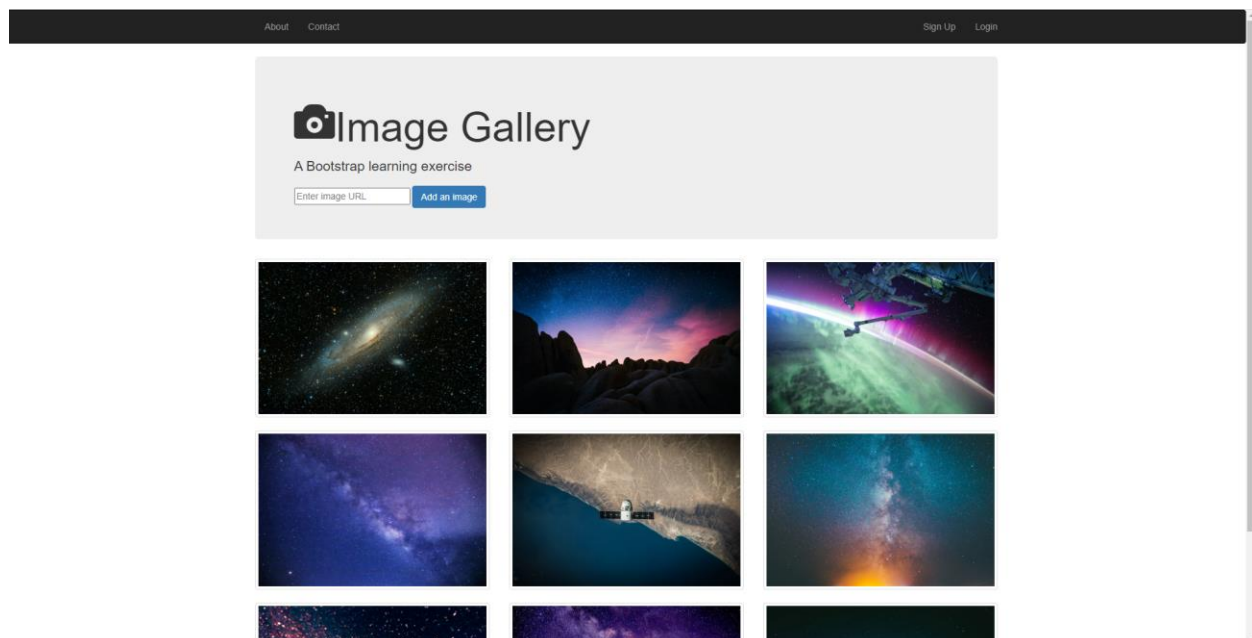


# Bootstrap and Javascript Image Gallery

Machine Environment:

- Windows 10 Pro
- Intel i7 CPU
- Google Chrome
- Bootstrap 3
- Javascript
- HTML
- jQuery

Previously, we have learned the fundamentals of using **Bootstrap** to make some responsive web pages. However, we have not added functionality. Javascript allows us to manipulate the HTML document while the web site is live. For example, in this tutorial, we will make an **image gallery using Bootstrap**, and then we will add a button that allows us to add more images. This is done using Javascript. Below is how the website will look at the end:



1. Let's begin by adding any sources we will need. Below, we are adding a source to **Bootstrap**, **jQuery** (which is needed to use Bootstrap), **Bootstrap JS**, and our own **Javascript** file. We've also added some details in a *style tag* that will be needed to format our images appropriately.

```
<!DOCTYPE html>

<html>

<head>

    <title>Bootstrap Image Gallery</title>

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css" integrity="sha384-
BVYiISiFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u"
crossorigin="anonymous">

    <style>

        .col-md-4:nth-child(3n+3) + .col-md-4{clear:both;}

    </style>

</head>

<body>

<!-- jquery -->

<script

src="https://code.jquery.com/jquery-3.5.1.min.js"

integrity="sha256-9/aliU8dGd2tb6OSsuzixeV4y/faTqgFtohetphbbj0="

crossorigin="anonymous"></script>

<!-- Bootstrap JS -->
```

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js" integrity="sha384-Tc5I Qib027qvyjSMfHjOMaLkfuWVxZxUPnPnCJA7I2mCWNlIpG9mGCD8wGNlcpD7Txa"
crossorigin="anonymous"></script>
```

```
<!-- JS script -->
```

```
<script src="imageGallery.js"></script>
```

```
</body>
```

```
</html>
```

2. Let's begin by adding **the navbar**. In this particular website, the navbar has no functionality and is used simply to give the website a more authentic feel. This code needs to be added right underneath the `<body>` tag.

```
<body>
```

```
<nav class="navbar navbar-inverse">
```

```
  <div class="container">
```

```
    <div class="navbar-header">
```

```
      <button type="button" class="navbar-toggle collapsed" data-toggle="collapse"
data-target="#bs-nav-demo" aria-expanded="false">
```

```
        <span class="sr-only">Toggle navigation</span>
```

```
        <span class="icon-bar"></span>
```

```
        <span class="icon-bar"></span>
```

```
        <span class="icon-bar"></span>
```

```
      </button>
```

```
      <a href="#" class="collapse navbar-collapse" id="bs-nav-demo"></a>
```

```
    </div>
```

```
    <ul class="nav navbar-nav">
```

```
      <li><a href="#">About</a></li>
```

```
      <li><a href="#">Contact</a></li>
```

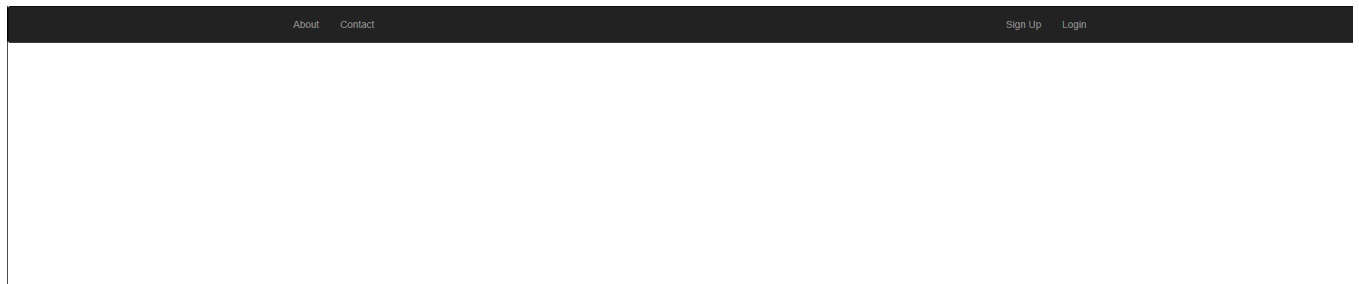
```
    </ul>
```

```

        <ul class="nav navbar-nav navbar-right">
            <li><a href="#">Sign Up</a></li>
            <li><a href="#">Login</a></li>
        </ul>
    </div>
</div>
</nav>

```

So far, we have this:



- Underneath the code we have just added in **section 2**, let's add a container that will hold everything else in the website. Also, we will be adding a **jumbotron**, which is a component in Bootstrap that serves to display some important information on the site.

```

<div class="container">
    <div class="jumbotron">
        <h1> <span class="glyphicon glyphicon-camera" aria-hidden="true"></span>Image
Gallery</h1>
        <p>A Bootstrap learning exercise</p>
    </div>
</div>

```

```

<input type="text" id="imageLink" placeholder="Enter image URL">

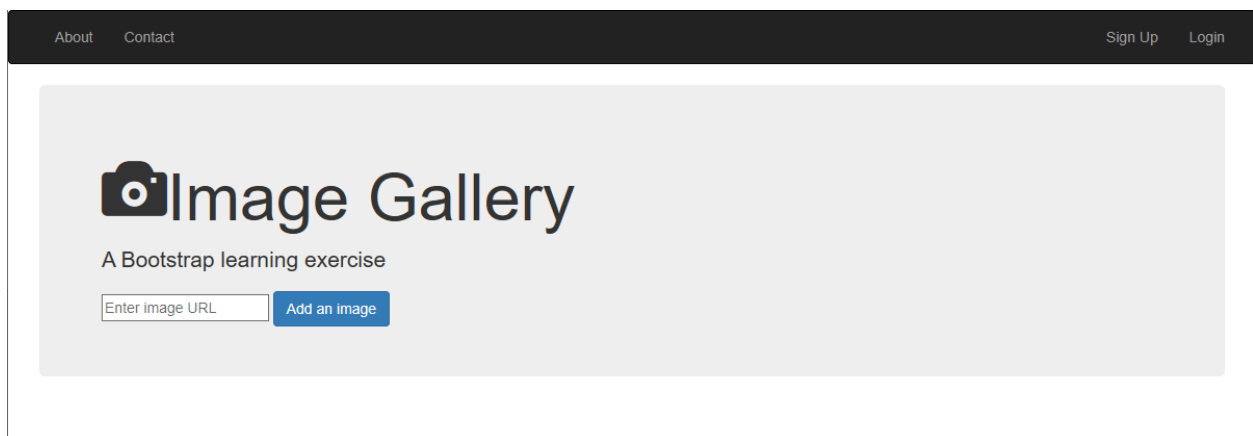
    <button type="button" class="btn btn-primary" onclick="addImage()">Add an
image</button>

</div>
</div>

```

The code in the next section needs to go above this </div> tag.

Now we have this:



- Now, let's populate the website with some images. We will wrap all of these images in a container named **"imageContainer"** so that we can easily access this div in our Javascript. I used images from [unsplash.com](https://unsplash.com) but you can get images from anywhere you'd like as long as you have the link to them, or you could use the same images I used. Add the following code **underneath the code we added in section 3** (it should be in the same container that the jumbotron is in):

```

<div id="imageContainer" class="row">

    <div class="col-md-4 col-sm-6 col-xs-12">

        <div class="thumbnail">

```

</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">

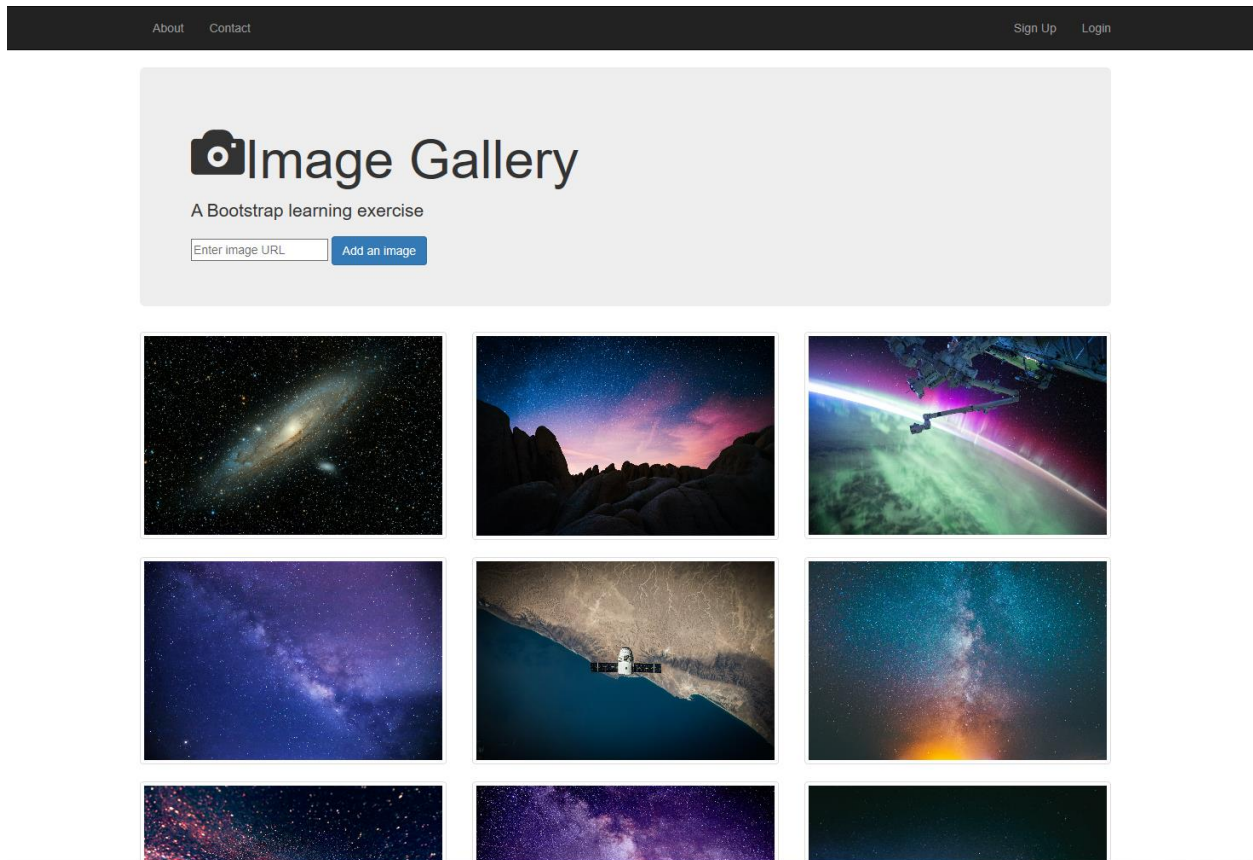


</div>

</div>

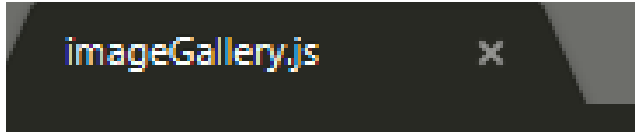
</div>

Finally, our website looks like this:





5. Our website is complete, however, our **Add image** button has no functionality yet. Let's make a javascript file named `imageGallery.js`



Our button in HTML has an *onClick* event that calls an **addImage()** function in our javascript.

```
<button type="button" class="btn btn-primary" onclick="addImage()">Add an image</button>
```

So let's define the function in our JS file. Make sure to save the file under the same directory that our `imageGallery.html` file is in.

- Var `imageURL` gets the text from the textbox that the user inputs.
- Var `rowContent` is the premade HTML we will need to append to the website. (Notice how the `imageURL` variable is used within the HTML.
- Finally, we append the text to the `imageContainer` HTML element.

```
function addImage() {  
    var imageURL = document.getElementById('imageLink').value  
    var rowContent = `        <div class="thumbnail">  
            <img src= "${imageURL}">  
        </div>  
    </div>`  
    document.getElementById('imageContainer').innerHTML += rowContent;  
}
```

Refresh your website and try adding an image:

## A Bootstrap learning exercise

You should see the image added at the *bottom* of the site:



Here is the complete code if needed:

imageGallery.html:

```
<!DOCTYPE html>

<html>

<head>

<title>Bootstrap Image Gallery</title>

<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css" integrity="sha384-
BVYiISiFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u" crossorigin="anonymous">

<style>

.col-md-4:nth-child(3n+3) + .col-md-4{clear:both;}

</style>

</head>

<body>

<nav class="navbar navbar-inverse">

<div class="container">

<div class="navbar-header">

<button type="button" class="navbar-toggle collapsed" data-
toggle="collapse" data-target="#bs-nav-demo" aria-expanded="false">

<span class="sr-only">Toggle navigation</span>

<span class="icon-bar"></span>

<span class="icon-bar"></span>

<span class="icon-bar"></span>

</button>

<a href="#" class="collapse navbar-collapse" id="bs-nav-
demo"></a>

</div>

<ul class="nav navbar-nav">

<li><a href="#">About</a></li>
```

```

        <li><a href="#">Contact</a></li>
    </ul>

    <ul class="nav navbar-nav navbar-right">
        <li><a href="#">Sign Up</a></li>
        <li><a href="#">Login</a></li>
    </ul>
</div>
</div>
</nav>

<div class="container">

    <div class="jumbotron">
        <h1> <span class="glyphicon glyphicon-camera" aria-
hidden="true"></span>Image Gallery</h1>

        <p>A Bootstrap learning exercise</p>

        <input type="text" id="imageLink" placeholder="Enter image URL">

        <button type="button" class="btn btn-primary" onclick="addImage()">Add
an image</button>

    </div>

    <div id="imageContainer" class="row">

        <div class="col-md-4 col-sm-6 col-xs-12">

            <div class="thumbnail">

            </div>

        </div>

        <div class="col-md-4 col-sm-6 col-xs-12">

            <div class="thumbnail">

```

</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="thumbnail">



</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

```

                <div class="thumbnail">

                </div>

            </div>

            <div class="col-md-4 col-sm-6 col-xs-12">

                <div class="thumbnail">

                </div>

            </div>

            <div class="col-md-4 col-sm-6 col-xs-12">

                <div class="thumbnail">

                </div>

            </div>

        </div>
    </div>

```

```
</div>
```

```
<!-- jquery -->
```

```
<script
```

```
src="https://code.jquery.com/jquery-3.5.1.min.js"
```

```
integrity="sha256-9/aliU8dGd2tb6OSsuzixeV4y/faTqgFtohetphbbj0="
```

```
crossorigin="anonymous"></script>
```

```
<!-- Bootstrap JS -->

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js" integrity="sha384-
Tc5lQib027qvyjSMfHjOMaLkfuWVxZxUPnCIA7l2mCWNIpG9mGCD8wGNlCPD7Txa" crossorigin="anonymous"></script>

<!-- JS script -->

<script src="imageGallery.js"></script>

</body>

</html>
```

## imageGallery.js:

```
function addImage() {

    var imageURL = document.getElementById('imageLink').value

    var rowContent = `<div class="col-md-4 col-sm-6 col-xs-12">

        <div class="thumbnail">

            <img src= "${imageURL}">

        </div>

    </div>`

    document.getElementById('imageContainer').innerHTML += rowContent;

}
```