Front End Technologies
CSS - Day 1

Agenda

- **CSS Introduction**
- **Inline CSS**
- **Internal CSS**

CSS INTRODUCTION:

Cascading **S**tyle **S**heets, fondly referred to as **CSS**, is the World Wide Web Consortium standard for the visual presentation of web pages. With CSS, you're going to completely control the presentation of your pages, often without even changing your HTML. CSS is used to define styles for your web pages, including the design,
layout and variations in display for different devices and screen sizes. CSS is a set of rules that we are telling to the html that this is how the styling should be.

There are three ways to apply CSS to the HTML page they are:

- **INLINE CSS**
- **INTERNAL CSS**
- **EXTERNAL CSS**

Inline CSS: An inline CSS is used to apply a unique style to a single HTML element. It uses the **style attribute** of an HTML element.

Internal CSS: An internal CSS is used to define a style for a single HTML page. An internal CSS is defined in the **<head> section** of an HTML page, within a **<style> element**.

External CSS: An external style sheet is used to define the style for many HTML pages. To use an external style sheet, add a link to it in the **<head> section** of each HTML page.

Syntax of CSS:

Property: value

Syntax of CSS is the property name and a value, separated by a colon. Property can be many things like Colours, Font-family, Background and each property have their own values. We can include multiple property: value pair, separated by semi-colon.

Let us now understand with an example how **property: value** can be used

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>Home Page</title>
</head>

<body>
    <h1 style="color: red">Full Stack Web Development</h1>
    <p>Full stack development refers to the development of both front end(client side) and back end(server
    side) portions of web application.</p>
    <h2>Technologies related to full stack web development</h2>
    <h3>Front End Technologies</h3>
    <p>Front End is the visible part of website or web application which is responsible for user
    experience, built using HTML,CSS,JAVASCRIPT</p>
    <img src="frontend.png">
    <h3>Back End Technologies</h3>
    <p>It refers to the server-side development of web application with a primary focus on how the website
    works and is built using languages such as Python,Java,C</p>
    <img src="backend.jpg">
    <h3>Database Technologies</h3>
    <p> Database is the collection of inter-related data which helps in efficient retrieval, insertion and
    deletion of data from database and organizes the data. The technologies used are SQL,MYSQL,MONGODB</p>
    <img src="dbms.png">
</body>

</html>
```

Output:

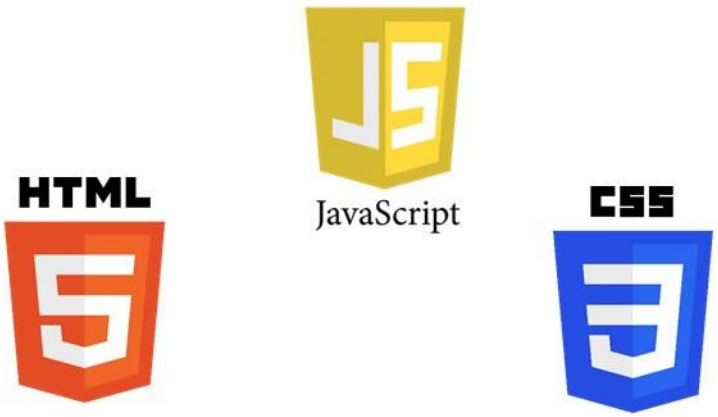
Full Stack Web Development

Full stack development refers to the development of both front end(client side) and back end(server side) portions of web application.

Technologies related to full stack web development

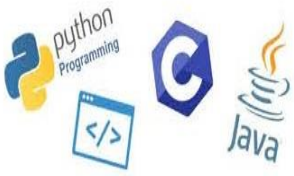
Front End Technologies

Front End is the visible part of website or web application which is responsible for user experience, built using HTML,CSS,JAVASCRIPT



Back End Technologies

It refers to the server-side development of web application with a primary focus on how the website works and is built using languages such as Python,Java,C



Database Technologies

Database is the collection of inter-related data which helps in efficient retrieval, insertion and deletion of data from database and organizes the data. The technologies used are SQL,MYSQL,MONGODB

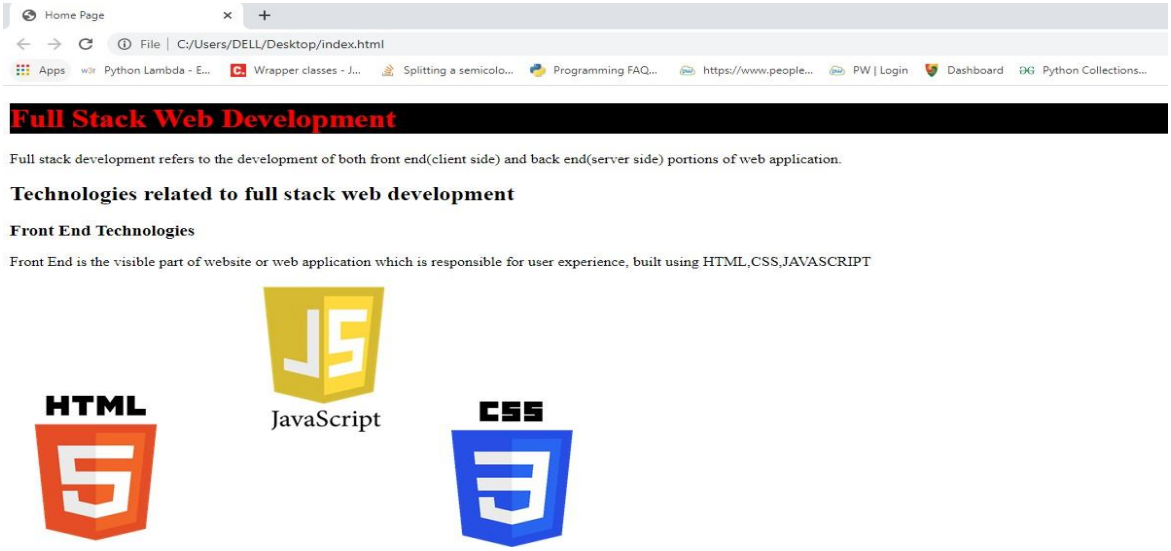
As we can see in the above example **style attribute** helps us to modify our text, viewed in the page. This modification includes changing font size, font family, font color etc. Not only the texts but also we can change the style of a body are part of a page. In above example we have used a property color with a value red and we can see the difference in the output screen after styling, we can change value of color blue, black, violet etc.,

In the above example we have seen how to apply color to the text, now we will see with the example how to apply **background color to the text** using **background property and a value**.

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>Home Page</title>
</head>

<body>
    <h1 style="color: red; background-color: black">Full Stack Web Development</h1>
    <p>Full stack development refers to the development of both front end(client side) and back end(server
    side) portions of web application.</p>
    <h2>Technologies related to full stack web development</h2>
    <h3>Front End Technologies</h3>
    <p>Front End is the visible part of website or web application which is responsible for user
    experience, built using HTML,CSS,JAVASCRIPT</p>
    <img src="frontend.png">
    <h3>Back End Technologies</h3>
    <p>It refers to the server-side development of web application with a primary focus on how the website
    works and is built using languages such as Python,Java,C</p>
    <img src="backend.jpg">
    <h3>Database Technologies</h3>
    <p> Database is the collection of inter-related data which helps in efficient retrieval, insertion and
    deletion of data from database and organizes the data. The technologies used are SQL,MYSQL,MONGODB</p>
    <img src="dbms.png">
</body>

</html>
```

Output:

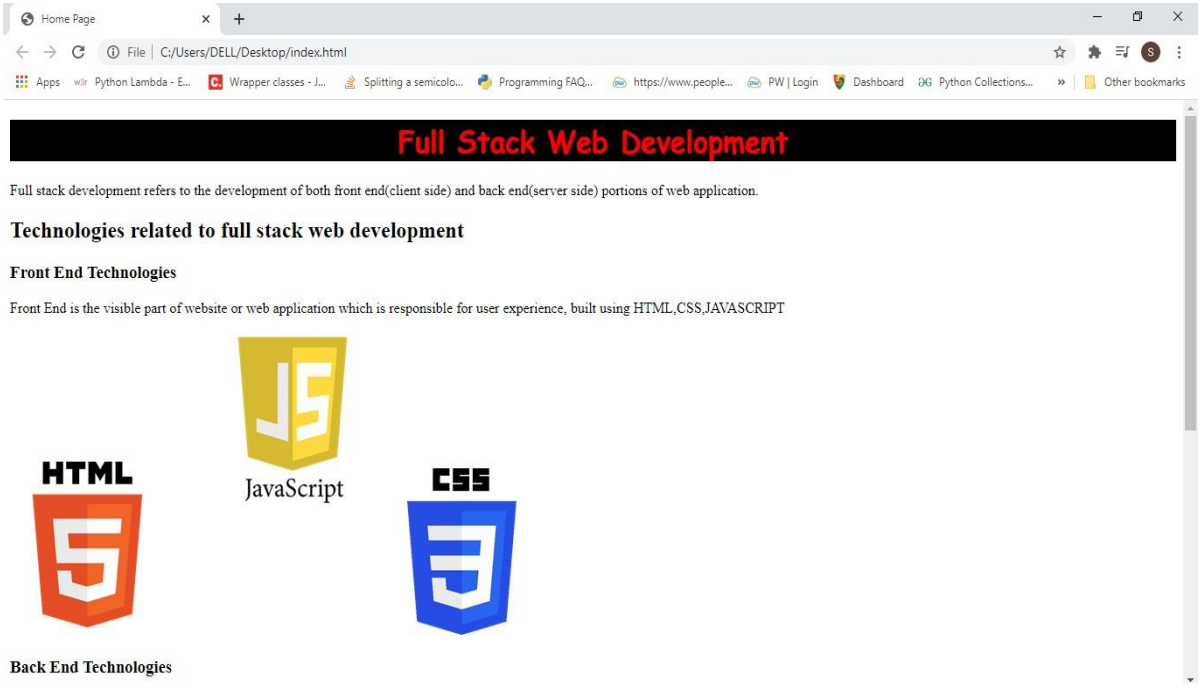


Now we will see how to change font of a text and alignment of a text. To change the font of a text font-family property should be used and to align we have to make use of text-align, let us understand with an example.

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>Home Page</title>
</head>

<body>
    <h1 style="color: red; background-color: black; font-family: cursive; text-align: center;">Full Stack
    Web Development</h1>
    <p>Full stack development refers to the development of both front end(client side) and back end(server
    side) portions of web application.</p>
    <h2>Technologies related to full stack web development</h2>
    <h3>Front End Technologies</h3>
    <p>Front End is the visible part of website or web application which is responsible for user
    experience, built using HTML,CSS,JAVASCRIPT</p>
    <img src="frontend.png">
    <h3>Back End Technologies</h3>
    <p>It refers to the server-side development of web application with a primary focus on how the website
    works and is built using languages such as Python,Java,C</p>
    <img src="backend.jpg">
    <h3>Database Technologies</h3>
    <p> Database is the collection of inter-related data which helps in efficient retrieval, insertion and
    deletion of data from database and organizes the data. The technologies used are SQL,MYSQL,MONGODB</p>
    <img src="dbms.png">
</body>
</html>
```

Output:



If we want to apply styling for all <p> tags in the above example, inline CSS is an inefficient way as adding CSS rules to every HTML element is time-consuming and makes your HTML structure messy. To overcome this problem we can make use of Internal CSS, now let us understand how to use internal css with an example.

Example-1:

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>Home Page</title>
    <style>
    h1 {
        color: red;
        background-color: black;
        font-family: cursive;
        text-align: center;
    }

    p {
        color: blue;
        background-color: yellow;
        font-family: sans-serif;
    }

    h2 {
        color: blue;
        font-family: Arial;
        background-color: yellow;
    }

    h3 {
        color: black;
        font-family: Helvetica;
        background-color: violet;
    }
    </style>
</head>

<body>
    <h1>Full Stack Web Development</h1>
    <p>Full stack development refers to the development of both front end(client side) and back end(server
    side) portions of web application.</p>
    <h2>Technologies related to full stack web development</h2>
    <h3>Front End Technologies</h3>
    <p>Front End is the visible part of website or web application which is responsible for user
    experience, built using HTML,CSS,JAVASCRIPT</p>
    <img src="frontend.png">
    <h3>Back End Technologies</h3>
    <p>It refers to the server-side development of web application with a primary focus on how the website
    works and is built using languages such as Python,Java,C</p>
    <img src="backend.jpg">
    <h3>Database Technologies</h3>
    <p> Database is the collection of inter-related data which helps in efficient retrieval, insertion and
    deletion of data from database and organizes the data. The technologies used are SQL,MYSQL,MONGODB</p>
    <img src="dbms.png">
</body>
</html>
```

Output:

As we can see in the above example using this CSS style is an effective method of styling a single page. Let us understand this with one more example.

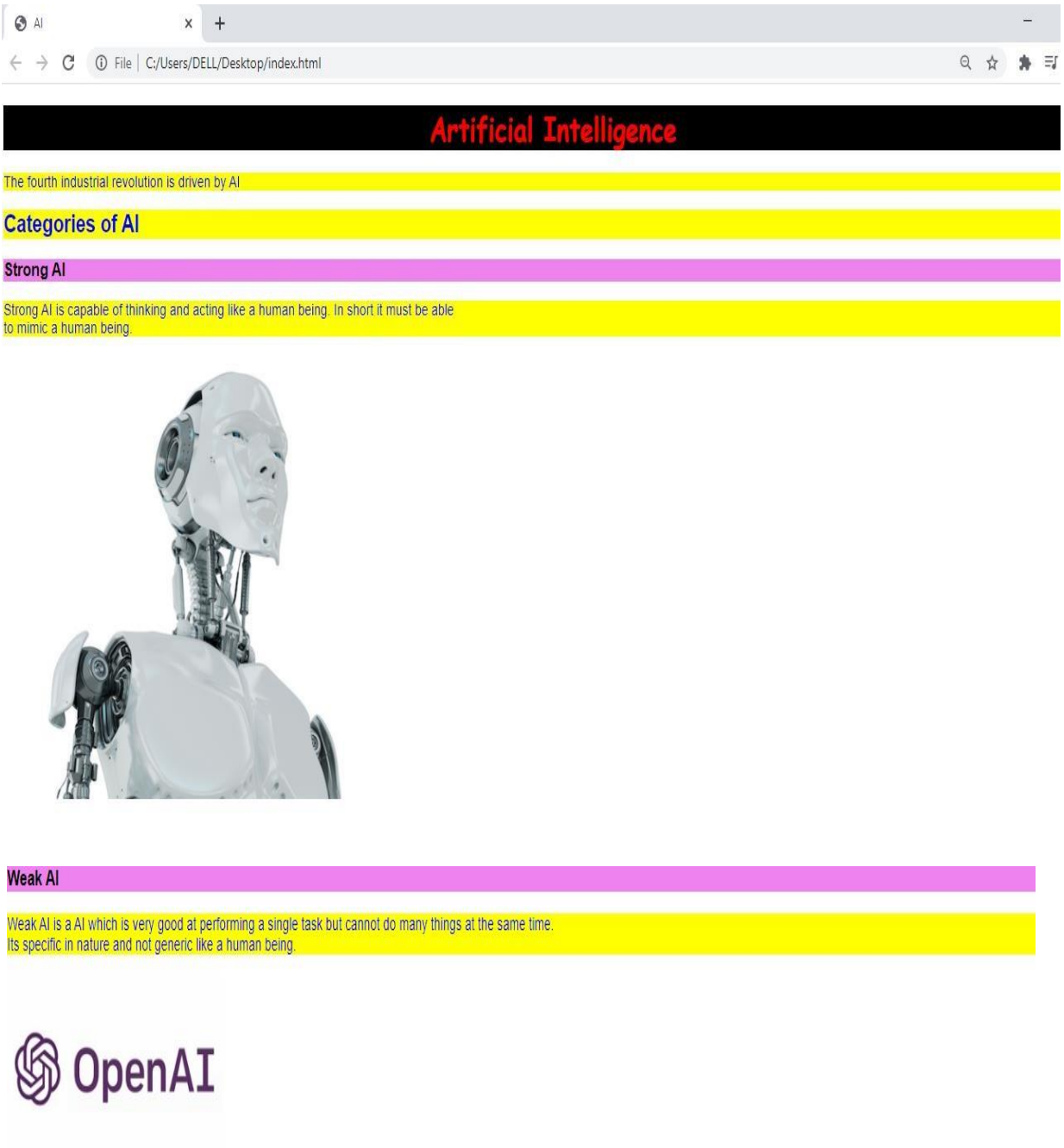
Example -2:

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>AI</title>
    <style>
    h1 {
        color: red;
        background-color: black;
        font-family: cursive;
        text-align: center;
    }

    p {
        color: blue;
        background-color: yellow;
        font-family: sans-serif;
    }

    h2 {
        color: blue;
        font-family: Arial;
        background-color: yellow;
    }
```

```
    h3 {
        color: black;
        font-family: Helvetica;
        background-color: violet;
    }
    </style>
</head>

<body>
    <h1>Artificial Intelligence</h1>
    <p>The fourth industrial revolution is driven by AI</p>
    <h2>Categories of AI</h2>
    <h3>Strong AI</h3>
    <p>Strong AI is capable of thinking and acting like a human being. In short it must be able<br>
        to mimic a human being.</p>
    <img src="strongai.JPG">
    <h3>Weak AI</h3>
    <p>Weak AI is a AI which is very good at performing a single task but cannot do many things at the
    same time.<br>Its specific in nature and not generic like a human being.
    </p>
    <img src="openai.JPG">
</body>

</html>
```

Output:



As we can see from Example1 and Example2 styling for both the example is same but using internal css style, styling for multiple pages is time-consuming as you need to put CSS rules to every page of your website. This can be overcome using External CSS.