

IT 105 – Principles of Programming

Day 06

1. Hyper Text Markup Language (HTML), is a hypertext language, which means it's clickable and non-serial.
2. In our programs, we will be concerned with both their ***syntax*** ("grammar rules") and their ***semantics*** ("meaning or intent").
3. Our HTML code will be simple text (ASCII), saved in files with the extension **.html**. These are sometimes referred to as ***source code***. Note that if you are editing with a text editor, you need the file extension to be **.html** and NOT **.txt**.
4. If you just click on a **.html** file, it will be rendered in a window in your default browser. In order to edit it, you can "right-click" and choose to edit with an ASCII text editor of your choice, like Notepad.
5. ***Elements*** of HTML are regions of text that are formatted and indicate some processing to be applied to that section.
6. ***Container*** elements are bracketed by ***start*** and ***end*** tags of the form:
`<tag-name> text </tag-name>`.
7. ***Empty*** elements don't bracket, so they don't require end tags.
8. ***Attributes*** are additional information inside the start tag which tell the browser how to process the element.
9. Tags and attributes are ***case-INsensitive***.
10. Generally our web pages are made up of many nested tags.
11. The three basic tags our web pages will have are `<html>`, `<head>`, and `<body>`.
12. Let's consider the source for our syllabus:
<http://jcsites.juniata.edu/faculty/kruse/it105/it105syl.htm>. In Chrome, right-click and then "view page source" to see the HTML that makes up the text-based content that webpage.
13. Locate the `<html>`, `<head>`, and `<body>` start and end tags on this page.
14. The `<head>` tag includes metadata about the page, such as the `<title>` element, which is the title of webpage in the tab in the browser.
15. While previously we just placed a file in our W: drive, now we will create our own.
16. Note that all HTML documents must start with a `<!DOCTYPE>` declaration, and while it is not an HTML tag, it is "information" to the browser about what document type to expect. We will also include the ***lang*** attribute in the `<html>` start tag.

17. Open an ASCII text editor, such as Notepad (Windows) orTextEdit (MAC), and enter the following:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>
      Hello!
    </title>
  </head>
  <body>
    Hello, world!
  </body>
</html>
```

18. Make sure it is a text file, but that it has the **.html file extension**.
- In the TextEdit app on your Mac, choose File > Open.
 - Select the document, then click Open.
 - Be sure that you save as a **plain-text** file.
19. Save this file on GitHub Desktop with the name ***first.html***. Commit the change in GitHub, then publish.
20. Open a browser window and use the full URL to render this file:
[https://**your-username**.github.io/first.html](https://your-username.github.io/first.html)
21. Note that while the HTML in the file is case-insensitive, the URLs are case-sensitive.
22. Google search → all type same thing?
23. Algorithms.ppt
24. Review Guidelines for Discussion:
https://docs.google.com/presentation/d/1CuOURjHCFbnIC12Tykht0-VSBev7Oaa8SNbYbYB-qDY/present?ueb=true&slide=id.g8bac821e94_0_95
- Brave Space – what does that mean?
 - Use “I” Statements.
 - Monitor your “air time.”
 - “What’s said here stays here, what’s learned here leaves here.”
 - It’s OK to acknowledge hurt feelings.
 - Be present.
25. Discussion on Algorithms of Oppression Intro. Breakout groups and report back:
- Be prepared to discuss the argument: "Our algorithm is 'neutral,' it just reflects the existing web-structure?"

- b. Be prepared to discuss the phrase that "search results are normalized," on page 25 in AoO . What does that mean?
 - c. Be prepared to discuss whether information is a public good.
26. ***Answer prompt in Moodle forum after discussion.***
27. If time, Scratch lab time.