Frontend

* Part of the application which involves designing and user interaction.

Frontend technologies/libraries/framework:

* **Html**
* **Css**
* **Javascript**
* **Bootstrap**
* **React**
* Angular
* Vue
* ………………….

HTML:

* Hyper text Markup language
* Hyper text : clickable text : More.. , click me , see more >>
* Markup language :
* **Create a structure of the webpage**

CSS:

* Cascading style sheet
* **Style the web page**

Javascript:

* To make webpage interactive

Editor:

Visual studio code

Browser (any browser) – Google Chrome

Html 🡪 .html / .htm

Versions of html

Html1

Html2

Html3

Html4

Html5 🡪 latest version (2014)

Tag:

* Tags are Predefined

Anything which is enclosed within angular brace (<>)

<something>

Types of tag:

1.Paired tag

- open tag

- close tag

<open tag> </closed tag>

2.Upaired tag or singleton tag

<tag/>

Comment

<!-- Instruction -->

Ctrl + /

<!DOCTYPE html>

It is a instruction to specific the latest version of html

<html> 🡪 root element

Attribute 🡪 which specifies the behavior of the element

Will add attribute in open tag or in singleton tag

<open tag> content </close tag> 🡪 Element

<Head> 🡪 head tag contains meta data (data about data)

<body> 🡪 all the content that you see on the webpage is enclosed in a body tag

Versions of CSS

CSS1

CSS2

CSS3 – Latest version

Types of CSS

1.Inline CSS – style - attribute

2.Internal CSS - <style> - tag

<style>

Selector {

Css declarations

Property:value

}

</style>

3.External CSS – separate file

Block level element:

**<div>**

H1…h6

P

…..

Inline element:

**<span>**

<a>

<img>

Semantic elements:

* <article>
* <aside>
* <details>
* <figcaption>
* <figure>
* <footer>
* <header>
* <main>
* <mark>
* <nav>
* <section>
* <summary>
* <time>

Naming the elements:

Class

Class selector –

.classname{ css declartions}

Id

#idname { css declartions }

Grouping a selector

.classselector,#idselector, tagselector {css declaration}

**Combinators**

Descendant combinator ( space)

Child combinator (>)

Adjcent sibling combinator (+)

General sibling combinator (~)

Measuring unit in css

Absolute unit: mm ,cm, px……

Relative unit: em, vh, vw ,% …..

Css Box model

Border 🡪 border-style, border-width, border-color

Border-style 🡪

Border-bottom-style

Border-left -style

Border-right- style

Border-top -style

Display:

Inline

Block

Inline-block

List

* Ordered list
* Unordered list
* Descriptive list

Nested list

Color:

Color Name

Rgb(0,0,255)

Hexadecimal value

Forms:

**TOPICS COVERED**

1. Form- label, input type
2. text, autofocus, name
3. email
4. password
5. submit/reset, action, method
6. number - max,min,step
7. date
8. radio
9. checkbox
10. select option
11. range, color, file
12. week, month, time, date-time-local
13. textarea
14. button
15. datalist
16. search
17. caret-color, placeholder, maxlength
18. Fieldset, legend
19. Forms with CSS
20. select option - selected, multiple, size
21. input type- hidden

**FORMS**

* They are used to create interactive webpages.
* They are created using <form> tag.

<form>…</form>

* Inside any form we have 2 things

1. Label – used to describe what input has to be specified.
2. Input mechanism – describe the input.

* If you specify name, it shall be reflected in the URL(backend) for easy extraction.
* Labels are created using <label></label>
* Input are created using <input/>  - singleton tag

1. Text: single line text

<input type=”text” autofocus name=”firstname”/>

1. Email : when u enter a mail id without .com/@ pop up msg will come.

<input type=”email” name=”email”/>

* Appears to be a normal textbox.

1. Password: to hide the password on URL, J2EE is req(backend)

[post to hide data in URL]

<input type=”password” autofocus name=”pwd”/>

1. Reset/submit :

<input type=”submit” />

<input type=”reset” />

1. Number :

<input type=”number” autofocus name=”age” max=”15” min=”0” step=”3”/>

* What is the first no increase spin=1 [no char allowed(accepts e)]
* Typing is allowed.
* Spin control box.

1. Date:

<input type=”date” name=”d”/>

* In URL yy-mm-dd
* Typing, spin, calendar
* Label is not mandatory in html5.

1. Radio button:

* No typing
* Single selection
* For every value you select – “on”[default value] will be displayed on URL
* If u want to select anyone out of multiple options use radio button.

male<input type=”radio” name=”g” value=”m” checked/>

female<input type=”radio” name=”g” value=”f”/>

others<input type=”radio” name=”g” value=”o”/>

* If g is not there, u can select all d radio buttons.

1. Checkbox: multiple selection

tea<input type=”checkbox” name=”b” value=”t” checked/>

coffee<input type=”checkbox” name=”b” value=”c”/>

milk<input type=”checkbox” name=”b” value=”m” checked/>

1. Menu items : only selection

Choose<select>

<option>mysore</option>

<option>bang</option>

</select>

1. Range [slider control box] : backend you can set the range.

* The range will be displayed on URL.

<input type=”range” name=”range”/>

1. Color : default color : black.

<input type=”color” name=”c”/>

* In URL – no.of color displays.

1. Week :

<input type=”week” name=”w”/>

1. Month :

<input type=”month” name=”m”/>

1. Time :

<input type=”time” name=”t”/>

* reset, scroll

1. Date-time-local:

<input type=”date-time-local” name=”dt”/>

1. File:

<input type=”file” name=”f” multiple/>

1. Textarea : it itself is a tag. [multiple line input].

It is not input tag alternatively it is a tag.

<textarea>enter address here</textarea>

1. Button :

<input type=”button” value=”login”/>

1. Datalist: both selection & insertion are possible [used to give hints (typing)].

choose<input type=”text” name=”fn” list=”dl”/>

<datalist id=”dl”>

<option> banglore </option>

<option> manglore </option>

</datalist>

1. Search :

<input type=”search” name=”s”/>

1. Telephone : can’t be used in HTML5 (same as number)

maxlength attribute

The maxlength attribute specifies the maximum number of characters allowed in the <input> element.

Syntax :

<input maxlength="number">

**Caret-Color Property**

The caret-color CSS property sets the color of the insertion caret i.e, the visible indicator of the point at which the next character typed by the user will be inserted within an element such as <input> or one with the contenteditable attribute set. The caret is typically a thin vertical line that flashes to help make it more noticeable. By default, it is black, but its color can be altered with this property.

Syntax :

caret-color: auto|color;

  UN <input type="text" style="caret-color:cyan;" autofocus name="username" placeholder="name">

*Grouping Form Data with <fieldset>:*

\* The <fieldset> element is used to group related data in a form.

\* The <legend> element defines a caption for the <fieldset> name.

 Example:

<form action="/action\_page.php">

  <fieldset>

<legend>Personal information:</legend>

First name:<br>

<input type="text" name="firstname" value="Mickey">

<br>

Last name:<br>

<input type="text" name="lastname" value="Mouse">

<br><br>

<input type="submit" value="Submit">

  </fieldset>

</form>

\* By default the first element in the drop down list is selected.

\* To define pre-selected option, add the selected attribute to the option.

Example:

<form action="/action\_page.php">

  <select name="cars">

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

<option value="fiat" selected>Fiat</option>

<option value="audi">Audi</option>

  </select>

  <br><br>

  <input type="submit">

</form>

*Visible Values:*

\* use the size attribute to specify the number of visible values:

Example:

<form action="/action\_page.php">

  <select name="cars" size="3">

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

<option value="fiat">Fiat</option>

<option value="audi">Audi</option>

  </select>

  <br><br>

  <input type="submit">

</form>

\* Here the size is 3 so at a time the 3 texts are visible and selected.

*Allow Multiple Selection:*

\* Use the multiple attribute to allow the user to select more than one value:

Example:

<form action="/action\_page.php">

  <select name="cars" size="4" multiple>

<option value="volvo">Volvo</option>

     <option value="saab">Saab</option>

<option value="fiat">Fiat</option>

<option value="audi">Audi</option>

  </select>

  <br><br>

  <input type="submit">

</form>

\* You can use (ctrl) for windows user and (command) for the Mac user in order to select multiple options.

<input type=”hidden”>

       <input type="image" src="pet.jpg" alt="no">

18.*CSS Forms:*

\* The look of an HTML forms can be generally improved with CSS:

Example:

<html>

<style>

input[type=text], select {

  width: 100%;

  padding: 12px 20px;

  margin: 8px 0;

  display: inline-block;

  border: 1px solid #ccc;

  border-radius: 4px;

  box-sizing: border-box;

}

input[type=submit] {

  width: 100%;

  background-color: #4CAF50;

  color: white;

  padding: 14px 20px;

  margin: 8px 0;

  border: none;

  border-radius: 4px;

  cursor: pointer;

}

input[type=submit]:hover {

  background-color: blue;

}

div {

  border-radius: 5px;

  background-color: red;

  padding: 20px;

}

</style>

<body>

<h3>Using CSS to style an HTML Form</h3>

<div>

  <form action="/action\_page.php">

    <label for="fname">First Name</label>

    <input type="text" id="fname" name="firstname" placeholder="Your name..">

    <label for="lname">Last Name</label>

    <input type="text" id="lname" name="lastname" placeholder="Your last name..">

    <label for="country">Country</label>

    <select id="country" name="country">

      <option value="australia">Australia</option>

      <option value="canada">Canada</option>

      <option value="usa">USA</option>

    </select>

    <input type="submit" value="Submit">

  </form>

</div>

</body>

</html>