Learn Every CSS Selector In 20 Minutes

CSS Selectors

In this presentation, I’m following this tutorial

1) Basic Selectors

1. **Universal selector**
   - Selects all elements - Ex: * matches all the elements of the document.
2. **Type Selector**
   - Selects all elements that have the given node name - Ex: *input* will match any <input>
3. **Class Selector**
   - Selects all elements that have the given class - Ex: *.index*
4. **ID Selector**
   - Selects elements based on the value of its *id* attribute - Ex: *#toc*
5. **Attribute Selector**
   - Selects all elements that have the value indicated (or a value) in a given attribute.
   - Ex: [attr=value] matches all elements an attribute set to an specific value
   - Ex2: [id] matches all elements that have the id attribute set (to any value)

2) Grouping Selectors

Selector list

- Using , we can group nodes to apply an style to them
  - Syntax: A, B
  - Example: div, span will match both <span> and <div> elements.

3) Combinators

- **Descendant combinator** (space)
  - All the descendants (not only children)
- **Child combinator** >
  - All children (not all descendants)
- **general sibling combinator** ~
  - Elements that are neighbours or siblings (not necessary immediate)
- **adjacent sibling combinator** +
  - Element that is the immediate (posterior, not previous) neighbour

4) Pseudo-classes

A pseudo-class defines a special state of an element.

A pseudo-class can be used to:

- Style an element when a user mouses over it
- Style visited and unvisited links differently
- Style an element when it gets focus

4) Pseudo-classes

- The : pseudo allows the selection of elements based on state information that is not contained in the document tree
- There are lots of pseudo-classes
  - User action: :link :visited :hover :active :focus
  - For inputs: :valid :invalid *etc.*
  - Tree Structural: :root :first-child :nth-child() *etc.*
  - *Etc..*

4) Pseudo-classes

- Pseudo-classes can be combined with CSS classes. Example

- Create interactions using pseudo-classes. Example

div:hover p { color:red }	Text inside a **p** that is descendant of a div is colored in red on hover the **div**
div p:hover { color:red }	Text inside the **p** is colored in red when hovering on the **p** that a descendant of a **div**
div.box:hover p { color:red }	Text inside the **p** is colored in red on hover the div of class *box*

4) Pseudo-classes

Other pseudo-classes:

- :first-child matches the first child of an element
  - p:first-child Any <p> that is the first child of any element
  - p i:first-child First <i> element in all <p> elements
  - p:first-child i All <i> elements in <p> elements that are the first child
- :nth-child() matches the child or children we want to modify

5) Pseudo-elements

Pseudo-Elements are used to style a specified part of an element

- **::first-line** first line of an element
- **::first-letter** first letter of the text of an element
- **::before** to insert content *before* an element text
- **::after** to insert content *after* an element text
- **::selection** match the selection of text made by the user

Recommended activities and links

1. **CSS selectors tutorials**
   - **MDN Web Docs**
   - W3Schools
2. ***CSS Diner***
   - A fun game to learn about **combinators, pseudo-classes** and **pseudo-elements**