

Building a Website – Adobe Dreamweaver

Reinforcement Handout

What is a webpage?

A web page or webpage is a document commonly written in HTML (Hypertext Markup Language) that is accessible through the Internet or other networks using an Internet browser. A web page is accessed by entering a URL address and may contain text, graphics, and hyperlinks to other web pages and files.

A webpage can contain multiple type of scripting and programming languages such as HTML, CSS, Java Script, Python, PHP, ASP.Net etc.

What is HTML and its basic tags?

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML5 is the latest version of Hypertext Markup Language, HTML5 has been designed to deliver almost everything you'd want to do online without requiring additional software such as browser plugins. It does everything from animation to apps, music to movies, and can also be used to build incredibly complicated applications that run in your browser.

HTML Tags:

There are two types of tags, Paired Tags and Unpaired Tags

A paired tag consist of two tags, first one is called an opening tag and the second one is called a closing tag. These tags contains the text in between at which the effect of that tag will be applied.

Example: `ABC`

Here `` is the opening tag, `` is the closing tag and ABC the text in between which will result as ABC on the browser screen.

More Examples:

- `<i> </i>`
- `<div> </div>`
- ` `
- `<h1> </h1>` etc.

An Unpaired tag is a single tag which does not need a companion tag. These tags can be written like `< >` or `< />` both works as same, it's your choice which style you choose.

Example:

- `
` or `
`
- `<hr>` or `<hr />`

HTML Tag Attributes:

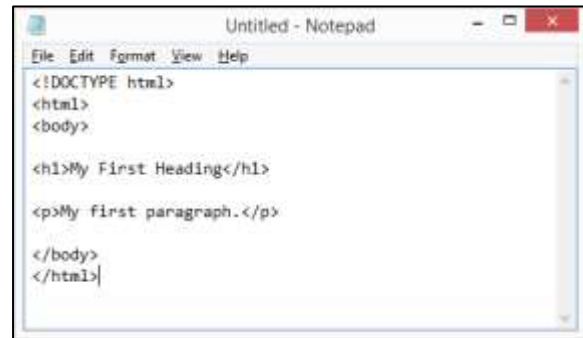
Attributes define additional characteristics or properties of the element such as width and height of an image. Attributes are always specified in the start tag (or opening tag) and usually consists of name/value pairs like name="value".

Creating a web page:

Creating a HTML page is easy as saving a notepad document, Follow the steps below to save a HTML using a simple text editor like Notepad.

- Open notepad and create the basic HTML Structure based on the following tags:

```
<!DOCTYPE html>
<html>
<Head>
<Title> My First web page
</Title>
</Head>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```



- Save the file on your computer. Select File > Save as in the Notepad menu and manually change the index.txt to index.html
- Always save the first page of your web page is the most common name used for the default page shown on a website if no other page is specified when a visitor requests the site. In other words, index.html is the name used for the homepage of the website.
- After saving the file close the notepad and double click on the file to execute you will notice instead of opening this file in notepad it will open in your default web browser.
- To edit the same file with text editor simply right click on the file and open with notepad.

**Commonly used HTML Tags:****<html> ... </html>**

This tag specifies that the webpage is written in HTML. It appears at the very first and last line of the webpage. It is mainly used to show that the page uses HTML5 – the latest version of the language. Also known as the root element, this tag can be thought of as a parent tag for every other tag used in the page.

<head> ... </head>

This tag is used to specify Meta data about the webpage. It includes the webpage's name<Title>...</Title>, its dependencies (JS and CSS scripts), font usage etc.

<title> ... </title>

As the name suggests, this tag contains the title/name of the webpage. You can see this in your browser's title bar for every webpage open in the browser. Search engines use this tag to extract the topic of the webpage, which is quite convenient when ranking relevant search results.

<body> ... </body>

Everything the user sees on a webpage is written inside this tag. It is a container for all the contents of the webpage.

<h1..h6> ... </h1..h6>

Six different variations of writing a heading. <h1> has the largest font size, while <h6> has the smallest.

<div> ... </div>

A webpage's content is usually divided into blocks, specified by the div tag also known as division.

<p> ... </p>

Plain text is placed inside this tag.

**
**

A line break for webpages. Is used when wanting to write a new line.

_{...}

Used for writing a subscript (smaller font just below the mid-point of normal font). Example: H₂O

^{...}

Similar to the above tag, but for superscripting. Example 12th.

... OR ...

For making the text bold.

<u>...</u>

For the Underline.

<i>...</i> OR ...

For making the text bold and em means emphasize.

** ... **

Anchor tag. Primarily used for including hyperlinks.

A tag to display images in the webpage followed by the URL or path where the image is located on your drive or on the web. The alt tag is alternative is contingency that if the image is not loaded from the server due to the wrong url or non-responsive connection from server a text related to the image will appear.

Introduction to Adobe Dreamweaver:

Dreamweaver is a web development tool. It is basically for generating HTML while using an editable front end. Kind of like using Word to do all your layout, and the end result is HTML code. The idea is that you should be able to do all of your layout visually without having to worry about the underlying generated code.

Adobe Dreamweaver is one of many HTML editors. It is used to edit HTML, PHP, Javascript, CSS and related files and can also be used to upload them to one's Web server. Dreamweaver is considered to be a WYSIWYG editor, though what you see in the program is not always an exact match to what

you would see on a live page as that requires the thorough understanding of code as well its structure.

Getting started with Dreamweaver:

Welcome screen:

On welcome screen select HTML to open a blank HTML file and save it in a folder. Unlikely notepad Dreamweaver will save the document in HTML format. It is highly recommended to save your HTML documents in a separate folder as other documents like CSS and Images will also need to save in this folder, the reason behind this is that other external resources will be embed through the URL and improper placements may cause malfunction of content.



Tools to insert HTML commands/elements instead of typing them

Code view to see the underlying source, Design View to work with GUI and Split View to work in Design view, but also want quick access to the code

Website preview on web browser

HTML Document Title which displays in web browser's title

This is the part of design view where we design HTML content using GUI and this will similarly appear in web browser

Properties panel to edit, format, change appearance and add HTML Anchor links to any element


Basic word processing tools, like bold underline, italic, numbers and bullet

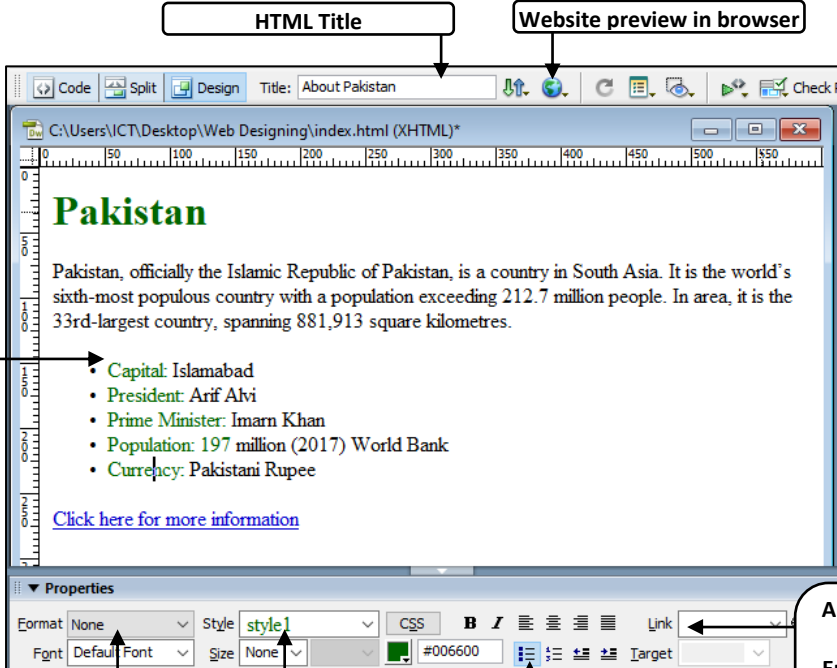
CSS and Properties Panel to add and modify elements

Adding content and hyperlinks to your Webpage:

In order to add content on your webpage we will use the design view of DW (DreamWeaver). This UI work likely to a word processing software but there would be some limitation due to the HTML code.

Follow the steps below to create a HTML document about General information of Pakistan:

- Open DW and copy paste the text from google.
- DW support all the external HTML items. Therefore if any data text and image copied from other sources will be pasted here with all the relevant formatting and hyperlinks, which might disturb the existing HTML layout, therefore while pasting external content use the Ctrl+Shift+V to paste special and select the option of Text only.
- Add the HTML title to “About Pakistan”.
- Copy paste the text about Pakistan from Wikipedia.
- Select the text of Pakistan heading and change it to heading 1 from the properties on the bottom also change its color to our national green color. Once the color is applied DW will automatically create CSS with name of style1 as a default action, this style can also be used apply same formatting to any other text as well.
- Create a five point bulleted list for the information of Pakistan using the bullet option from the properties on the bottom.
- After that add a simple text “Click here for more information” and add a hyperlink from the properties on the bottom enter the URL of website from you have downloaded the data.
- Save the file and click on  globe icon or press F12 to preview it on the default web browser.



The screenshot shows the Adobe Dreamweaver interface with a webpage titled "About Pakistan". The page content includes a heading "Pakistan", a paragraph, a bulleted list of facts, and a hyperlink. Annotations point to various elements:

- HTML Title:** Points to the title bar of the browser window.
- Website preview in browser:** Points to the globe icon in the toolbar.
- Content copied from Wikipedia:** Points to the paragraph of text on the page.
- Headings 1-6 and Paragraph:** Points to the heading and paragraph formatting options in the Properties panel.
- CSS Styles:** Points to the "style1" dropdown in the Properties panel.
- Bullets and numbering. OL(ordered list), UL(Unordered list):** Points to the list formatting options in the Properties panel.
- Anchor HREF (Hyperlink Reference) Enter URL to links, URLs can also be linked to files locally available on computer:** Points to the "Link" field in the Properties panel.

Create this HTML document along with every element and also check the functionality of Wikipedia link.

Creating a Website:

In a traditional website there is a lot of content containing text, images, videos, sounds, etc. these content need proper management to effectively use the space and also provide a clear and aesthetic look to users/viewer.



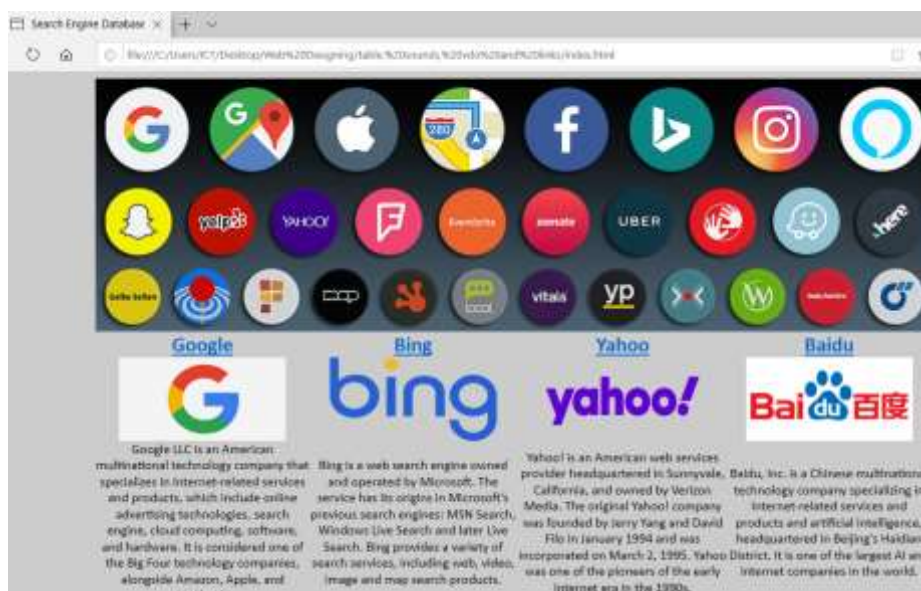
Content management on a webpage can be achieved by several ways but the two most common ways are Tables and DIVs. Tables in HTML can be formed using the Table icon  which will later ask for the properties of the table like number of rows and column, table width, border thickness, cell padding and spacing (cell margins).



Table can also have tables inside to manage the content more symmetrically, and this table is called nested table/s.

Follow the steps below to create a webpage with navigation using tables:

- Add background color or a background image to the page from properties [Page Properties...](#) panel on the bottom, also set the font to Calibri from the same menu so the whole text in this document should be displayed with Calibri font. These formatting will automatically add CSS in the code.
- Add the HTML webpage title as “Search Engine Database”.
- Create a new table with 1000px width and 6 rows and 4 column. Set cell border, cell padding, cell spacing to 0, by doing this the table will not visible and can be used only for the structure and content management.
- After creating the table set is background appropriately so the background color or image will not bother the content we will place inside the table.
- Select the cells of first row, right click to open the menu and from the menu select table and merge cells or press CTRL+ALT+M after selecting the cells.
- Insert a relevant header image to the topic in merged cell as a header of the website. Using the insert image option. Ideally the image  size would be 1000px in width and height would not exceed more than 250px.
- In the next line write the name of search engines in center of the cells column wise: Google, Bing, Yahoo and Baidu and also create a link to each of them to their respective websites.
- Apply appropriate formatting to the search engine heading from properties panel.
- Download the logos of these search engines and place below the cell with some information about that search engine.
- Center align the pictures and set the image size to 200 width x 100 height.
- Hyperlink can also assign on the pictures with the same procedure use to assign hyperlinks to text. Add hyperlink on pictures to their relevant search engines.

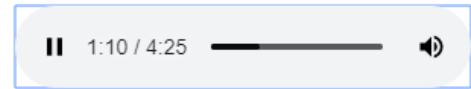


Inserting Sound with HTML5:

To play an audio file in HTML, use the <audio> element:

<audio src="sound.mp3" controls>Your browser does not support Audio**</audio>**

- The controls attribute adds audio controls, like play, pause, and volume.
- The <source> element allows you to specify URL of audio.
- The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.
- <audio> can be used to play sound files in the following formats:
 - **.mp3:** Supported by all modern browsers.
 - **.wav:** Not supported by Internet Explorer.
 - **.ogg:** Not supported by Internet Explorer and Safari.



Audio can be placed like an object similar to images or text in DIV or Table.

Inserting Video with HTML5:

In HTML or in website the videos can be placed by two methods. Either we embed the video from an external website like YouTube or we can place the video along with our website. Embedding a video from YouTube is always recommended as it does not occupy space on our server and it does not affect the traffic of our website.

```
Embed Video
<iframe width="560" height="315"
src="https://www.youtube.com/embed/
n/atGkba-Z8" frameborder="0"
allow="accelerometer; autoplay;
encrypted-media; gyroscope;
picture-in-picture;
allowfullscreen"></iframe>
```

These are the 3 easy steps to embed a video from YouTube.

- Access the video which you want to embed in HTML.
- Click on share and then click on embed
- YouTube will automatically give you the code for embedding, add that code to your HTML and resize height and width from the iframe code if necessary.



The other way to add a video in HTML is using the HTML5 <video> tag

The HTML5 <video> element specifies a standard way to embed a video in a web page.

<video width="320" height="240" controls>

<source src="movie.mp4" type="video/mp4"> Your browser does not support the video tag.
</video>

- The controls attribute adds video controls, like play, pause, and volume.
- It is a good idea to always include width and height attributes. If height and width are not set, the page might flicker while the video loads.
- The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.
- The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.



Video can be placed like an object similar to images or text in DIV or Table.

What is CSS?

CSS stands for Cascading Style Sheets, CSS describes how HTML elements are to be displayed in web browsers, CSS typically creates a design profiles for any HTML element for reuse and overall layout control of the document layout.

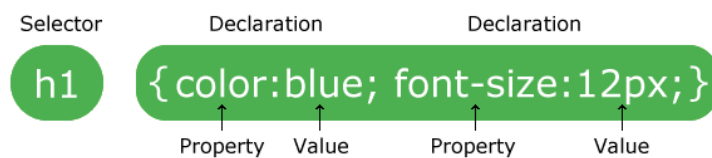
There are three methods of CSS integration in HTML: Inline CSS, Internal CSS and External CSS.

Internal CSS Example:

```
<style>
body {background-color:lightblue; font-family: calibri;}
h1 {color:blue; font-size:40px;}
p {font-family:verdana; font-size:20px;}
</style>
```

Inline CSS Syntax

A CSS rule consists of a selector and a declaration block:



The selector points to the HTML element to style (h1).

The declaration block (in curly braces) contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

CSS of Search Engine Database HTML Doc

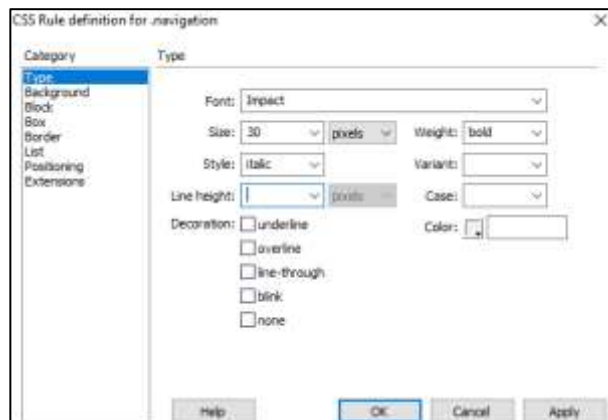
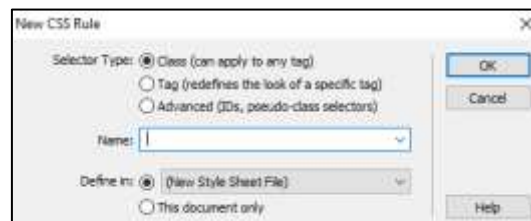
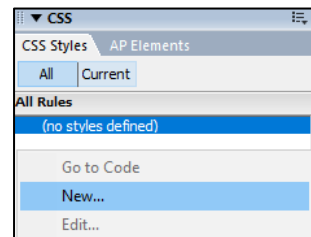
```
<head>
<meta http-equiv="Content-Type
<title>Search Engine Database<
<style type="text/css">
<!--
body {
    background-color: #CCCCCC;
}
.navigation {
    font-family: calibri;
    font-size: 25px;
    font-weight: bold;
    color: #FFFFFF;
}
body,td,th {
    font-family: calibri;
}
-->
</style>
</head>
```

CSS with DreamWeaver:

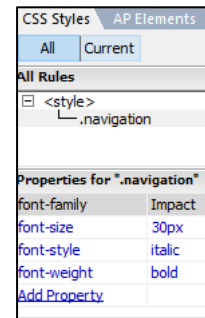
CSS can be add and edit using GUI of DW as well and DW will automatically add the CSS code respectively.

Follow the steps below to add CSS using GUI of DW:

- Start DW with a new HTML document.
- Right click on the blank area of CSS Styles panel which is usually located on the right side.
- Click on new option.
- In new CSS rule window select the class option and add the name of class for which this class will be defined, like navigation.
- Option of “Define in” new style sheet can be used for external CSS whereas “This document only” option will create CSS within the HTML document.
- Select “This document only” option and click ok.
- After that another window will appear in which we will define the styles of CSS for this specific class.
- We can define the background color, font color, font type, background image, bold, underline, italic, block, position, list items, hover etc.



- After defining the properties of CSS it will be added and available in CSS Style Panel on the right side for further editing and addition.
- By clicking on “add property” option more properties can be added for the whole class.
- Using CSS standardize the formatting and layout for all HTML elements, which comes handy by times when we made a slight change in class property and then it will reflect everywhere where it is applied.



Applying CSS to HTML:

CSS can be applied through adding a class attribute in HTML tag, but if in case the content is text and does not contain any HTML tag CSS can't be integrate with it, therefore a tag can be used to call the CSS class.

If the content is already between HTML tag like <p>, <td>, <div> etc. than we can use simply add the attribute of class="name of CSS class" to do the magic.

```
<span class="navigation">this is a text from CSS navigation class</span>
```

this is a text from CSS navigation class

This is the formatting of the text which we have defined while creating Navigation class earlier.

Another convenient way to apply CSS class is to use the properties panel at the bottom and click on the styles while selecting that HTML content, all the defined class will be listed here.




Creating Web Forms:






A webform, web form or HTML form on a web page allows a user to enter data that is sent to a server for processing. Forms can resemble paper or database forms because web users fill out the forms using checkboxes, radio buttons, or text fields. For example, forms can be used to enter shipping or credit card data to order a product, or can be used to retrieve search results from a search engine.

One of the common and important use of web forms in website is the Contact Form, in which developers or site owners asks the relevant information from the user to contact them in terms of sales or technical support.


Creating forms using DW:

Follow the steps below to create a contact form:

- Create a new HTML document and set the font to Calibri from page properties panel.
- Enter the contact us text as a heading using H1 heading.
- From the insert option click on forms tab and insert the form  to let the HTML knows that this is the form area. After clicking on this button a red dashed line will appear to represent that this is the form area, from this point onward we will be working inside the <form> tag.
- Create a table of 10 rows and 2 columns while setting its cellpadding to 4, border and padding to 0. Using a table to manage the forms elements is highly recommended for place management. Recommended width 500px.
- On the left column we will enter the title of information required such as name, address etc. whereas on the right side we will enter the form elements.

- The first element we will insert is a text field. Click on this button  and another will appear with numerous information required:
 - **ID:** information is used to program the form text field with programming languages like PHP, JavaScript etc.
 - **Label:** information is used to place the title along with form element, but in this case we are already using the table therefore no need to fill in the label information and also select the option of “No Label tag”.
 - Access key is used to assign a specific hotkey to directly shift the cursor focus by pressing Alt+“Access Key”.
 - Tab Index is the sequence of cursor focus, if we enter 3 over here then the cursor will focus this specific text field on the third press of the TAB key.
- Insert two text fields, first one for name and the second one for contact number.
- The next form element we will enter is List/Menu to create a drop down list for selecting an option from a list given. HTML tag for form list is <select> </select>.
- The number of list item can be inserted from **List Values...** button on the bottom from the properties panel, click on the **List Values...** button and another window will appear, click on the + icon to add the list menu items.
- The next form element is Radio buttons, the function of radio button is to get one single answer from the multiple choices given. 
- The next form element is checkboxes, the function of checkboxes is to get multiple answers from the multiple choices given. 
- The next form element is text area. Text area works like a simple text field but it can accommodate more words than a normal text field and its layout is like a paragraph. 
- Buttons is the action element of form to submit or reset the form. 



Contact Us:	
Name:	<input type="text"/>
Contact Number:	<input type="text"/>
City:	Islamabad 
Gender:	<input type="radio"/> Male <input type="radio"/> Female
Contact time preference:	<input type="checkbox"/> Morning <input type="checkbox"/> Afternoon <input type="checkbox"/> Evening <input type="checkbox"/> Night
What's your message about?	<input type="text"/>
<input type="button" value="Submit"/>	

Note: It is highly recommended to use an individual table to format the FORMS. We can create a nested table inside a div or a main table’s cell, also known as nested tables.