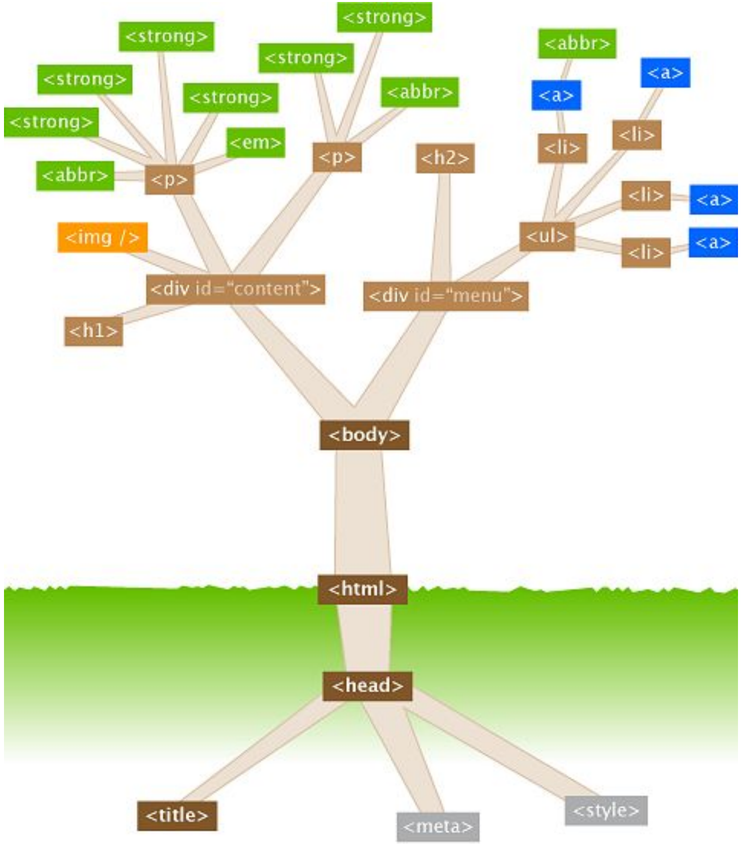
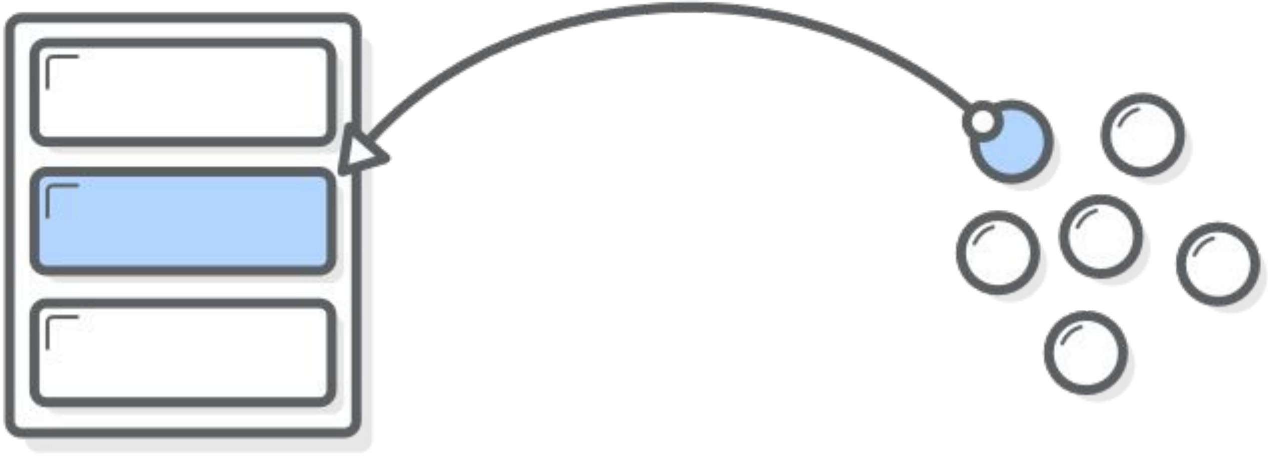
CSS – Selectors

reach & collect & manipulate DOM elements





“SELECTOR”

HTML ELEMENTS

CSS RULES

Agenda

- Advanced Selectors
  - Hierarchy
  - Attribute level
- Questions

Learning Objectives

- You know how to make use of the selectors for the parent-child relationships.
- You know how to select elements by attributes
- The meaning of DOM-Traversing
- You know what Pseudo means.

Selectors

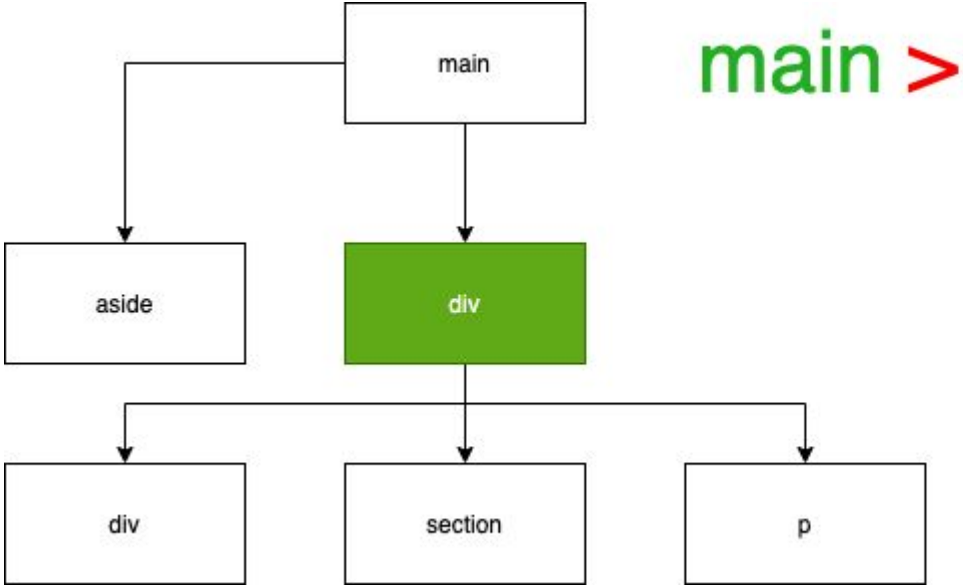
The way how to select a group of elements (tags)

- Universal-Selector→ *{...}
- ID-Selector → #idname{...}
- Class-Selector → .classname{...}
- Tag-Selectors → tagname{...}
- Hierarchy-Selectors
  - child
  - siblings
  - decendants
- Attribute-Selectors → [attrname]{...}
- Pseudo-Class-Selectors
  - first-child
  - last-child

Selectors used for hierarchical relationship

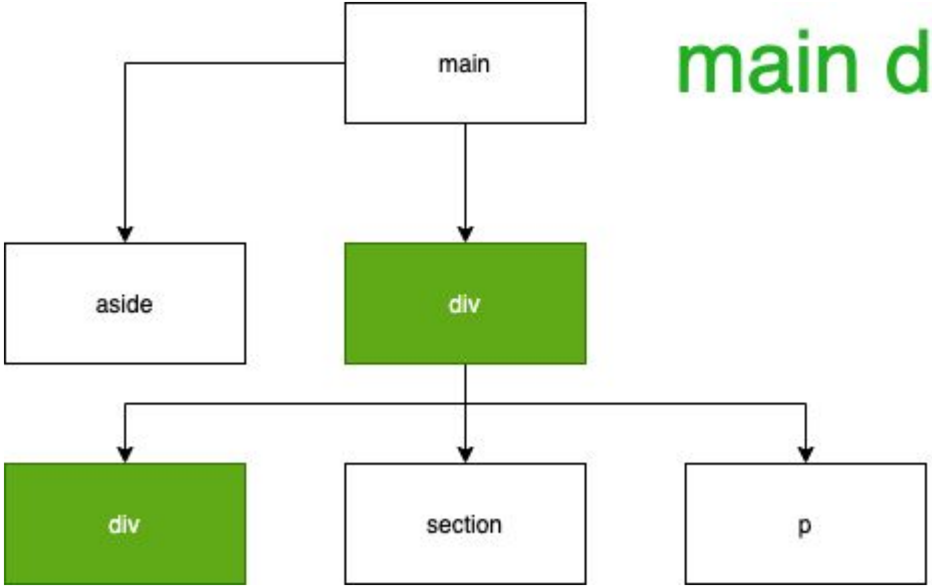
parent, children, sisters, ...

- Descendant (all generations)
  - div p{...}
  - #someId .someClass{...}
  - ul li{...}
- Direct Descendant
  - div > p{...}
  - #someId > .someClass{...}
  - ul > li{...}
- General Sibling
  - div ~ p{...}
  - #someId ~ .someClass{...}
  - ul ~ li{...}
- Adjacent Sibling
  - div + p{...}
  - #someId + .someClass{...}
  - ul + li{...}



main > div

Direct child selector



main

aside

div

div

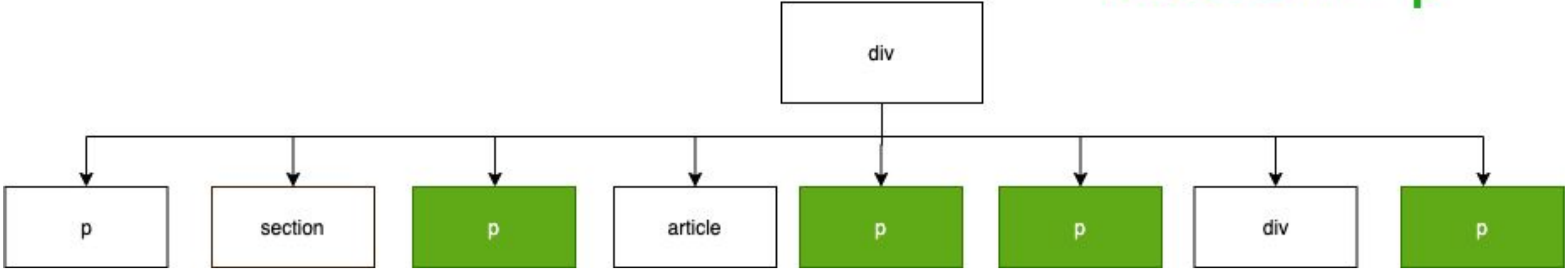
section

p

main div

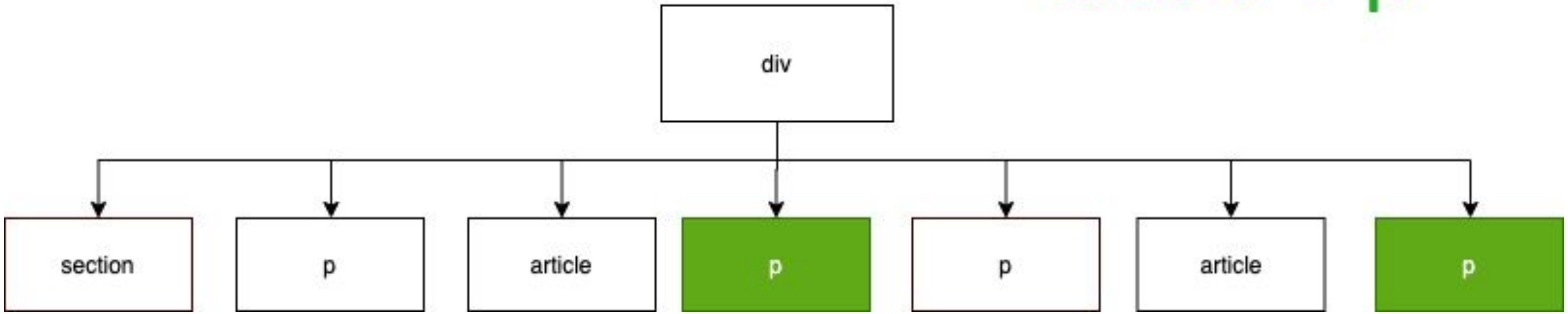
descendant selector

section ~ p



General Sibling selector

article + p



Adjacent selector

Selectors using attributes

Another useful classification

- Attribute existing
  - div[id]
    - <div></div>
    - <div id=”primary”></div>
- Attribute is exactly same
  - div[id=”primary”]
    - <div id=”primary”></div>
- Attribute contains a part of the value
  - div[id*=”ima”]
    - <div id=”primary”></div>
- Attribute starts with the value
  - div[id^=”pr”]
    - <div id=”primary”></div>
- Attribute ends with value
  - div[id$=”ary”]
    - <div id=”primary”></div>
- Attribute’s value separated by an empty space
  - div[class~=”tag”]
    - <div class=”tag btn”></div>
- Attribute’s value separated by a dash
  - div[class|=”tag”]

Pseudo Classes & Elements

More advanced

Pseudo-classes

- Helps us to extend the search on the tree

Pseudo-elements

- Help to create content on html

Pseudo classes

Links

```
a:link { color: blue; text-decoration: underlined; }
```

unvisited Link

```
a:visited { color: green; text-decoration: underlined; }
```

besuchter Link

```
a:hover { color: blue; text-decoration: undelined; }
```

Effekt bei Hover über Link

```
a:active { color: purple; text-decoration: none; }
```

Effekt beim Klicken auf einen Link

Pseudo classes

UI element states

- :enabled
  - Selects active elements

    `disabled=”enabled”`
- :disabled
  - Selects inactive elements

    `disabled=”disabled”`
- :checked
  - Selects checked elements

    `checked=”checked”`

Pseudo classes

Structure relevant classes

- :first-child
  - fist Element
- :last-child
  - last Element
- :nth-child(n)
- :nth-last-child(n)
- :nth-of-type(n)
- :nth-last-of-type(n)
- :first-of-type
- :last-of-type
- :only-child
- :only-of-type
- :empty
- :root (web component)

Pseudo Elements

special cases

A CSS pseudo-element is a keyword added to a selector that lets you style a specific part of the selected element(s).

CSS
::after (:after)
::before (:before)
::first-letter (:first-letter)
::first-line (:first-line)

::backdrop
::cue (:cue)
::grammar-error
::marker
::placeholder
::selection
::slotted()
::spelling-error

https://flukeout.github.io/

Additional Resources

- https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Selectors
- https://www.youtube.com/watch?v=Bcr70LIJcOk
- https://www.youtube.com/watch?v=zGiirUiWslI

Questions?