Front End Technologies
CSS - Day 7

Agenda

- **ATTRIBUTE Selector**

Attribute Selector: The CSS Attribute Selector is used to select an element with some specific attribute or attribute value. It is an excellent way to style the HTML elements by grouping them based on some specific attributes and the attribute selector will select those elements with similar attributes.

There are three different types of attribute selector:

- **Simple Attribute selector**
- **Exact value Attribute selector**
- **Partial value Attribute selector**

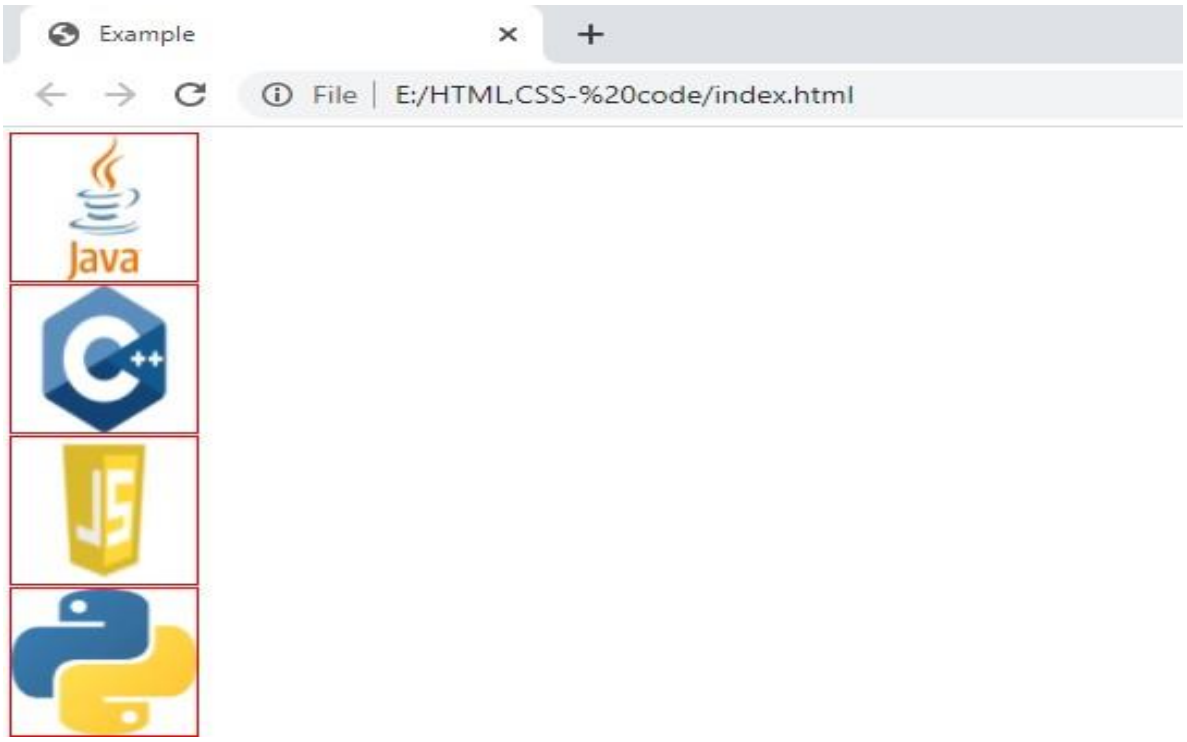
Simple Attribute Selector: If you want to select elements that have a certain attribute, regardless of that attribute's value, you can use a simple attribute selector. Let us now understand this with an example.

Example: To select all img tag that have an alt attribute and add the solid border to the image.

index.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        img[alt]{
            border:2px solid red;
        }
    </style>
</head>
<body>
    <img src="java1.png" height="255" width="255" alt="pic not found"><br>
    <img src="c++1.png" height="255" width="255" alt="pic not found"><br>
    <img src="js1.png" height="255" width="255" alt="pic not found"><br>
    <img src="python1.png" height="255" width="255" alt="pic not found"><br>
</body>
</html>
```

Output:

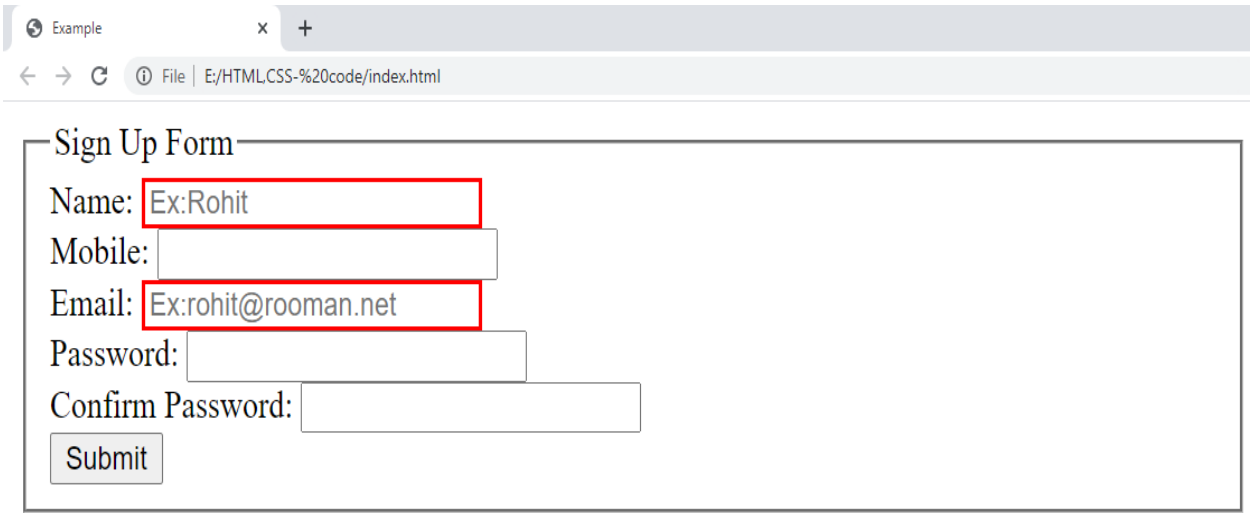


Example: To select all input tags based on multiple attributes.

index.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        input[type][name][placeholder]{
            border:2px solid red;
        }
    </style>
</head>
<body>
    <fieldset>
    <legend>Sign Up Form</legend>
    <form>
        <label>Name: </label>
        <input type="text" name="name" placeholder="Ex:Rohit"><br>
        <label>Mobile: </label>
        <input type="tel" name="mob"><br>
        <label>Email: </label>
        <input type="Email" name="mail" placeholder="Ex:rohit@rooman.net"><br>
        <label>Password: </label>
        <input type="Password" name="pwd"><br>
        <label>Confirm Password: </label>
        <input type="Password" name="cpwd"><br>
        <input type="submit">
    </form>
</fieldset>
</body>
</html>
```

Output:



Example: To select an attribute based on exact value, partial value.

index.html

```
<!DOCTYPE html>
<html>

<head>
    <title>Home Page</title>
    <link rel="stylesheet" type="text/css" href="index.css">
</head>

<body>
    <div class="main font1">
        <h1>Web Development</h1>
        <p>Web development is the work involved in developing a Web site for the <a href="https://www.britannica.com/
        technology/Internet" target="_blank">Internet</a> (World Wide Web) or an intranet (a private network). Web
        development can range from developing a simple single <a href="https://en.wikipedia.org/wiki/Static_web_page" target=
        "_blank">static page</a> of plain text to complex Web-based Internet applications (Web apps), electronic businesses,
        and social network services. A more comprehensive list of tasks to which Web development commonly refers, may
        include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, <a
        href="https://en.wikipedia.org/wiki/Web_server" target="_blank">Web server</a> and network security configuration,
        and e-commerce development.</p>
        <a href="https://www.google.com/" target="_blank">To google about web development click here</a><br><br>
        <h3>Layers of a web application:</h3>
        <a href="#FE">Front-end</a><br>
        <a href="#BE">Back-end</a><br>
        <a href="#DB">Database</a><br>
    </div>

     <div class="sub font2">
         <h2 id="FE">Front-End</h2>
         <h3>Front End is the visible part of website or web application which is responsible for user experience.The front
         end stack is made up of many different languages and libraries. While these vary from application to application,
         there are only a few generic languages understood by all web browsers. These three main front-end coding languages
         are HTML, CSS and JavaScript.</h3>
         <h3>HTML is the first layer of any website and creates the code version of a wireframe on a webpage. These
         wireframes exist for the styles in CSS and all the bells and whistles in JavaScript. </h3>
         <h3>Cascading Style Sheets, or CSS, is what gives our HTML visual appeal and draws in the user. To put it simply,
         style sheets dictate the presentation of HTML elements on a page.</h3>
         <h3>JavaScript is a runtime language for web browsers. This means that when you open a web page, the page will load
         both the foundational JavaScript that is standard with the page and any new JavaScript added to a page. The new
         JavaScript will load in parallel with it and can perform actions and make decisions.</h3>
         <img src="frontend.png" alt="pic not found">
     </div>

    <div class="sub font2">
        <h2 id="BE">Back-End</h2>
        <h3>the back end is everything that happens, well, backstage. It contains servers where your web pages are located
        and the underlying logic that governs the website's functions and processes. Back-end developers are involved in
        constructing the actual logic on which an application or a website works. Some of the key skills they should have
        include: an in-depth knowledge of the back-end programming language/framework</h3>
        <h3>In order to handle the back end of given applications, programmers or back end developers have to deal with back
        end technologies that includes languages like java, python,C, C#, PHP, .NET etc</h3>
        <img src="backend.png" alt="pic not found">
    </div>


    <div class="sub font2">
        <h2 id="DB">Data Base</h2>
        <h3>A database is an organized collection of data, generally stored and accessed electronically from a computer
        system. Where databases are more complex they are often developed using formal design and modeling techniques.</h3>
        <h3>The database management system (DBMS) is the software that interacts with end users, applications, and the
        database itself to capture and analyze the data. The DBMS software additionally encompasses the core facilities
        provided to administer the database. The sum total of the database, the DBMS and the associated applications can be
        referred to as a "database system". Often the term "database" is also used to loosely refer to any of the DBMS, the
        database system or an application associated with the database.</h3>
        <h3>As a developer, we have lots of choices for the databases. We can have mainly two types of database. The most
        popular databases are</h3>
        <h3>SQL - Examples: Oracle, MySQL, Microsoft SQL Server, PostgreSQL</h3>
        <h3>NoSQL - Examples: MongoDB, Redis</h3>
        <img src="dbms.png" alt="pic not found">
    </div>

      <div class="end font3">
          <h4>Also read about:</h4>
          <a href="ai.html" target="_blank">Artificial Intelligence</a><br>
          <a href="st.html" target="_blank">Software Testing</a>
          <h4>Useful PDF's for download</h4>
          <a href="full-stack-java-developer.pdf" target="_blank">Full Stack Java Developer</a><br>
          <a href="fend_intro.PDF" target="_blank">Web Development Intro</a>
      </div>
</body>

</html>
```

Index.css

```css
.main{
    background-color: #DC3D24;
    color: #232B2B;
}

.font1{
    font-family: cursive;
    font-weight: bolder;
}

.sub{
    background-color: #221E1D;
    color: #ECEAE0;
}

.font2{
    font-family: monospace;
    font-weight: #DFD297;
}

.end{
    background-color: #AC2832;
    color: #DFD297;
}

.font3{
    font-family: sans-serif;
    font-weight: normal;
}
a[href = "https://www.google.com/"]{
    color: yellow;
}

a[href *= "wikipedia"]{
    color: cyan;
}

a[href ^= "#"]{
    color: #f5ad42;
}

a[href $=".html"]{
    color: #0ec2eb;
}

a[href $= ".pdf"]{
    color: #0ec2db;
}

div[class ~= "font1"]{
    border:2px solid blue;
}
```

Output:


Home Page
File | E:/HTML,CSS-%20code/index.html
Web Development
Web development is the work involved in developing a Web site for the Internet (World Wide Web) or an intranet (a private network). Web development can range from developing a simple single static page of plain text to complex Web-based Internet applications (Web apps), electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration, and e-commerce development.
To google about web development click here
Layers of a web application:
Front-end
Back-end
Database
Front-End
Front End is the visible part of website or web application which is responsible for user experience.The front end stack is made up of many different languages and libraries. While these vary from application to application, there are only a few generic languages understood by all web browsers. These three main front-end coding languages are HTML, CSS and JavaScript.
HTML is the first layer of any website and creates the code version of a wireframe on a webpage. These wireframes exist for the styles in CSS and all the bells and whistles in JavaScript.
Cascading Style Sheets, or CSS, is what gives our HTML visual appeal and draws in the user. To put it simply, style sheets dictate the presentation of HTML elements on a page.
JavaScript is a runtime language for web browsers. This means that when you open a web page, the page will load both the foundational JavaScript that is standard with the page and any new JavaScript added to a page. The new JavaScript will load in parallel with it and can perform actions and make decisions.
HTML
JavaScript
CSS
Back-End
the back end is everything that happens, well, backstage. It contains servers where your web pages are located and the underlying logic that governs the website's functions and processes. Back-end developers are involved in constructing the actual logic on which an application or a website works. Some of the key skills they should have include: an in-depth knowledge of the back-end programming language/framework
In order to handle the back end of given applications, programmers or back end developers have to deal with back end technologies that includes languages like java, python,C, C#, PHP, .NET etc
python
Java

In this example,

The [attribute = “value”] selector is used to select elements with a specified attribute and value.

The [attribute *= “value”] selector is used to select elements whose attribute value contains a specified value.

The [attribute ^= “value”] selector is used to select elements whose attribute value begins with a specified value.

The [attribute $= “value”] selector is used to select elements whose attribute value ends with a specified value.

The [attribute ~= “value”] selector is used to select elements with an attribute value containing a specified word.

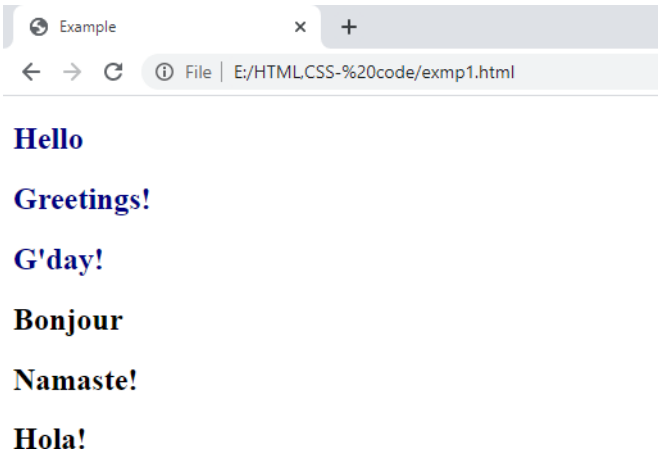
Example-1:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <link rel="stylesheet" type="text/css" href="style.css"
    >
</head>
<body>
    <h2 lang="en">Hello</h2>
    <h2 lang="en-us">Greetings!</h2>
    <h2 lang="en-au">G'day!</h2>
    <h2 lang="fr">Bonjour</h2>
    <h2 lang="hi">Namaste!</h2>
    <h2 lang="es">Hola!</h2>
</body>
</html>
```

Index.css

```css
h2[lang ^= "en"]{
    color: navy;
}
```

Output:

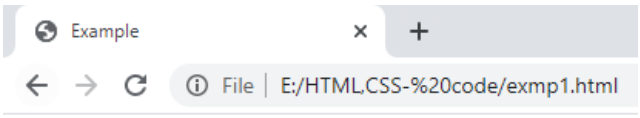


Example-2:

Index.css

```
h2[lang |= "en"]{
    color: red;
}
```

Output:



Hello

Greetings!

G'day!

Bonjour

Namaste!

Hola!

In the above two examples, starts with (^) and pipe character (|) both will give same result but actually ^ matches only en and | matches en-. Depending on the requirement you can make use of ^ or |.