HTML: Structure eg: table of content, chapters, sessions

CSS (cascading style sheet??):

- Formatting or presentation issues eg: chapter title, line spacing and presentation issues
- They can be defined at three different levels (inline, document, and external) to specific style of a document. Lower level style sheets can override higher level style sheets, so the style of an element is determined through a cascade style application

CSS standards or W3 recommendations:

- CSS level 1 created 1996 revised 2008 supported Firefox 2 and safari implemented IE7
- CSS level 2 created 1998
- CSS level 2 revision 1 created 2011 most implemented in major layout engine (Trident, gecko, and web kit)
- CSS level 3 builds on level 2 module by using module 2.1 as it core. Only four modules are published as a W3 recommendation. Other modules are either in working draft or candidate recommendation. Less support by browser compared to CSS2

Type of style sheet (Inside head)

- *Inline:* (lowest level but has precedence)
    - Style sheet appears in the tag itself as attribute
    - Specified for specific occurrence of a tag and apply only to that element
    - not recommended because mixing presentation issues with structural issues. Generally use for planning. Difficult to maintain
    - Style sheet appears as the value of the *style attribute* in the tag (*think appear in tag itself)
    - EG: In other document

```
<body>
    <p style = "property(n): value; property(n+1): value; ...">This is a paragraph</p>

</body>
```

- *Internal style/Document-level style sheets:*
    - Style sheets appear in the head element of document
    - List of style rules that are the content of <style> element
    - Comments inside list of rules (*think above dot point) must have different form use c comments
    - Applies to the whole documents in which they appear (put style sheet inside head element) (*Think main one we use for this lecture)

```
<head>
    <title>Internal style sheet or document level style sheet<title>

    <style type="text/css">

        selector {
            property1: value;
            property2: value;
        }
    </style>

</head>

<body>

</body>
```

- *External style sheet:*
    - Can applied to any number of documents (put style sheet on server and make reference to it so when browser render it will download style sheet and use it. Preferred
    - Are in separate files, potentially on server on the internet
    - Less load time compared to external and also with internal one file is affected and could go wrong also external can reuse css
    - Rel stands for what is link relationship?

```
<head>
    <title>External style sheet </title>

    <link rel="stylesheet" type ="text/css" href ="relative path EG: css/main.css">
</head>

<body>

    we can refer to selector

</body>
```

- Add </link> end tag

main.css

```
selector {
    property1: value;
    property2: value;
}
```

inline.html

- When more than one style sheet applies the lowest style sheet had precedence (think which style sheet is closer to element). Test inline → document level → external style sheet to see if none or all then use browser default stylesheet

Style rules:

- Has selector (document/internal level and external style sheet)
    - Specifies the elements to which the following style information applies
    - General form-

```
selector {
   property1: value;
   property2: value;
   . . . . . .
   propertyn: value;
}
```

Types of selectors:

Simple selectors: (*think properties applies to all tags stated)

- This type is a tag name or list of tags separated by commas
- Tags eg: p, h2, h3
- The properties apply to both h2 and h3 elements

```
h2, h3 {
  color: red;
  text-align: center;
}
```

Contextual selectors: (*think properties applies to tags that are within tags or B is child of A must be fulfilled)

- This type more than two tag names not separated by comma
- Tags EG: ol + p
- The properties only apply when both tags are met (*think not all properties apply to all tags)
- Below is a descendant selector but there is also child sector type aswell not in the example given

```
ol p {
  margin-left: 0ex;
  text-align: left;
}
```

Class selectors: (generally this)

- Allows different occurrences of the *same tag* to use *different style* specifications
- Selector are in the format of
    - Tag.Class (n)
    - Tag.Class(n+1)
    - We have different classes for same tag

```
p.English {font-weight: bold; color: red; }
p.French {font-style: italic; color: green; }
```

- So in the body section: If a tag has the specific *class attribute*. It will apply those property

<body>

```
<p class = "English"> Hello </p>
<p class = "French"> Bonjour </p>
```

</body>

Generic selectors: (*think differs from class selectors as properties of same class can applies to different types of tags)

- A generic class can be defined if you want a style (same class) to apply to generic types of tags
- Selector format-
    - .class

```
.big { font-size: 200%; }
```

- So in the body section: If different types of tags has specific *class attribute.* It will apply those properties

<body>

```
<h1 class = "big"> Big Heading </h1>
<p class = "big"> Doubling the font size! </p>
```

</body>

ID selectors: (very specific)

- Id selector allow the application of a style to one specific element
- Reddit: use ID on unique things (header, content, footer) and classes on reusable things

- General form:

#specific-id {property-value list}

- EG:

```
#section14 {font-size: 20pt;}
<h2 id="section14"> id Selector</h2>
```

Pseudo classes: (useful my website uses it)

- Styles that apply when something happens, rather than because target element exists
- Defines a special state of element
    - Hover: classes apply when the mouse cursor is over element
        - So notice when you hover over a navigator like home changes it white on my website
    - Focus: class apply when an element has focus. When text cursor enter element that element has focus
    - Visited: Link that has already been clicked on
- Note: below a stands for anchor which is a link ie <a href>

```
<head>
<style>
/* unvisited link */
a:link {
    color: #FF0000;
}

/* visited link */
a:visited {
    color: #00FF00;
}
```

Span element:

- Allows us to display part of the element content with different style (*think: in a paragraph/sentence change one text colour)
- Can be nested and they have id and class attributes

.iphone{property: value} ← In header

TEXT

DIV element: (we can wrap div element around single span element)

- Allows us to display all of an element with a same style (*Think make a whole list red)

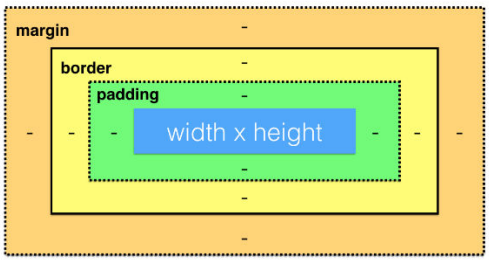
- Defines a new division in the document. May contain several block elements- group of tag

Property Categories: are a large number of properties grouped into commonly used categories

Background

  - background:-color:
  - background-image:

- Colors
- Font
- Alignment of text
- List
- Margins
  - Margin-left/right/bottom/top: VALUEpt
  -
- Borders
  - border-style:
  - border-width:
  - border-color:



Precedence Rules:

- Important declaration with user origins
- Important declaration with author origin
- Normal declaration with author origin
- Normal declaration with user origin
- Any declaration with browser

Still do:

Style sheet style, properties format,