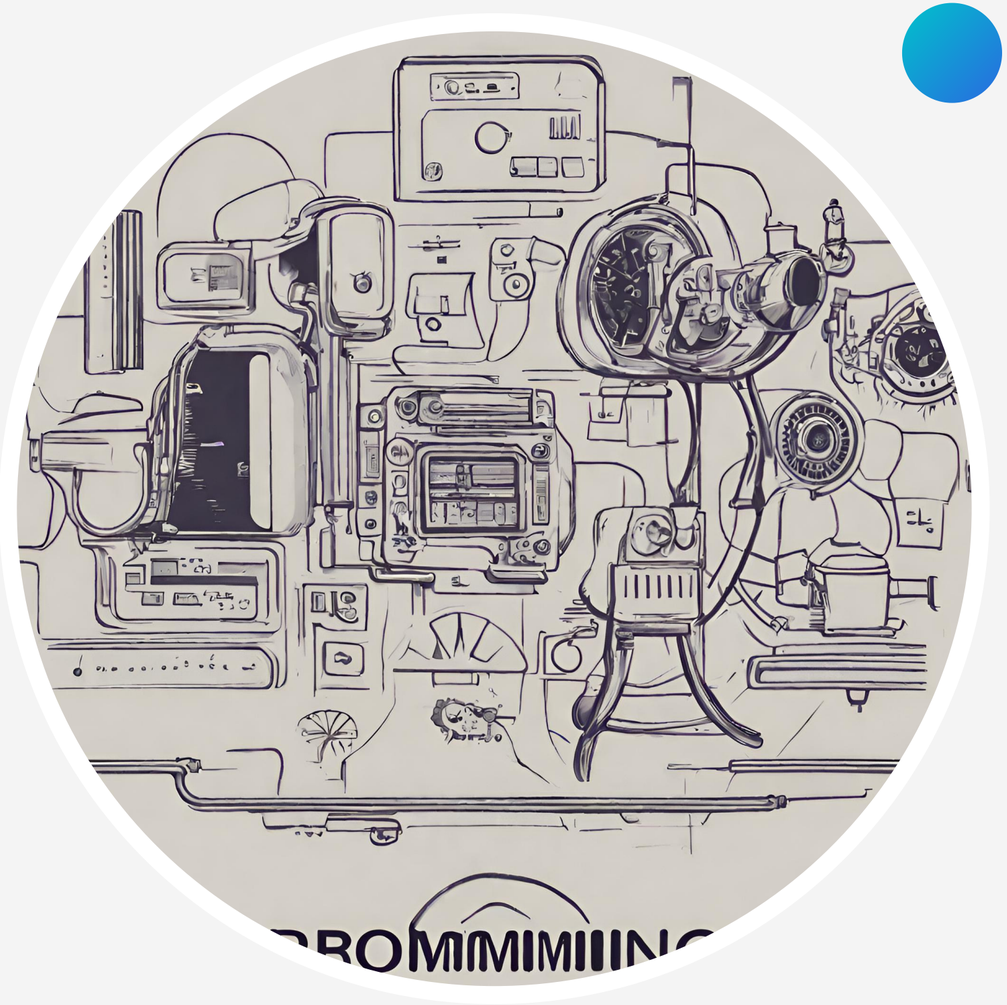
APPLICATION DESIGN AND DEVELOPMENT



HTML: Structures web content.
CSS: Styles web pages for better design and responsiveness.
JavaScript: Adds interactivity and enhances user experience.

FRONTEND DEVELOPER

HTML

CSS

JAVA

HyperText Markup Language

- TIM BERNERS-LEE, A PHYSICIST AT THE CERN RESEARCH INSTITUTE IN SWITZERLAND, INVENTED HTML IN 1991
- THE FIRST VERSION OF HTML WAS LAUNCHED OFFICIALLY IN 1993.
- THIS FIRST VERSION CONSISTED OF 18 HTML TAGS. THERE ARE CURRENTLY ABOUT 140+ HTML TAGS, ALTHOUGH NOT ALL ARE SUPPORTED BY MODERN BROWSERS.
- HTML IS THE ONLY MARKUP LANGUAGE FOR CREATING WEB PAGES.
- IT PROVIDES TITLES, HEADINGS, PARAGRAPHS, LISTS, TABLES, EMBEDDED IMAGES, ETC., TO DESCRIBE TEXT-BASED AND MULTIMEDIA INFORMATION STRUCTURE IN HTML DOCUMENTS.
- WEB BROWSERS ARE SOFTWARE TO READ HTML AND DISPLAY WEB PAGE DESIGN AS OUTPUT.
- HTML TAGS ARE THE ESSENTIAL ELEMENTS FOR BUILDING WEBPAGES, THEY TELL BROWSERS HOW IT SHOULD DISPLAY CONTENT
- TAGS ARE USUALLY ENCLOSED IN OPENING AND CLOSING BRACKETS. AND COME IN PAIRS - AN OPENING TAG AND A CLOSING TAG.
- HTML TAGS ARE NOT CASE-SENSITIVE

HTML TAGS

<!DOCTYPE html>

- The<!DOCTYPE html>is the first tag of any HTML document.
- It tells the browser that the document loaded is an HTML document.

<html>

- <HTML>is defined just after the doctype declaration
- All the other tags and content that constitute your webpage go inside this<html>tag

<head>

- The<head>is the first child of HTML.
- The head additional information about the webpage like webpage SEO, CSS links, scripts, and meta tags

<title>

- HTML Title Tagis the compulsory child of HEAD.
- This title also appears on the browser tab

<body>

- <body>encloses all HTML tags to create HTML documents and pages for your website.
- HTMLBody Tagdefines the body of our HTML Document, basically the content visible to the user.

Text tags

- <p> paragraph tag. The default font size is 16 pixels
- - is used for a group of words within a paragraph that needs to be styled differently.
- - bold text
- - emphasis tag – italics text
- The<link>tag links an internal or external resource

List tags

- Unordered List: <ul> - each list item is listed using <li> - rendered with a bullet point icon.
- Ordered List - - rendered with numbers
- Description List - <dl>- each list item is listed using <dt> - for each term we use <dd> to present description

HTML TAGS

Table Tags

- Table Header: <th>- Tables in HTML can have headers horizontally and vertically.
- Table Rows: <tr>- Data arranged horizontally in different table cells are called table rows.
- Table Cell: <td>- contains data

Image Tag

- HTML Imagesare defined within<img>tag.Image tagis an void tag.srcandaltattributes are compulsory to add path of image and alternative text.
- HTML includesimage tagsince 4th version(HTML 4)

Audio Tags

- HTML5 Audio tagis used to play audio files, likeMP3,OGG,andAAC.
- in a webpage is to usea <audio> tag.<src>is a compulsory attribute in <audio> tag.

Video Tag

- Video tag supportsMP4,OGG,MOV,andH.264files.
- To embed a video, create a <video>.
- <src>is a compulsory attribute for <video>

Figure Tag

- The <figure> tag in HTML adds self-contained content like illustrations, diagrams, photos, or codes listed in a document.

Form tags

- HTMLForms are used to collectinformationsubmittedby the user
- The elements used inHTML formareform tagssuch as parent,input,text area, select,buttonandlabel.
- Forms include input controls like text, password, file, radio, checkbox, etc.which can be seen on any website registration or Login/signup pages.

<form>

- <input type = “text” name = “name” value = “name”>

</form>

Cascading Style Sheets

- CSS describes how HTML elements should be displayed on the screen.
- It is a powerful tool for web designers to change the design and control over web pages and how they should be displayed.
- It is supported by all browsers and is designed primarily to separate the document content from the document presentation.
- Style: This is the easiest part. As mentioned before, CSS deals with styling a web page, hence the part‘style’.
- This includes simple changes in font, color, layout, etc.., to complex animations.

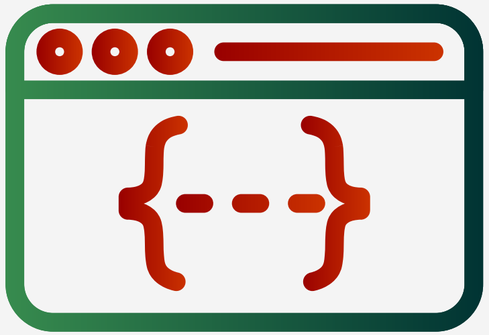
- Sheets:you write how you would like to style a file in a sheet using CSS, and the browser implements it. The file here is what we mean by the sheet, usually called astyle sheet

- Cascading: On a particular element in a webpage, there may be different styles applied, and all of them have different importance. Similar to the placement of steps, the styles are said to be cascading over an element, and the mostrecent/important style is applied to the element.
- Advantages of CSS: Browser Support,Time Saving,Better than HTML
- Disadvantages of CSS:Cross browser,Lack of security,Worst Behaviour

PROGRESS CHART

Inline CSS

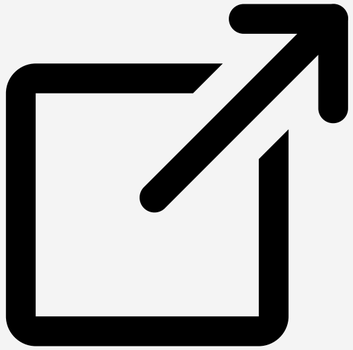
- In inline CSS, we use the keywordstyleas an attribute to an HTML element and specify the style properties.
- The properties will then be applied to that specific element.
- <tagname style = “ property-name : property-value”>content </tagname>



Internal CSS

- In internal CSS, we use the<style>tag and write the styles needed. We can write them in the HTML file with the elements we wish to modify.
- The<style>tag can be used insidethe<head>and<body>of the HTML file.

<style>
--- required styles--
</style>



External CSS

- The most common and preferred style.
- We create a file with the extension.css, write all our styles in it, and use this CSS file in an HTML to apply the CSS rules we wrote.
- Using this approach improves readability as CSS and HTML are in separate files

Style TAGS

Border

- CSS is all about emphasizing and decorating HTML elements; one of the ways to do it is to add borders to content.
- Space between margin and padding is the border of an element.

Margin and padding

- Margin: This is the outer space of an element. It increases/ decreases the space between 2 adjacent elements.
- Padding: This is the inner space of an element. It increases/ decreases the space between content and border.