PayPal Pre-Work Notes

HTML and CSS

Introduction HTML

HTML stands for **HyperText Markup Language**. It is the most basic building block of the website which allows you to add/remove website content. HTML provides the building core structure and **CSS** adds styling to it. **JavaScript** adds functionality to it.

The tags and content between the tags combined are known as **elements**.

There are three sections to the webpage:

1) Head
2) Body
3) Footer

Read documentation about the attributes for the tags.

HTML Tag	Functionality
head	For head section
body	For body section
footer	For footer section
title	Title of the website which is visible on tab
h1,h2,h3,h4,h5,h6	Heading Tags
p	Paragraph Tag
br	Line break(No closing tag)
hr	Horizontal Rule tag(No closing tag)
<!-- -->	Comments section
a	Hyperlink Tag(Direct to url or file or a mail id)

img	Image Tag(No closing tag and requires source)
audio	Audio Tag(No closing tag)
video	Video tag(No Closing Tag)
b	Bold Tag
i	Italic Tag
big	Big Tag for Text
small	Small Tag for Text
sub	Subscript Tag
sup	Superscript Tag
ins	Underline Tag
del	Crossed Text
mark	Highlighted Text Tag
ul	Unordered List Tag
ol	Ordered List Tag
dl	Descriptive List Tag
li	List Item Tag
dt	Description Term Tag
dd	Description Term Definition
table	Table Tag
tr	Table row
th	Table Header
td	Table Data(For columns data)
span	Selects a portion of a document
div	Division Creation Tag

meta	Adds metadata to the html page(Characteristics of the HTML page, which cannot be done by other tags)(Like charset, author, viewport, refresh rate etc.)
iframe	Adds another website to your website(Not all websites allow that)
button	Button Tag
form	Form Tag
input	Input Tag for Form(Read about different attributes like type)
label	Label Tag for Form(Use **for** attribute for the navigation to input field, use **name** attribute to name it whatever you want that data when its submitted, use **placeholder** for default text)
reset, submit	type attribute for input element for creating button

Introduction CSS

CSS stands for **Cascade Style Sheets.** It is a style sheet which is used to describe the presentation of a document written in HTML.
We can apply CSS using three methods:

1) **Inline:** Applying directly in the tag
2) **Internal**: Applying all the CSS below in the HTML file itself
3) **External**: Creating a separate HTML file and linking it.

Their priority is the same as listed when applied.

If you want to learn how to apply them, you can learn about it online. This will only mention the broad concepts of CSS for quick revision.

We can target the CSS element using the following things:

1) Tag: Directly applying CSS on all the Tags

2) Class: Applying the CSS using class. Can be applied on multiple elements.(Declared by **.**)
3) ID: Applying CSS using ID. Can be applied to only one element. (Declared by #)

In CSS, the priority of selectors is determined by their specificity. The specificity hierarchy from lowest to highest is:

1) **Element selectors** (e.g., div, p, h1) : These have the lowest specificity.
2) **Class selectors** (e.g., .class-name) : These have higher specificity than element selectors.
3) **ID selectors** (e.g., #id-name) : These have the highest specificity among the common selectors.

The specificity can be calculated as follows:

- ID selectors: **100 points**
- Class selectors, attribute selectors, and pseudo-classes: **10 points**
- Element selectors and pseudo-elements: **1 point**
- Inline styles: **1000 points** (they override everything in the CSS file)

If two selectors have the same specificity, the one that appears later in the CSS file will take precedence.

Order of **margin** or **padding** follows: top, right, bottom, left
Margin in outside the element and padding is distance between element content and boundary.

There are also **pseudo classes** which help apply CSS like hover etc.
Position can be fixed, relative, absolute.
Transform can help in rotating or scaling the objects. You can also apply **animations**.