Web Development

Technical Summer School 2019, IIT Bombay – Parth Patil

Part 2 – More on HTML, CSS and JavaScript

id and class attributes

```
<p id="first-paragraph" class="good-stuff"> This is first </p>
<p id="second-paragraph" class="good-stuff"> This is second </p>
<p id="strange-para"> This is third and is really weird </p>
<p class="good-stuff important"> This is last and important </p>
```

- id – Unique identity for an HTML element

- class – Group of elements that have something common

- Can have one or more classes, but **only one id**

The style attribute

```
<tag style="property:value;">

<p style="color:red;">

    This is a red paragraph.

</p>
```

- Change how an element **looks**
- Predefined properties and their values
- For example,
  - `color:blue;`
  - `font-size:30pt;`
  - `text-align:center;`
- Can have multiple semi-colon separated pairs
  - `style="color:red; font-size:30pt"`

Common CSS Properties

- **color:green; background-color:#ff6600**

- **text-align:center**

- **height:100px; width:200px**

- **width:70%; max-width:400px**

- **text-decoration:underline** (or overline/line-through)

- **display:block** (or inline-block/inline/none)

Common CSS Properties

- **font-size:15px; font-weight:bold**

- **margin:20px; margin-top:10px**

- **padding:10px; padding-right:6px**

- **border-style:solid; border-width:3px; border-color:red**

- **border-radius:5px**

color and **background-color**

- **color** - color of the text

- **background-color** - color of the box around the text

  - Some colors pre-defined, for example, **red green black**

  - More – **lightpink aqua teal fuchsia purple**

  - Can use any arbitrary color - **#ff6347**

  - Alpha - **background-color:rgba(255, 99, 71, 0.5);**

  - Backgrounds can also be images

  - Note – **color**, **not colour**

margin and **padding**

- **margin** – separation between objects
- **padding** – separation of content with border of the **same object**
- Can be specified in pixels, percentages, points etc.

font-size and **font-family**

- Change the font size
- Unit preferred is em – relative to current

Some more properties

- **`width, height`**
- **`float`**
- **`border-style, border-width, border-color`**
- **`border-radius`**
- **`box-shadow`**
- **`text-align`**
- And it goes on …

Separating styles

- Too much style in HTML – looks ugly

- Hard to maintain

- Lots of repetition

- One change requires changing a lot

Separating styles

```html
<head>
    <style>
        .big-text {
            font-size: 30px;
        }
        #main {
            color: red;
        }
    </style>
</head>
```

```html
<body>
    <p id="main" class="big-text">
        This is one
    </p>
    <p> This is two </p>
    <p class="big-text">
        This is three
    </p>
</body>
```

Cascading Style Sheets

- Put all styles in a separate my`styles.css`
- Link the file in `<head>`

`mystyle.css`

```css
.big-text {
    font-size: 30px;
}
#main {
    color: red;
}
```

`index.html`

```html
<head>
    <link rel="stylesheet" type="text/css"
          href="mystyle.css">
</head>
```