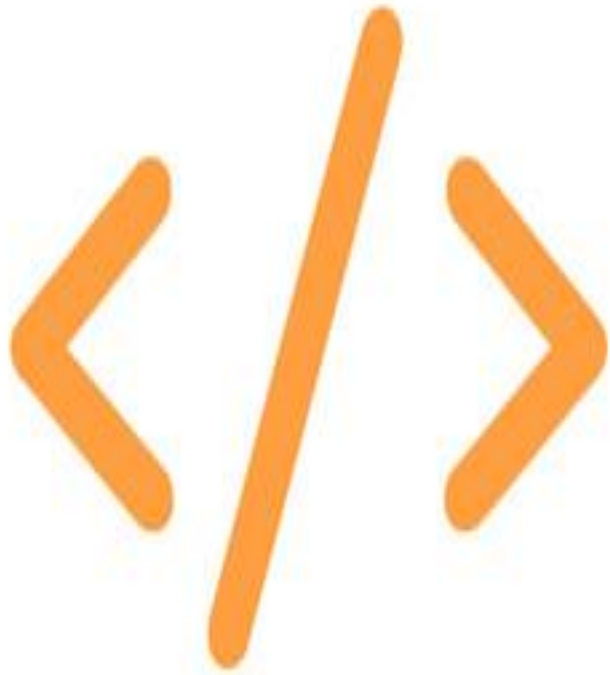## Lab 11: CSS

CLO 3:

Introducing CSS and CSS Styling: CSS selectors, inline, external, and internal, colors, background, border, margins, paddings, table styles, forms
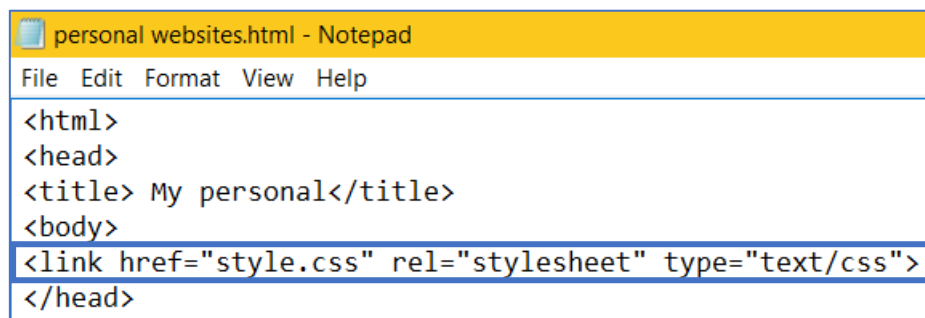
Website development

HTML & CSS

Introduction to CSS

- **CSS** stands for **C**ascading **S**tyle **S**heets

- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**

- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once

- External style sheets are stored in **CSS files**

1. Linking CSS style sheet with HTML

Link the css style sheet with html.

The "rel" stands for relationship. It denotes that, we connect an external CSS with the HTML page.

Figure 120-linkin css style sheet with htm file

2. CSS Selectors

- Element Selector
- Id Selector
- Class Selector
- Universal Selector
- Grouping Selector

Element Selector

```css
p {
  text-align: center;
  color: red;
}
```

Id Selector

```css
#para1 {
  text-align: center;
  color: red;
}
```

Class Selector

```css
.center {
  text-align: center;
  color: red;
}
```

Universal Selector

```css
* {
  text-align: center;
  color: blue;
}
```

Group Selector

```css
h1 {
  text-align: center;
  color: red;
}
```

3. Three Ways to Insert CSS

There are three ways of inserting a style sheet:

- External CSS
- Internal CSS
- Inline CSS

4. Css Colors

- Background color
- Text color
- Border Color
- Color Values

5. Background

- Background Color
- Background Image
- Background Repeat
- Background Position

- Background attachment
- Background Shorthand

```css
body {
  background-color: #ffffff;
  background-image: url("img_tree.png");
  background-repeat: no-repeat;
  background-position: right top;
}

body {
  background: #ffffff url("img_tree.png") no-repeat right top;
}
```

When using the shorthand property the order of the property values is:

- background-color
- background-image
- background-repeat
- background-attachment
- background-position

6. Border

```css
p.dotted {border-style: dotted;}
p.dashed {border-style: dashed;}
p.solid {border-style: solid;}
p.double {border-style: double;}
p.groove {border-style: groove;}
p.ridge {border-style: ridge;}
p.inset {border-style: inset;}
p.outset {border-style: outset;}
p.none {border-style: none;}
p.hidden {border-style: hidden;}
p.mix {border-style: dotted dashed solid double;}
```

- Round Boarder

```css
p {
  border: 2px solid red;
  border-radius: 5px;
}
```

7. Margin

Margins are used to create space around elements, outside of any defined borders.

All the margin properties can have the following values:

- auto - the browser calculates the margin
- length - specifies a margin in px, pt, cm, etc.
- % - specifies a margin in % of the width of the containing element

8. Padding

The CSS padding properties are used to generate space around an element's content, inside of any defined borders.

```css
div {
  padding-top: 50px;
  padding-right: 30px;
  padding-bottom: 50px;
  padding-left: 80px;
}
```

9. Table

- Table Border
- Table Size
- Table Alignment
- Table style
- Table Responsive

```css
table, th, td {
  border: 1px solid;
}

table {
  border-collapse: collapse;
}

table {
  width: 100%;
}
```

Table Alignment

- Horizontal Alignment(like left, right, or center)
  ```css
  td {
    text-align: center;
  }
  ```
- Vertical Alignment(like top, bottom, or middle)
  ```css
  td {
    height: 50px;
    vertical-align: bottom;
  }
  ```

Table Style

- Table padding(To control the space between the border and the content in a table, use the padding property on <td> and <th> elements)

```
th, td {
  padding: 15px;
  text-align: left;
}
```

- Horizontal Dividers(Add the border-bottom property to <th> and <td> for horizontal dividers)

- Hover able Table(Use the :hover selector on <tr> to highlight table rows on mouse over)

```
tr:hover {background-color: coral;}
```

- Striped Table(For zebra-striped tables, use the nth-child() selector and add a background color to all even (or odd) table rows)

- Table Color

```
th {
  background-color: #04AA6D;
  color: white;
}
```

Table Responsive

A responsive table will display a horizontal scroll bar if the screen is too small to display the full content. Add a container element (like <div>) with **overflow-x:auto** around the <table> element to make it responsive.

```
<div style="overflow-x:auto;">

<table>
... table content ...
</table>

</div>
```