Web Development

Technical Summer School 2018, IIT Bombay – Varun 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)
- `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>

<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 **S**tyle **S**heets

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

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

mystyle.css
```
.big-text {
    font-size: 30px;
}

#main {
    color: red;
}
```

Thank You!