Agenda

- Form tag
- GET vs POST method
- Header,Footer,section,article,aside,nav Tags
- CSS
- Selector
- CSS Box Model
- CSS Display

GET Method

- Values will be sent using Request Head
- Values will be appended on url (visible)
- Restriction on maximum size of data to be passed
- Only ascii values can be sent using GET
- URL can be bookmarked with the values
- Files can NOT sent using GET

POST Method

- Values will be sent using Request Body
- Values will be invisible
- There is no restriction on size of data
- Any value of any type (binary) can be sent by using POST
- URL can be bookmarked without the values
- Files can be using POST

article

- The
  HTML element represents a self-contained composition in a document, page, application, or site, which is intended to be independently distributable or reusable.
- Examples include a forum post, a magazine or newspaper article, or a blog entry, a product card, a user-submitted comment, an interactive widget or gadget, or any other independent item of content.

aside

- The
  HTML element represents a portion of a document whose content is only indirectly related to the document's main content.
- Asides are frequently presented as sidebars or call-out boxes.

header

- The
  element can define a global site header, described as a banner in the accessibility tree.

- It usually includes a logo, company name, search feature, and possibly the global navigation or a slogan.
- It is generally located at the top of the page.

footer

- The
  HTML element represents a footer for its nearest ancestor sectioning content or sectioning root element.
- It typically contains information about the author of the section, copyright data or links to related documents.

nav

- The
  HTML element represents a section of a page whose purpose is to provide navigation links, either within the current document or to other documents.
- Common examples of navigation sections are menus, tables of contents, and indexes.
- It's not necessary for all links to be contained in a
  element.
- is intended only for a major block of navigation links

section

- The
  HTML element represents a generic standalone section of a document, which doesn't have a more specific semantic element to represent it.

CSS

- CSS stands for Cascading Style Sheets.
- It makes an HTML website presentable.
- It adds style to various HTML elements.
- It helps you to define how the elements should look, where they should be placed and whether they should be displayed or not.
- Types of CSS

1. Inline
2. Internal
3. External

Inline CSS

- Use style attribute of an element to decorate it
- Simplest way to add decoration
- It is very difficult to manage because it can target only one element at a time
- It is discouraged to use inline CSS
- E.g. `<p style=”color:red;”>test</p>`

Internal CSS

- Use style tag in header section
- It can target multiple elements at a time in the given page
- It can target only one page at a time
- E.g.

```
p {
color: red;
}
```

External CSS

- Use external CSS file to hold all the rules
- Link the external CSS with link tag in header section
- E.g.

```
<link rel=”stylesheet” href=”mystyles.css”>
```

Terminology

- Rule or Ruleset:
  - Pair of CSS selector and declaration block
- Declaration block:
  - Collection of declarations
- Declaration:
  - Pair of CSS property and its value separated by colon(😃 and terminated by semi-colon(😉
- Selector:
  - Used to select one or more elements from the page

Units

- px: pixel (Picture Element)
- deg: degree
- s: Seconds
- %: with respect to its parent

CSS Selector

- used to select one or more elements from given page
- Types of selector

1. Element selector
   - Also called as type selector
   - Targets only similar type of element

   - E.g. : only paragraph will have red color

```
p { color: red; }
```

2. Multiple element selector (,)
   - Multiple type selector
   - Select multiple type of elements
   - E.g. : paragraph, h2 and h3 will have color green

```
p, h2, h3 { color: green; }
```

3. ID selector (#)
   - Select only element matching the given Id
   - Id can appear in a page only once
   - E.g. :

```
/* select only paragraph having id para1  */
p#para1 { color:red; }

/* select any element having id para1 */
#para1 { color: green; }
```

4. Class selector (.)
   - Select only element matching the given class
   - E.g.

```
/* select only paragraph having class para1 */
p.para1 { color:red; }

/* select any element having class para1 */
.para1 { color: green; }
```

5. Descendant selector (white-space)
   - Used to select child elements at any level
   - E.g.

```
/* paragraph at any level inside div will have color red */
div p { color: red; }
```

6. Child selector (>)
   - Used to select child elements which are at first level

- Used to select only direct child elements
- E.g.

```
/* paragraph at first level (direct) inside div will have color red */
div > p { color: red; }
```

7. Attribute selector ([])
    - Used to select an element based on the given attribute value
    - E.g.

```
/* input of type submit will have color red */
input[type=”submit”] { color: red; }
```

8. Universal selector (*)
    - Used to select all elements
    - E.g.

```
/* all elements will have font family as arial */
* { font-family: arial; }
```

9. Pseudo selector (😃
    - Used to apply CSS rules in specific condition
    - The conditions are also known as pseudo classes
    - E.g. hover, nth-child, active, focus, visited
    - E.g.

```
/* when mouse gets over on div, the color will change to red */
div:hover { color: red; }
```

CSS Box Model

- Every element in html is rendered as a box (rectangle)
- Their are 3 Properties
    1. Border
    2. Padding
    3. Margin

CSS Position

- Used to control the position
- Values are

1. static:
   - by default static is used
   - ignores top, bottom, left and right
2. relative:
   - element is aligned with respective with top,bottom,left and right
3. absolute:
   - It is absolute with the current displayed window and moves up as window scrolls
4. fixed:
   - It is fixed at the position. Even if window scrolls the element will not move from the position

CSS Display

- Used to control the display behavior of an element
- Values are

1. block:
   - considers width and height and displays elements on new line
2. inline:
   - ignores the width and height and displays in same line
3. none:
   - hides the element
4. inline-block:
   - considers width and height and displays elements on same line

CSS Float

- The float property in CSS is used to position elements to the left or right of a container, allowing text or other elements to wrap around them.
- values
  1. right:
  2. left:

CSS Flex

- Flexbox (Flexible Box Layout) is a powerful, one-dimensional layout system in CSS designed for organizing elements in rows or columns.
- It simplifies alignment, spacing, and distribution of elements, making it ideal for responsive design.
- To use Flexbox, apply display: flex; to a container.
- This makes all child elements (flex items) automatically adjust according to the rules of Flexbox.
- Flex Container and Flex Items

1. Flex Container: The parent element that holds flex items.
2. Flex Items: The child elements inside the container.

- Below properties apply to the container (display: flex;).

1. flex-direction

1. row: Default. Items are placed left to right.

2. row-reverse: Items are placed right to left.
3. column: Items are placed top to bottom.
4. column-reverse: Items are placed bottom to top.

2. justify-content

1. flex-start: Default. Items align to the start (left).
2. flex-end: Items align to the end (right).
3. center: Items are centered.
4. space-between: First item at start, last item at end, space between them.

CSS3 Advanced Properties

- border-radius
  - Used to add rounded corner
- Shadow
  - Text shadow
  - Box shadow
- Gradients
  - Linear
  - Radial
- column-counts
  - Used to divide an element in number of columns
- CSS Animations
  - Transition
  - Transform
    - scale
    - rotate
    - translate