

1c.explain class selectors and pseudo-selectors css with relevant script?

A **pseudo-class** is a **selector** that selects **elements** that are in a specific state, e.g. they are the first element of their type, or they are being hovered over by the mouse pointer.

Ex.

```
<article>
```

```
  <p class="first">Veggies es bonus vobis, proinde vos postulo essum magis  
  kohlrabi welsh onion daikon amaranth tatsoi tomatillo  
    melon azuki bean garlic.</p>
```

```
  <p>Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette  
  tatsoi pea sprouts fava bean collard
```

```
    greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea  
  peanut soko zucchini.</p>
```

```
</article>
```

```
.first {  
  font-size: 120%;  
  font-weight: bold;  
}
```

The **class selector** is a way to select all of the elements with the specified **class** name, and apply styles to each of the matching elements. The **selector** must start with a period (.) and then the **class** name.

Ex.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <meta charset="utf-8">
```

```
  <title>CSS: The class selector</title>
```

```
  <style>
```

```
    /* Makes all elements with hot-city class have red background */
```

```
    .hot-city {  
      background-color: rgb(255, 0, 0);  
    }
```

```
    /* Makes all elements with warm-city class have orange background */
```

```
    .warm-city {  
      background-color: rgb(255, 203, 71);  
    }
```

```
    /* Makes all elements with cold-city class have blue background */
```

```

.cold-city {
    background-color: rgb(92, 222, 255);
}

/* Makes all elements with capital-city class have bold text */
.capital-city {
    font-weight: bold;
}
</style>
</head>
<body>

<h2>US Cities</h2>
<p>Color-coded according to perceived climate.</p>
<ul>
    <li class="warm-city">Annapolis, Maryland</li>
    <li class="cold-city capital-city">Augusta, Maine</li>
    <li class="hot-city capital-city">Austin, Texas</li>
    <li class="hot-city">New Orleans, Louisiana</li>
    <li class="cold-city capital-city">Juneau, Alaska</li>
    <li class="hot-city">Miami, Florida</li>
    <li class="warm-city">San Francisco, California</li>
</ul>

<h3>Legend:</h3>
<p class="hot-city">This is a city that I sweated in a lot when I visited.</p>
<p class="warm-city">This is a city that's hot enough for me to live in, but not so
much that I sweat profusely.</p>
<p class="cold-city">This is a city that is too cold for me to ever live in.</p>
</body>
</html>

```

Difference between XHTML and HTML5

1. XHTML :

XHTML stands for Extensible Hypertext Markup Language. It can be considered as a part of the XML markup language this is because of XHTML have features of both XML and HTML. XHTML is extended from XML and HTML. XHTML can be considered as a better version of HTML.

2. [HTML](#) :

HTML is the Hypertext Markup Language which is the most widely used language over the internet. HTML is used to create web pages and link them from one to another. Please note HTML is not a [programming language](#), it is a markup language. We can use different other technologies as like CSS and [javascript](#) to give a new look to the pages developed by HTML.

Differnece between HTML and XHTML :

S.N o.	HTML	XHTML
1.	HTML stands for Hypertext Markup Language.	XHTML stands for Extensible Hypertext Markup Language.

- | | | |
|----|---|---|
| 2. | It was developed by Tim Berners-Lee. | It was developed by W3C i.e World Wide Web Consortium. |
| 3. | It was developed in 1991. | It was released in 2000. |
| 4. | It is extended from SGML. | It is extended from XML and HTML. |
| 5. | The format is a document file format. | The format is a markup language. |
| 6. | All tags and attributes are not necessarily to be in lower or upper case. | In this, every tag and attribute should be in lower case. |

- | | | |
|-----|---|---|
| 7. | Doctype is not necessary to write at the top. | Doctype is very necessary to write at the top of the file. |
| 8. | It is not necessary to close the tags in the order they are opened. | It is necessary to close the tags in the order they are opened. |
| 9. | While using the attributes it is not necessary to mention quotes. For e.g. <Geeks>. | While using the attributes it is mandatory to mention quotes. For e.g. <Geeks="GFG">. |
| 10. | Filename extension used are .html, .htm. | Filename extension are .xhtml, .xht, .xml. |

HTML Tag

.The HTML tag is used for specifying an unordered list, which groups a collection of items having no numerical order. When changing the order of list items, the meaning does not change. Usually, the items of an unordered list are displayed with a bullet. It can be of different forms such as a circle, a dot, or a square.

Each element of an unordered list is declared inside the `` tag.

The `` tag is a block-level element, and occupies all available horizontal space. Its height depends on the content within the container. An unordered list is typically rendered as a bulleted list.

The `` tag also represents a list of items and creates an ordered list. But it differs from ``, as the order in the `` tag is meaningful. By default, the items of an ordered list are displayed with numbers.

The `` and `` tags can be nested as deeply as you want. The nested lists can alternate between `` and ``.

It is possible to change the list item marker with [CSS](#). However, the semantic meaning expressed by the choice of a list type cannot be changed with CSS.

Syntax ¶

The `` tag comes in pairs. The content is written between the opening (``) and closing (``) tags. **Example of the HTML `` tag:** ¶

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title of the document</title>
  </head>
  <body>
    <ul>
      <li>List item</li>
      <li>List item</li>
      <li>List item</li>
    </ul>
  </body>
</html>
```

Two different ordered lists (the first list starts at 1, and the second starts at 50):

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

```
<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

Types of URL

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URL stands for Uniform Resource Locator. Any internet location available on server is called a web URL, web address or website. Each website or webpage has a unique address called URL. e.g., the website of

geeksforgeeks website has an address or URL called

<https://www.geeksforgeeks.org/>

type://address/path

**Basic Structure
of URL**

type: It specifies the type of the server in which the file is located.

address: It specifies the address or location of the internet server.

path: It specifies the location of the file on the internet server.

Types of URL: URL gives the address of files created for webpages or other documents like an image, pdf for a doc file, etc.

There are two types of URL:

- Absolute URL
- Relative URL

Absolute URL: This type of URL contains both the domain name and directory/page path. An absolute URL gives complete location information. It begins with a protocol like “http://” and continues, including every detail. An absolute URL typically comes with the following syntax.

```
protocol://domain/path
```

For web browsing, absolute URL's are types in the address bar of a web browser. For example, if it is related to our project page link of **geeksforgeeks** website, the URL should be mentioned as <https://www.geeksforgeeks.org/computer-science-projects/> this gives the complete information about the file location path.

Note: The protocol may be of following types.

```
http://, https://, ftp://, gopher://, etc.
```


Relative URL: This type of URL contains the path excluding the domain name. Relative means “in relation to”, and a relative URL tells a URL location on terms of the current location. Relative path is used for reference to a given link of a file that exist within the same domain.

Let us assume a web developer setting up a webpage and want to link an image called “geeksforgeeks.jpg”.

```

```

It would internally be interpreted like the following.

```

```

The dot(.) before the “/” in the *src* attribute is a “special character”. It means the location should be started from the current directory to find the file location

4.

The `<nav>` tag defines a set of navigation links.

Notice that NOT all links of a document should be inside a `<nav>` element. The `<nav>` element is intended only for major block of navigation links.

Browsers, such as screen readers for disabled users, can use this element to determine whether to omit the initial rendering of this content.

Ex.

```
<!DOCTYPE html>
<html>
<body>
```

<h1>The nav element</h1>

<p>The nav element defines a set of navigation links:</p>

```
<nav>
<a href="/html/">HTML</a> |
<a href="/css/">CSS</a> |
<a href="/js/">JavaScript</a> |
<a href="/python/">Python</a>
</nav>
```

</body>

</html>

- **<section>**

The **<section>** tag defines a section in a document.

Ex.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

<h1>The section element</h1>

```
<section>
```

```
  <h2>WWF History</h2>
```

```
  <p>The World Wide Fund for Nature (WWF) is an international organization
working on issues regarding the conservation, research and restoration of the
environment, formerly named the World Wildlife Fund. WWF was founded in
1961.</p>
```

```
</section>
```

```
<section>
```

```
  <h2>WWF's Symbol</h2>
```

```
  <p>The Panda has become the symbol of WWF. The well-known panda logo
of WWF originated from a panda named Chi Chi that was transferred from
the Beijing Zoo to the London Zoo in the same year of the establishment of
WWF.</p>
```

```
</section>
```

```
</body>
```

```
</html>
```

- **<aside>**

- The **<aside>** tag defines some content aside from the content it is placed in.
- The aside content should be indirectly related to the surrounding content.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The aside element</h1>
```

```
<p>My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!</p>
```

```
<aside>
```

```
  <h4>Epcot Center</h4>
```

```
  <p>Epcot is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.</p>
```

```
</aside>
```

```
</body>
```

```
</html>
```