Assignment_2

1. What is the difference between writing the HTML code in a text editor (such as VS Code, Sublime, Atom) and a word document?

   Ans: TEXT EDITOR A text editor is used solely to write and edit text. You can copy, cut, paste, undo and redo. Text formatting is not available in those editors. Mostly text editors are used for programming purposes to write HTML, CSS, JavaScript, Php and other languages. An example of a text editor is sublime text or notepad++. Moreover usually in text editors you will keep on typing infinitely in the same line unless you click on enter to go to a new one.

   WORD PROCESSOR A word processor allows you to edit text in addition to multiple other functionalities such as text formatting (italic, bold, underline, etc.). In addition to that word processors allow automatic spelling and grammar checks. It also comes with a thesaurus for word selections. Some word processors come equipped with predefined themes and templates to make it easier for you to start your work. Some popular word processors are Microsoft Word and Apple Pages.

2. What is the purpose of the first tag in the HTML document?

   Ans: The first tag in any HTML file is the <HTML> tag. This tells web browsers that the document is an HTML file.

3. Which HTML tags in HTML do not have any visual appearance? What is the purpose of such tags?

   Ans: The meta tag in HTML which stores the metadata of the HTML document, has no visual appearance.

4. Is it possible to create user-defined tags in HTML?

   Ans: It, can be done with the help of “foo” in HTML5 but not in HTML

5. Which HTML tag is the most powerful? Hint: It enables the world wide web

   Ans: <a> is the most powerful tag which helps you to link websites.

6. Is there a compiler or interpreter for the HTML code? Which software package does the job of taking HTML code as input, checks the tags and generates the output?

   Ans: HTML is text markup language. Markup language is used to describe the visual appearance of a document to be displayed, that means only defining how things are displayed. Therefore, no need to use a compiler or interpreter. But, Browsers do contain something similar to an interpreter (called parser).

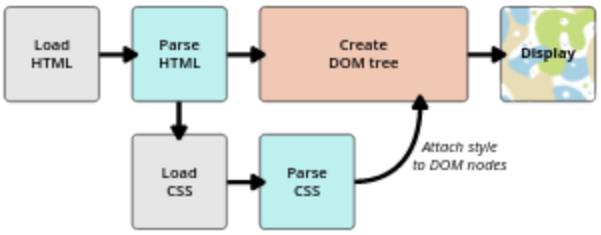
7. Which data structure is used to represent the HTML page in the browser?

   Ans: The Document Object Model (DOM) is a *programming interface* for HTML and XML(Extensible markup language) documents. It defines the logical structure of documents and the way a document is accessed and manipulated. Note: It is called a Logical structure because DOM doesn't specify any relationship between objects. DOM is a way to represent the webpage in the structured hierarchical way so that it will become easier for programmers and users to glide through the document.

Assignment_3

1. How are DOM and CSS related?

   Ans: When a browser displays a document, it must combine the document's content with its style information. It processes the document in a number of stages, which we've listed below.



2. Which is the most useful form of using CSS? style attribute, style tag or external style sheets?

   Ans: I feel external form of styling is most useful because once you change the style in the external page, it reflects in the page. We don't have to change it multiple times ulike in style.

3. I want to print a web page that I create and on the paper, I don't want all the advertisements to be printed. Describe how CSS can be used for this purpose.

   Ans: By using the display: none for the add slots when the media is used for printing.

4. What exactly is responsive design and why should I care? How is it relevant to software app development? Is the LMS software responsive?

   Ans: The importance of responsive web design is that it offers an optimized browsing experience. Basically, your website will look great and work well on a desktop (or laptop), a tablet, and a mobile phone's browser. Yes, LMS is a responsive software.

5. Is there any use for SASS? When is it most relevant?

   Ans: SASS, LESS are tools that enable you to write better CSS. When you write a CSS, you need to make sure of certain things like namespacing, cross-browser compatibility, etc. These tools enable you to do it automatically when you follow their syntax and features. Having said that, if good coding becomes part of your coding standards, then tools are not required.

Assignment_4

1. Version control adds additional steps like creating a repo, commit, etc., and it slows me down from completing my work. Is that overhead worthwhile?

   Ans: Version Control keeps a track of each and every commit you do. So, by any chance if there's any issue you can revert back which makes it worthwhile.

2. What is a good logical way to structure the commits when creating web pages?

   Ans: Commit Related Changes ,Commit Often, Don't Commit Half-Done Work, Test Your Code Before You Commit, Write Good Commit Messages, Use Branches

3. Is it good to include assets like images and videos in the git repo or is it better to keep them outside the repo? What if there are videos on the web page? How do we ignore them from staging and committing to the repo?

   Ans: If the Images and Videos are their own work, then I suggest to keep them in repo. If not, you can always recover them.
   Usage of .gitignore helps in ignoring the files that you feel should be ignored from staging and committing.

4. It looks like staging is not required before making a commit to the repository. Do you agree?

   Ans: When we commit it's only going to commit the changes in the index (the "staged" files). There are many uses for this, but the most obvious is to break up the working changes into smaller, self-contained pieces. Before we make a Commit we must tell what files we want to commit, This is called Staging. If you want to commit without staging, then each and every file will be committed.

5. Imagine a scenario where the old project files, that are previously in the version history, are deleted from the project folder and commits

are done to the same repo. Will we lose the old files forever? How does this work?

Ans: No, we won't miss the files forever if we have previously committed those files. Those files are found in the previous commits of the repo.

6. I'm working on a data science project with the Google colab. Colab already maintains version control. How is this different from using git? Which one is better? Is it possible to maintain the colab files on git?

   Ans: The option of branching and comparison between versions is available in git only but not in colab, And yes we can maintain git files on colab. Git is more useful that way. In the case of Collab if the server is down we can not continue with our work. Git resides in the local system, so even if we are not able to connect to the internet we can still continue with our work.