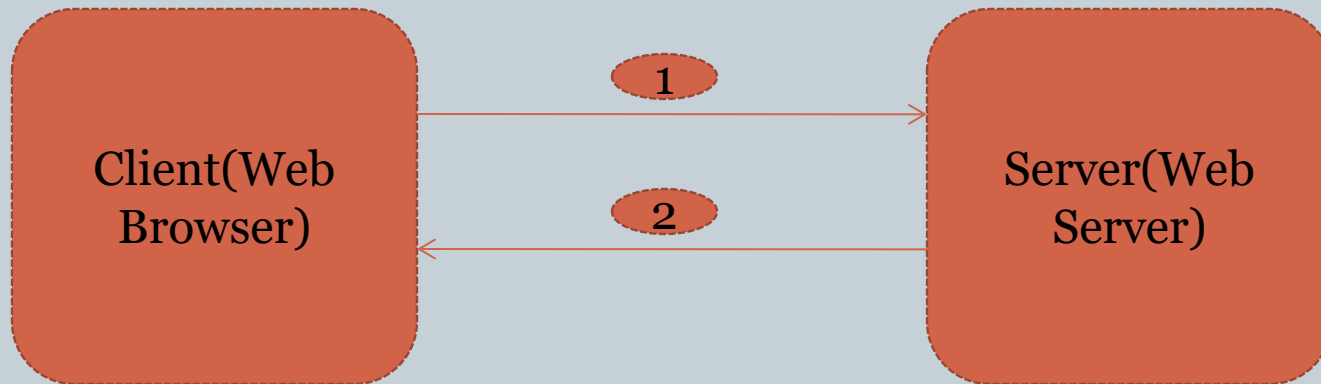


- Scripts
- Script language vs. Programming Language
- Client side scripting vs. Server side scripting
- Web server
- WAMP
- Static vs. Dynamic web sites
- PHP

Client Server Model



- For example:-



Scripting



- The scripting language is basically a language where instructions are written for a run time environment. They do not require the compilation step but interpreted.
- A scripting language is a programming language that is interpreted, meaning it is translated into machine code when the code is run.
- A script or scripting language is a computer language with a series of commands within a file capable of being executed without being compiled. Examples of server-side scripting languages include Perl, PHP, and Python. The best example of a client side scripting language is JavaScript.
- It can be client side scripting or server side scripting.

Types of scripting

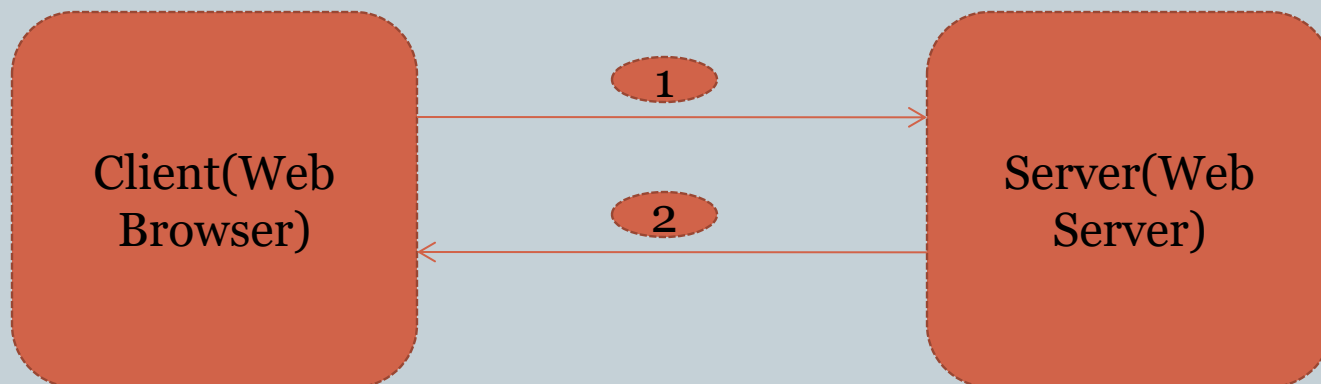


- Client side scripting
- Server side scripting

Client side scripting



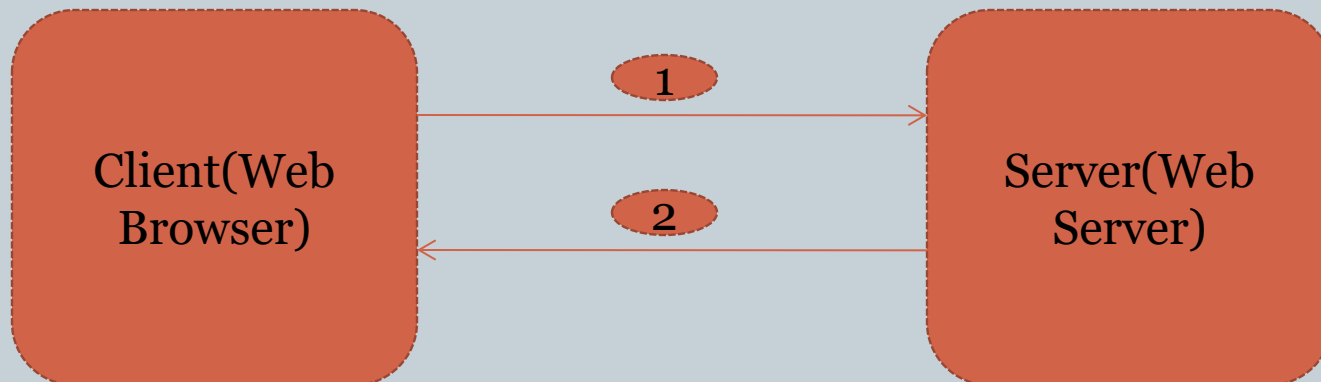
- **Client-side** scripting languages create the scripts that run on the client side (i.e. your browser). These are sent from the server. Some examples are **JavaScript**, **jQuery**, **CSS** etc.
- Once the client receives the returned information from the server if it contains a client side script then web browser executes that script before displaying the web page.



Server Side Scripting



- **Server-side** scripting languages in which scripts run on the server and minimize the workload of a browser. The most commonly used server-side scripting languages are **Perl, Ruby, Python, PHP**, etc.
- When a browser sends a request to the server for a webpage consisting of server-side scripting, the web server processes the script prior to serving the page to the browser. Here the processing of a script could include extracting information from a database, making simple calculations, or choosing the appropriate content that is to be displayed in the client end. The script is being processed and the output is sent to the browser.



Client Side Scripting vs. Server Side Scripting



| Client Side Scripting | Server Side Scripting |
|---|--|
| 1. Run on client side i.e. on web browser | 1. Run on server side i.e. on web server |
| 2. Scripts are visible among users | 2. Scripts are not visible among users. |
| 3. Languages are HTML, CSS, JavaScript. | 3. Languages are PHP, ASP.net, Ruby, Python. |

Programming language vs. Scripting language

| Programming language | Scripting language |
|--|---|
| 1. programming languages use a compiler to convert the high-level programming languages into machine language | 1. scripting languages use an interpreter to convert the high-level programming languages into machine language |
| 2. C, C++, C#, Java, Basic, COBOL, and Pascal, are some examples of programming languages | 2. JavaScript, Perl, PHP, Python, Ruby etc. are some examples of scripting languages. |
| 3. Compiled programs run generally run faster than interpreted programs since compilers read and analyze the code at once and report errors (if any) collectively. | 3. An interpreter, however, reads and analyzes a code line by line and every time it detects an error, it stops to address them one by one. |
| 4. Coding with programming languages is relatively difficult as many lines of code are required for a single function | 4. Creating a code function with a scripting language is easier as it requires only a few short and specific lines to be written. |
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