

# IT 105 – Principles of Programming

## Day 10

1. Just a reminder, when you save your pages make sure they are text, but that they have the .html extension and not .txt. As you modify your pages to add functionality, be sure to save separate copies.
2. Cascading Style Sheets (CSS)
  - a. inline
  - b. style section in <head> element
  - c. separate .css file
3. Now, let's style a table. First the table definition in the <body>, with three rows and three columns:

```
<body>
    <table>
        <tr>
            <td>Cell 1</td>
            <td>Cell 2</td>
            <td>Cell 3</td>
        </tr>
        <tr>
            <td>Cell 4</td>
            <td>Cell 5</td>
            <td>Cell 6</td>
        </tr>
        <tr>
            <td>Cell 7</td>
            <td>Cell 8</td>
            <td>Cell 9</td>
        </tr>
    </table>
</body>
```

4. Now to style the table. First, a border (one pixel, solid black):

```
<head>
    <title>Hello!</title>
    <style>
        table
        {
            border: 1px solid black;
        }
    </style>
</head>
```

5. Each individual cell also (one big border, and one for each):

```
<head>
    <title>Hello!</title>
    <style>
        table
        {
            border: 1px solid black;
        }
        td
        {
            border: 1px solid black;
        }
    </style>
</head>
```

6. Can collapse, so there is just one border:

```
<head>
    <title>Hello!</title>
    <style>
        table
        {
            border: 1px solid black;
            border-collapse: collapse;
        }
        td
        {
            border: 1px solid black;
        }
    </style>
</head>
```

7. Next, let's add some padding, or space, between cells:

```
<head>
    <title>Hello!</title>
    <style>
        table
        {
            border: 1px solid black;
            border-collapse: collapse;
        }
        td
        {
            border: 1px solid black;
            padding: 5px;
        }
    </style>
</head>
```

```

        }
    </style>
</head>

8. Let's color the top row, if they were a header (could color all cells in td), so
let's create a class:

<head>
    <title>Hello!</title>
    <style>
        table
        {
            border: 1px solid black;
            border-collapse: collapse;
        }
        td
        {
            border: 1px solid black;
            padding: 5px;
        }
        .header
        {
            background-color: blue;
        }
    </style>
</head>
<body>
    <table>
        <tr class="header">
            <td>Cell 1</td>
            <td>Cell 2</td>
            <td>Cell 3</td>
        </tr>
        <tr>
            <td>Cell 4</td>
            <td>Cell 5</td>
            <td>Cell 6</td>
        </tr>
        <tr>
            <td>Cell 7</td>
            <td>Cell 8</td>
            <td>Cell 9</td>
        </tr>
    </table>

```

```
</body>
```

Could also use the HTML element `<th>` instead of `<td>` for that first header row:

```
th
{
    background-color: blue;
}

<tr>
    <th>Cell 1</th>
    <th>Cell 2</th>
    <th>Cell 3</th>
</tr>
```

9. Check out the W3 Schools CSS Tutorial: <https://www.w3schools.com/css/>
10. We might spend so much time doing this, but some have already written styles, such as bootstrap.
  - a. getbootstrap.com has a lot of these, in `<link>` elements, which you can copy and paste into your `<head>` element.
  - b. Note that the `href` is now a URL to the bootstrap style file.

11. Here's an example, for an alert:

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <title>
            Hello!
        </title>
        <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-giJF6kkoqNQ00vy+HMDP7azOuL0xtbfIcaT9wjkHr8RbDVddVHyTfAAAsrekwKmP1" crossorigin="anonymous">
    </head>

    <body>
        <h1>
            Hello, world!
        </h1>
        <div class="alert alert-primary" role="alert">
            A simple primary alert
        </div>
    </body>
</html>
```

12. Note that the `<div>` element is just a section of HTML code.