

COMP 2406 Assignment 1

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Questions:

1. [2] When a web browser loads a standard web page, what type of HTTP request does it make of the server? And, if the requested URL is valid, what is the standard response code?
2. [2] Would you normally use jQuery with client side or server side JavaScript? Why?
3. [2] Briefly explain how the values of two HTTP header fields are used by standard web servers to customize their responses. You may choose any two standard HTTP headers.
4. [2] Why do web applications often use a separate template language to generate web pages (such as Jade) rather than using the language of the application (e.g., Java, Python, and JavaScript)? (Note that PHP is an exception to this!)
5. [2] Is JavaScript an untyped language? Explain briefly.
6. **[BONUS 1]** What do you find most confusing about the material covered so far in COMP 2406? Note you do NOT get a bonus mark for saying "nothing"!

Answers:

1. The web server receives a GET request from the browser. The browser links to the server using user-agent string and sends a list of types of responses that are acceptable by the browser. If the URL is valid the standard response code for successful HTTP requests is usually 200 OK.

2. JQuery is a cross platform. JQuery is used as a language to add visual tools to a website. It enables users to take advantage of visual tools like sliders, event handling, animations etc. It adds to a webpage user-friendliness and aesthetics. Thus, doesn't serve much purpose on the server side.

3. ACCEPT:

The Accept request-header field can be used to specify certain media types which are acceptable for the response. Multiple media types can be listed separated by commas.

HOST:

The Host request-header field is used to specify the Internet host and port number of the resource being requested. A host without any trailing port information implies the default port, which is 80.

4. Application languages are not usually mark-up languages (PHP being an exception where it can be added with HTML, hence making it a functioning mark-up language) Mark-up languages have meta-data enabled in them which is essential for search engine optimization for many search engines e.g. Google. These search engines refine webpages using these meta-data standardized by mark-up. Mark-up languages also give developers the edge over creating and updating design of webpage i.e. fonts, text, color, styles etc.

5. JavaScript is an untyped language for various reasons, for instance, a variable in JavaScript can hold values of any data type unlike other languages. E.g. if you declare a variable (`var i = 20`) in the following code we can assign it to be a string (`var i = twenty`). Also looking at the example stated, variable declarations do not need a data type. Lastly, in JavaScript values are conveniently and automatically converted from one type to another, shown in the example for variable above.

6. The most confusing part of the course so far would be visualizing and understanding the client and server aspect of the course and also using and grasping JavaScript with its own “uniqueness” compared to other programming languages.

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