

# OIM3690 - Web Technologies



# Introducing HTML

# What is HTML?

- **HTML** = Hyper Text Markup Language
  - Hyper Text: the content of a web page
  - Markup: tags used to define how content is to be displayed
  - Language: syntax and vocabulary associated with marking-up



# Standard HTML5 Template

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Page Title Goes Here</title>
  <style>
    /* Your styles go here */
  </style>
  <script>
    // Your JavaScript code goes here.
  </script>
</head>
<body>
  <!-- Your HTML code goes here. -->
</body>
</html>
```

# HTML Tags

```
<body>
  <h1>Welcome to OIM 3690</h1>
  <p>This is the first paragraph that is the least bit interesting</p>
  <p>
    This is the second paragraph that is even less interesting than the first.
    It is longer than the first paragraph. It also shows how the paragraph is
    formatted on the page.
  </p>
</body>
```

- `<h1>` : section heading
- `<p>` : paragraph

# HTML Headings

```
<h1>Big Text</h1>
<h2>Relatively smaller text</h2>
<h3>Even smaller text</h3>
<h4>Well, you</h4>
<h5>get the</h5>
<h6>picture</h6>
```

- Most tags come in pairs – a opening tag and a closing tag
- Tags are enclosed in tag markers ( < and > )
- Closing tags include a forward slash /

# More Basic Tags

- `<i>` and `</i>` - italicize the content
- `<b>` and `</b>` - make the content bold
  - try `<em>` / `<strong>`
  - to read: `<b>` vs. `<strong>` and `<em>` vs. `<strong>`
- `<u>` and `</u>` - underline content
- `<hr>` - a thematic break in an HTML page (e.g. a shift of topic)
  - does not come in pairs – single tag
  - **not recommended for drawing a horizontal line**
- `<br>` - provides a line break
  - **Note: Do not** use `<br>` to create margins between paragraphs; use **CSS** instead (reference: [MDN Web Docs](#))

# More Tags

- `<div>` and `</div>` - helps divide a page into sections for formatting
- `<span>` and `</span>` - helps format multiple occurrences of a specific word or phrase the same way
- Will use more of these when dealing with formatting and CSS
- Comments

```
<!-- Your comment goes here -->
```

- for use by the web designer (you)
- will not be displayed
- Check out homepage of the new **White House website** and find out the first comment in the html file.

# HTML Entity

- For HTML5, the default character encoding is [UTF-8](#)
- To use "special" characters we need additional codes. For example:
  - > (greater than) is done using `&gt;`
  - < (less than) is done using `&lt;`
  - & (ampersand) is done using `&amp;`
  - " (quotation) is done using `&quot;`
- Reference: [MDN](#), [w3schools](#)
- Question:
  - How do we add *a lot* of spaces?

# Exercise - Creating Your First Web Page

1. Create a new file, `ex01.html`, under folder `WebTech` using VS Code
2. Change **title** to "Web Technologies - Your Name"
3. Add a **heading** to the page "All About Your Name"
4. Add a **paragraph** on why you chose Babson and/or about what you want to be when you graduate.
5. Add a **paragraph** on your favorite hobby/sport.
6. Place a **horizontal line** between the heading and the first paragraph and **another one** at the end of the second paragraph.
7. Use appropriate tag(s) to **highlight** the hobby/sport name.

# Exercise - Finally...

1. Save the file
2. View the file using web browser. You can
  - (without **Live Server** extension) right-click the file name and select "Reveal in File Explorer", then open the HTML file with your default web browser
  - (with **Live Server** extension) click "Go Live"
3. Don't forget to **commit and push** your repository to GitHub.com using GitHub Desktop.

