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Process Description (1st Draft)

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How to Build a Website using HTML

HTML is a computer language that is used for creating website. It is the abbreviation of Hypertext Markup Language. Hypertext is the method by which one can go from one page to another page, one site to another site on the web. Markup is what HTML tags do to the text inside them. Though HTML is not a programming language, it has its own tags and syntax like other programming languages [1].

There are many ways to build a website. Using HTML is the only manual way of creating a website. Nowadays there are some applications that can make website according to one's provided information and design. Using those applications, one does not need to code HTML instead the applications will code for them. The below process provides a simplified version of building a website using HTML.

Step 1: Opening the Code Editor

- Windows: First, we need to open the Notepad (code editor) from the desktop. To do that, we have to press the windows button on the keyboard or simply click on windows from the toolbar. Then, we need to search for Notepad. If it is Windows 10, there is a search icon in the toolbar. Searching there for Notepad, we can find it.

- Linux: If the operating system is Linux, the default code editor is VI or VIM depending on the version. Using the search option from the toolbar, we need to open it. Also, we can download advanced editor like *gedit*, *atom* or *textedit*.
- Mac: We need to click Spotlight, type in textedit, and double-click TextEdit at the top of the results. The code editor will show up on the screen [2].

Step 2: Structure-wise coding:

This is the most important step. We need to code in this step. In HTML, every tag is written inside ‘<’ and ‘>’ this sign. The forward slash sign (/) represents closing for the tag. For example, </html> means HTML closed. The most basic structure is given below with its function:

<html> This tag tells the browser it is opening a new HTML document; it primes the browser, telling it, “Hey, get ready to receive some HTML goodness!”

<head> This tag tells the browser it is going to provide some information about the page. For example, title of the page is provided between this tag.

<title> My title page. By default, it will be shown on top of the webpage </title>

</head>

<body>

This is the place that contains codes for all the materials and web page contents

</body>

</html>

Except the title tag, all other tags shown above must be written when coding. Otherwise the program will not be executed. Inside the <body>, we will code for our web content. This part is what will be shown in the web page. This is the part where the website creator can show his/her creativity.

Step 3: Some Basic Tags:

Once the structure of the webpage is formed, we will need to pay attention to coding. In HTML, many tags are used. The following table shows some very common tags and their functions:

Figure 1- Basic Tags for HTML

HTML Tags	Function
<h1>, <h2>,, <h6>	These are tags that indicate headlines of different size. The order of this size is larger to smaller.
<p>	This tag is used for single paragraph.
<table>	This tag is used for making tables.
	This tag makes letters bold.

	This tag is used for ordered list. For example, numbering a list using 1,2,3 etc.
<pre>	Between this tag, the texts will preserve the formatting of source document.
	The 'ul' tag is used for listing a group of things using different type of bullets.
 	This tag is breaks a line.
<hr>	This tag creates lines from the current position up to the right margin and breaks line accordingly.
<center>	This tag put any content in the center of the page or table.

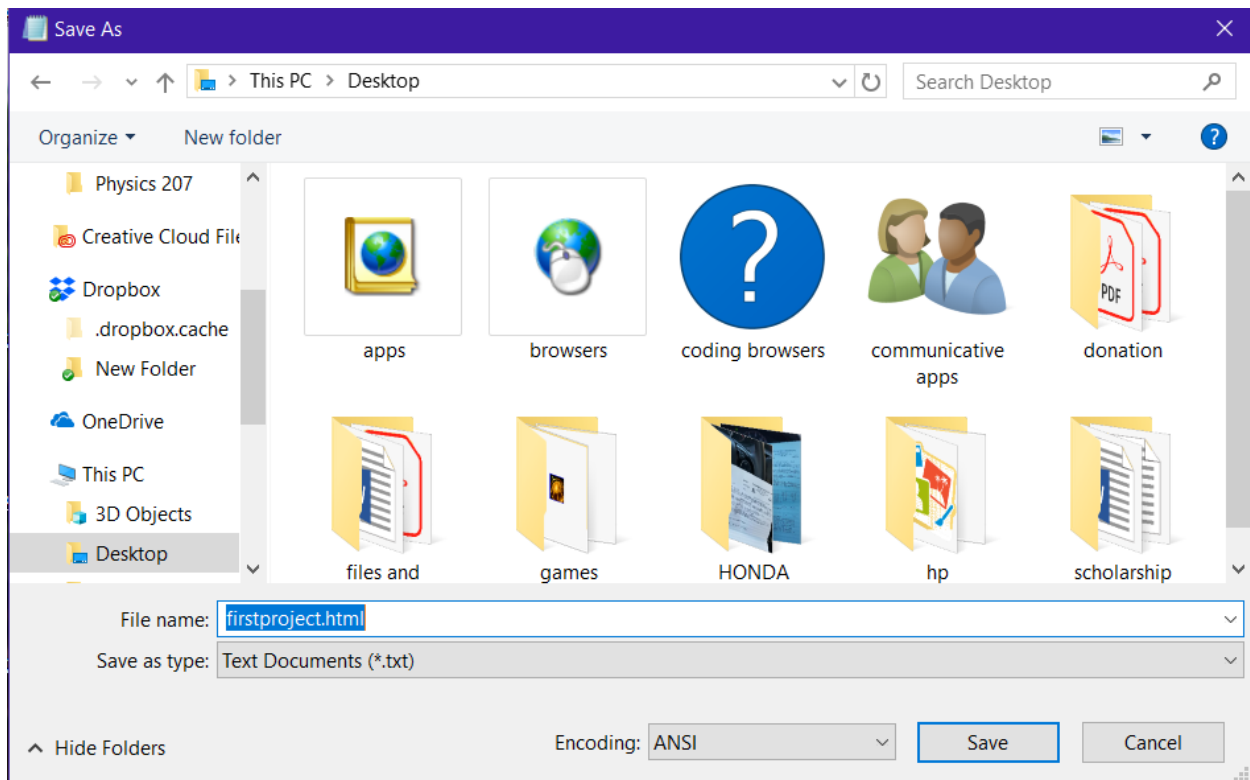
[3]

These tags are so common that one cannot create a website without them.

Step 4: Saving the Code

In this step, we need to save our coding. For that, we can use keyboard button Ctrl + S or click the 'file' which is left top corner of the notepad. Then, we have to click save. There will be a box popped up like the following:

Fig-2: Screen shot of Saving HTML code



We need to make sure the file name has '.html' after the name. If it is not saved in html format, the code will not link up to the internet and cannot be executed for webpage. Also, the name used in the file name will be the name of the webpage [4].

Step 5: Opening the Web Page:

After saving the code, we can open our website going to the saved file location. It will appear as an icon with 'e' on the location. The icon is different from the icon of the Internet Explorer or Microsoft Edge. By clicking the icon, we can see our webpage. It does not need internet connection. After that, we need to repeat this method to make more webpages. All the webpages together will make a website.

Step 6: Connecting All Web pages:

We can connect the web pages using the <a> tag. This tag has several parts. An example is given below to explain the tag:

```
<a href = "https://www.mrRashidsworld.com/html/Visit my Webpage </a>
```

Only the blue part will be visible in the webpage. If we click on the blue part (Visit my Webpage), the current page will connect another webpage that is addressed by www.mrRashidsworld.com [5].

Using this method, all the webpages need to be connected. Then, the website is ready for uploading.

Step 7: Uploading the Website:

- Free Hosting Domain: To upload the web site, we need to register for a domain. There are many companies who are hosting free domain in the internet like *web.com*, *freehosting.com*, *wix.com* etc. We can register to one of these free-hosting companies, but they include some conditions. Oftentimes, these websites are not visible in the internet

for 24 hours. Moreover, there are some security problems with these free-hosting domains.

- Paid Domain: For security purposes, it is better to use a paid domain. There are plenty domains for cheap annual premium like *godaddy.com*. Websites from a paid domain last longer than a website from a free-hosting domain.

After going through each step properly, a website can be built using the HTML. The structure of HTML is always same. The part where one can show the creativity is the `<body>`. All the tags and attributes that build web contents are coded in this part. Using HTML for the creation of a website gives the user a real creator feeling. Moreover, it is the basic language for web-designing.

Reference List

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- [4] R. I. Summy, [Screen shot]. *Notepad, Microsoft Windows 10*.
- [5] “HTML Links – Syntax,” [Online]. Available:
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