

Web Development Workshop

Day 1

Make a Repl.it Account & Start a New Project

- Go to repl.it and create a new account
- Click + New repl to create a new Repl project
- Select Language as HTML, CSS, JS
- Name your repl as All About Me (Or something else if you prefer) and click Create repl

Changing the Browser Tab Name

- Let's change what the Browser tab says. Between `<title>` and `</title>` it should say "repl.it" by default. Change it to "All About Me"
- It should look like this:

```
<title>All About Me</title>
```

Creating a Heading

- Let's create a title for our website. We can use *heading tags* to create titles for our website. We need to make sure that all of our following code is within the *body tags* which are denoted as `<body>` and `</body>`.
- Use the `h1` tag to create a new title. Between `<h1>` and `</h1>`, write "All About [Name]". Make sure this comes after the line with the *script tags*.
- It should look something like this:

```
<body>  
  <script src="script.js"></script>  
  <h1>All About Me</h1>  
</body>
```

Creating a Subheading

- Now, let's create a subheading. We can use a different type of heading tag to create it.
- Use the `h2` tag to create a new subtitle. Between `<h2>` and `</h2>`, write your subheading. Make sure it comes after the `h1` tags.
- It should look something like this:

```
<h1>All About Me</h1>  
<h2>A website made by me!</h2>
```

Creating a Paragraph

- Let's create a paragraph of text to introduce ourselves! We can use a *paragraph tag*.
- Use the `p` tag to create a paragraph. Between `<p>` and `</p>`, write a paragraph to introduce yourself. Make sure it comes after the `h2` tags.

- It should look something like this:

```
<h2>A website made by me!</h2>
```

```
<p>Hello! Welcome to my website where you can learn all about me! I
am currently a student at Rutgers University and I major in Computer
Science. I also like to create cool websites!</p>
```

Adding a Picture/Gif

- What's an interesting website without pictures? Let's add one! We use *image tags* to insert pictures (and other media such as gifs!) on a website.
- Insert the **img** tag after your paragraph. Then find a url for an image or gif and add it as the **src** value of the image. The following code illustrates an example of an image being inserted onto the website:

```
<p>Hello! Welcome to my website where you can learn all about me! I
am currently a student at Rutgers University and I major in Computer
Science. I also like to create cool websites!</p>
```

```
<img src =
"https://dlsi3tbndbwz9.cloudfront.net/football/team/550/logo.png">
</img>
```

- Hint: To get URLs off google images, find a picture, right-click, then select "Copy image address". The URL of the picture will then be on your clipboard.

Changing the Text Format

- There are multiple ways to change the format of text on a website. Here we will teach you three easy ways to change the format of text: **Bold**, *italics*, and underlined.
- Use the **b** tag to bold any text. Just wrap it around any text-based tag, such as a paragraph tag. You can also wrap it around certain parts of the text if you put the text format tags inside the text tags.
- Use the **em** tag to italicize any text. Like the bold tag, wrap it around any text-based tag.
- Use the **u** tag to underline text. You got it! Wrap it around just like the b and em tags!
- Write three different sentences using three different **p** tags.
 - Let the first sentence be about your favorite movie. Bold the movie title.
 - Write your favorite quote as the second sentence. Italicize the whole quote.
 - Let the last sentence be about your favorite food. Underline the food.
- It should look something like this:

```
<img src =
"https://dlsi3tbndbwz9.cloudfront.net/football/team/550/logo.png">
</img>
<p>My favorite movie is <b>Titanic</b>.</p>
<p><em>"She believed she could, so she did." - R.S. Grey</em></p>
<p>My favorite food is <u>pizza</u>.</p>
```

Making a List

- Lists are cool, so let's add them to our website! We can make two kinds of lists: ordered and unordered. Ordered lists are numbered and unordered lists consist of bullet points.
- Let's make an ordered list of goals we want to accomplish this school year. We need to use the *ordered list tag* to enumerate each item, along with *list item tags* to create a new item for our list. `` and `` are tags to create the ordered list and `` and `` is used to add an item to the list. You can add a title to the list before the `li` tags.
- It should look something like this:

```
<p>My favorite food is <u>pizza</u>.</p>
<ol>Goals for this School Year:
  <li>Survive online classes</li>
  <li>Try some new baking recipes</li>
  <li>Get more exercise and stay active</li>
</ol>
```

- Now let's make an unordered list. Let's list out books we'd like to recommend!
- We create an unordered list similarly to an ordered list, but we use the `ul` tag instead.
- Your book recommendations should look something like this:

```
<ul> Books I Recommend:
  <li>Of Mice and Men by John Steinbeck</li>
  <li>The Great Gatsby by F. Scott Fitzgerald</li>
  <li>Pride and Prejudice by Jane Austen</li>
</ul>
```

Creating a Button

- Let's create some buttons to put on our page! They won't have functionality yet but we'll add that later!
- We can add a button using the *button tag* which is denoted using `<button>` and `</button>`. We also need to add the type as a "button" which creates the typical button image icon. Add the text of the button between the button tags.
- It should look something like this:

```
<button type="button">Button!</button>

type="button">Button!</button>
<br></br>
<button type="button">Also a Button!</button>
```

Creating Dividers

- We can use dividers to divide content areas within a web page. It works by grouping elements together, which can then be manipulated as a whole. A *divider tag* is denoted by `<div>` and `</div>`.
- Let's group together the Title and Subheading of our webpage. All we need to do is wrap those tags with **div** tags.
- It should look something like this:

```
<div>
  <h1>All About Me</h1>
  <h2>A website made by me!</h2>
</div>
```

- Lets group the three sentences we text formatted too!
- That should look something like this:

```
<div>
  <p>My favorite movie is <b>Titanic</b>.</p>
  <p><em>"She believed she could, so she did." - R.S. Grey</em></p>
  <p>My favorite food is <u>pizza</u>.</p>
</div>
```

Aligning Things Easily

- We will talk more about alignment and margins later, but we will show you a quick and easy way to align components to the right, left, or center of a webpage.
- We can center the title subheading of our webpage by adding a "text-align" **style** to our div tag.
- The following code shows how to center the title and subheading by adding a style to the **div** tag:

```
<div style="text-align:center;">
  <h1>All About Me</h1>
  <h2>A website made by me!</h2>
</div>
```

- We can also center the sentences we grouped together with the other **div** tag.
- It should look something like this:

```
<div style="text-align:center;">
  <p>My favorite movie is <b>Titanic</b>.</p>
  <p><em>"She believed she could, so she did." - R.S. Grey</em></p>
  <p>My favorite food is <u>pizza</u>.</p>
</div>
```

- Extra: Try changing "center" to "right" or "left" to see the change in alignment.
- Note: List tags might have a bit of trouble with this type of alignment since their bullet points or numbers may not adjust to the "text-align" style.

Final Demo Code

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width">
    <title>All About Me</title>
    <link href="style.css" rel="stylesheet" type="text/css" />
  </head>
  <body>
    <script src="script.js"></script>
    <div style="text-align:center;">
      <h1>All About Me</h1>
      <h2>A website made by me!</h2>
    </div>
    <p>Hello! Welcome to my website where you can learn all about me! I am currently a student at Rutgers University and I major in Computer Science. I also like to create cool websites!</p>
    <img src =
"https://dlsi3tbndbwz9.cloudfront.net/football/team/550/logo.png"></img>
    <div style="text-align:center;">
      <p>My favorite movie is <b>Titanic</b>.</p>
      <p><em>"She believed she could, so she did." - R.S. Grey</em></p>
      <p>My favorite food is <u>pizza</u>.</p>
    </div>
    <ol>Goals for this School Year:
      <li>Survive online classes</li>
      <li>Try some new baking recipes</li>
      <li>Get more exercise and stay active</li>
    </ol>
    <ul> Books I Recommend:
      <li>Of Mice and Men by John Steinbeck</li>
      <li>The Great Gatsby by F. Scott Fitzgerald</li>
      <li>Pride and Prejudice by Jane Austen</li>
    </ul>
    <button type="button">Button!</button>
    <br></br>
```

```
<button type="button">Also a Button!</button>  
</body>  
</html>
```

View of Demo Webpage

All About Me

A website made by me!

Hello! Welcome to my website where you can learn all about me! I am currently a student at Rutgers University and I major in Computer Science. I also like to create cool websites!



My favorite movie is **Titanic**.

"She believed she could, so she did." - R.S. Grey

My favorite food is pizza.

Goals for this School Year:

1. Survive online classes
2. Try some new baking recipes
3. Get more exercise and stay active

Books I Recommend:

- Of Mice and Men by John Steinbeck
- The Great Gatsby by F. Scott Fitzgerald
- Pride and Prejudice by Jane Austen

Button!

Also a Button!