

# User Input: Buttons and Forms

## Objectives and Outcomes

In this lesson we review the support for user input through the use of buttons and forms in a web page. We review Bootstrap button classes and Forms classes. At the end of this lesson you will be able to:

Create and style buttons on a web page using Bootstrap button classes

Create and style forms on a web page using Bootstrap form classes

## 1. User Input

Let's now talk about user input.

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Gone are the days when websites purely delivered information to the user through the browser. And at most they would have hyperlinks that you could click to move to other pages in the website. Most websites these days provide many different ways for the user to interact with the website. Say in the form of buttons or forms that the user can fill out information and submit to the server and so on. So let's look at some of these in more detail.

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To help us understand the various ways a website can provide for users to interact, let's just quickly pay a visit to your course website. Now here you see a lot of buttons on the screen so you can see a button that you can click. You can see a search box where you can type in information and then press this button in order to initiate a search. You might have other buttons that you can click to

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be able to cause some actions to be taken. You could even have hyperlinks on the website. So hyperlinks still do exist on websites that will take you to other parts of your website. All the user inputs to your website boils down to three different

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tags that can be used for this purpose. We have the `<a>` tag, which was originally designed for hyperlinks. So you have the `href` attribute for the `a` tag through which you can specify what should be done when the user clicks on the hyperlink.

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Then we have buttons. Buttons typically, the moment you put a button, you are automatically prompting the user to click the button. So that's how users would interact with buttons. Button was added to the HTML specification later on to provide a separate way from hyperlinks to enable user interaction. Then of course we have forms. Forms provide for more detailed interaction from the user. User can submit information by typing in things into the various boxes that you provide, and then click a button in order to submit the information that you entered into the form.

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Buttons themselves are a very straightforward way of providing interaction to the user. Once you put a button, you're expecting the user to click on that button.

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Button behavior can vary depending on where the button is positioned within your website. If a button is included inside a form, the general expectation is that when you click on the button the form information will be submitted.

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Buttons outside the form may take on many other roles. So clicking on a button may open or hide parts of information in your webpage. Maybe open a modal on the screen that allows you to view other

information. So we will see some of these uses of buttons in the next module. The `<a>` tag itself has many times been hijacked and transformed into a button through the use of CSS. Indeed even Bootstrap itself you can easily turn an `a` tag into a button-like form very easily. Which is something that we will see in the later lectures and exercise. Forms, of course, are the granddaddy of information submission. They provide you with many different fields that you can fill in, input fields that allow you to specify different kinds of inputs. And then we have text areas which are much larger

4:04

boxes which allow you to fill in more detailed information. You could have buttons of course, within a form that allows the triggering of the submission of the information that you enter into the form. Then you have select. And select allows you to select from a predetermined set of choices, then you have checkboxes, then you have radio buttons. So all of these combinations allow forms to be very versatile in seeking information from the user. So in the next set of lectures we're gonna review Bootstrap Button Classes and then subsequently we'll look at Bootstrap Classes to style forms.

## 2. Bootstrap Buttons

Let's now talk about Bootstrap's buttons. In particular, the various classes that Bootstrap provides for you to include buttons in your website, and also to style the buttons in various forms.

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The default Bootstrap setup is configured with five different colors, and these colors can be specified within Bootstrap or attached as qualifiers for previous classes in the form of primary, success, info, warning and danger. There five corresponding colors in the default Bootstrap set up. Is darker blue for primary, green for success, light blue for info, an orange color, somewhat of an orange yellow color for warning, and red color for danger.

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These five colors, identifications, can be used together with many of the Bootstrap classes. So, for example, if we want to set a text to light blue in color they can say text info or you can say text primaries. You can say button success for a green colored button, similarly, alert danger for red colored and text to be displayed. Similarly, background info for a blue colored background to be created for an element. So, this standard five color combinations can be used together with many classes to specify colors for those elements in Bootstrap.

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Bootstrap provides various button classes that allow you to style your buttons in various ways. Now, these button classes can be applied to the `<a>` tags, to the `<button>` tag, as well to the `<input>` tags that you use on your web site. All these can be styled using the button class. So, all of them when you apply the Bootstrap button classes, will take the form of a button, they all look like a button on the screen. But, in particular only button tags can be used inside navs and navbars if you want to include a button in the nav or navbar. Let's take a look at some example buttons and how they are defined in code. So, looking at the example that we have on the screen here. You can see that I have defined five different kinds of buttons,

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the large button that you see there has been styled using button, button primary, button LG class. And, similarly the default, the small success button, the extra small buttons, and even links. The two buttons on the right side here they use the button class called button block. This essentially makes those buttons span the entire payment block within which this button is contained. So, in this case, the two buttons are spanning an entire column. So, they are spanning three columns in that particular row there. To summarize, Bootstrap's button classes application can be done by selecting one from each of these four choices here. So, if you need to apply the button class to any `A` or `Button R`, the input element. You would specify the class as `BTN`. Then followed by one of the color choices that we have there button

default, button success, button info and so on. Then you can also specify the size of the button. So, you can say button large, button small, button xs. And of course that if you don't specify a size, the default button size will be used. And you can also make the button occupy the entire block by using the btn-block class.

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Bootstrap also allows you to group buttons into button groups. So, when you group a set of buttons into button groups, these buttons are displayed together as a single unit. So, in the picture what you see here, we have three different kinds of button groups being used. The left two button groups are enclosed inside a button toolbar. So, you enclose button groups inside a button toolbar. So, how do we apply the button classes for applying the button group? You use btn-group class, then you can specify the size, also, as btn-group -sm lgr excess, if you would like to specify.

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You can also specify the orientation for the patterns as vertical. Normally, the buttons will be done in a horizontal manner if you include them in a button group. But, you can specify that the button group is button group vertical so the buttons are going to be laid out stacked one upon the other. As you see in the example on the right side. So, you have the three buttons in for warning and danger buttons stacked one on top of the other. And the corresponding code for causing this is shown right there in the slide. Finally, summarizing, for buttons we have the button class, BTN class, then you have the colors, then you have the sizes that can be used in combination. Buttons can be grouped using button toolbar, button group, button group vertical button group justified meaning that the buttons will stretch to occupy the entire space that they are allowed to occupy based upon appearance size. So, if they are included in a column then they stretch to occupy the entire color.

6:26

And of course you have the button group with the size being specified large, small, and extra small.

### 3. Bootstrap Buttons

Let us now talk about Bootstrap support for forms. In particular, the various classes that Bootstrap provides in order to style the forms. We have seen forms already in a lot of detail, in the previous course. So in this lecture, I will primarily deal with Bootstrap's own classes that are available to style the forms.

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Forms in Bootstrap are created using the form tags. So all the elements of the form are enclosed inside the form tags.

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If we do not specify any class for the form, then the standard layout for the form is used.

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We can specify the form class as form-horizontal. And if we do that, then we can have the labels to be displayed to the left side of the data entry fields. So as you see in this particular example, when you specify a label together with the data entry element, then we would use a form-group to enclose these two. So in here, I am specifying the label as the first name there, which is shown in the form on the left hand side. To the right of it in the same horizontal line, the actual field for entering the data is shown. Now by default within Bootstrap, the form group supports the row class. So inside the form group, you can use the column classes in order to style the elements inside the form group. So here, you see me using the column class for both the label as well as for the input element there. We can also define inline forms. Inline forms are shown completely in a single line. So this could be very useful, for example, if you want to include in your navbar a method for the user to type in their username and password and log in to your website. So inline forms use the class form-inline, and inside there you can specify the form groups. In particular, in this example, you see that for the label

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tag, I am specifying the class as sr-only, meaning that those labels are valid only for screen readers. Now for a normal visual display, those labels will be hidden.

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Instead, we are using the placeholder inside the form element itself to identify what the user is supposed to type into that field in the form. Another class that Bootstrap supports is called as an input-group. An input-group allows you to group together a set of elements. Now, for any data entry field that you have within your form, you can also have an input-group-addon, so that you can add elements to the left and right side of your group. So in this example, you see me including the left and right parenthesis to the field where I allow the user to type in an area code. Say, for example, a telephone number. So in here, I am attaching using the input-group-addon the left parentheses, and the input-group-addon the right parentheses for this group. So these group addons, I am taking the help of a div to put them together with my field there. Now, we'll move on to the next exercise, where we'll continue to work on our website. We're gonna add buttons to the web site, and also use various form elements in order to create a user feedback form for our restaurant.

## **Exercise (Instructions): Buttons and Forms**

### Objectives and Outcomes

In this exercise, we will examine user input for a website through the use of Buttons and Forms support in Bootstrap. At the end of this exercise, you will be able to:

Create, style and activate buttons in a web page using the button classes

Design a form using various form elements and style the form using Bootstrap form classes

Set up for the Exercise

Download contactus.html file and move it to the conFusion folder that contains your ongoing website project. This file is already pre-formatted with some content.

Set up the links in the navigation bars for all the three pages, index.html, aboutus.html and contactus.html so that we can navigate from one to another with ease. We have configured the links in contactus.html appropriately.

Add glyphicons and font awesome icons to all the links in the navbar. We have already configured for Home and About links. Now add the glyphicon glyphicon-list-alt to the Menu link, and the font awesome icon fa-envelope-o to the Contact link. Do this in all the three html pages in the website. Note that this instruction is brief since you should by now be familiar with doing this step from the previous module.

### Adding a Button Bar

We are now going to add content to contactus.html file to learn more about buttons and button bars. Go to the div where we specify "Button group goes here", and replace it with the following code to create a button bar containing three buttons:

```
<div class="btn-group" role="group" aria-label="...">
  <a type="button" class="btn btn-primary" href="tel
    :+85212345678"><i class="fa fa-phone"></i> Call</a>
  <a type="button" class="btn btn-info"><i class="fa fa-skype"
    ></i> Skype</a>
  <a type="button" class="btn btn-success" href="mailto
```

```

:confusion@food.net"><i class="fa fa-envelope-o"></i>
Email</a>
</div>

```

Note how we define the button bar using the btn-group class, and then add the three buttons using the <a> tag. In this case, the three buttons are hyperlinks that cause an action and have an href associated with them. So we decided to use the <a> tag instead of the <button> tag. Note how the <a> tags have been styled using the btn class.

## Adding a Basic Form

Next, we will add a simple form to the page at the location identified by "Form goes here". Add the following code to page to create a simple horizontal form with two fields:

```

<form class="form-horizontal" role="form">
  <div class="form-group">
    <label for="firstname" class="col-sm-2 control-label"
      >First Name</label>
    <div class="col-sm-10">
      <input type="text" class="form-control" id="firstname"
        name="firstname" placeholder="Enter First Name">
    </div>
  </div>
  <div class="form-group">
    <label for="lastname" class="col-sm-2 control-label"
      >Last Name</label>
    <div class="col-sm-10">
      <input type="text" class="form-control" id="lastname"
        name="lastname" placeholder="Enter Last Name">
    </div>
  </div>
</form>

```

This creates a form with two elements in the form. Note that the class form-group acts as a row in the Bootstrap grid system. Hence we can style the contents using the column classes as appropriate.

## Adding a Input Group with addons

We now see the use of an input-group together with input-group-addons. Let us add fields to seek user's telephone number and email:

```

<div class="form-group">
  <label for="telnum" class="col-xs-12 col-sm-2 control-label">Contact Tel.</label>
  <div class="col-xs-5 col-sm-4 col-md-3">
    <div class="input-group">
      <div class="input-group-addon"></div>
      <input type="tel" class="form-control" id="areacode"
        name="areacode" placeholder="Area code">
    </div>
  </div>
</div>

```

```

        <div class="input-group-addon"></div>
    </div>
</div>
<div class="col-xs-7 col-sm-6 col-md-7">
    <input type="tel" class="form-control" id
        ="telnum" name="telnum" placeholder="Tel.
        number">
    </div>
</div>
<div class="form-group">
    <label for="emailid" class="col-sm-2 control-label"
    >Email</label>
    <div class="col-sm-10">
        <input type="email" class="form-control" id
            ="emailid" name="emailid" placeholder="Email">
        </div>
    </div>

```

Note the use of the input-group and input-group-addon classes.

### Adding a Checkbox and Select

We now see the addition of a checkbox and a select element to the form. Note the styling of these elements using Bootstrap classes:

```

<div class="form-group">
    <div class="checkbox col-sm-5 col-sm-offset-2">
        <label class="checkbox-inline">
            <input type="checkbox" name="approve" value="">
            <strong>May we contact you?</strong>
        </label>
    </div>
    <div class="col-sm-3 col-sm-offset-1">
        <select class="form-control">
            <option>Tel.</option>
            <option>Email</option>
        </select>
    </div>
</div>

```

### Adding a textarea

Next we add a textarea for the users to submit their feedback comments as follows:

```

<div class="form-group">
    <label for="feedback" class="col-sm-2 control-label"
    >Your Feedback</label>
    <div class="col-sm-10">
        <textarea class="form-control" id="feedback" name
            ="feedback" rows="12"></textarea>
    </div>

```

```
</div>
</div>
```

## Adding the Submit Button

Finally, we add the submit button to the form as follows:

```
<div class="form-group">
  <div class="col-sm-offset-2 col-sm-10">
    <button type="submit" class="btn btn-primary">Send
      Feedback</button>
  </div>
</div>
```

Note the declaration of the type for the button to submit.

## Conclusions

We have learnt how to add buttons and button groups to a web page. We also learnt how to add a form and style the form using Bootstrap form classes.

## Exercise (Video): Buttons and Forms

In this exercise, we're gonna learn more about buttons and forms. We're going to learn how to add buttons to your website, how to style them using the button classes that are available in. We'll also learn about and how we create and style the elements. Using classes. To get started download the contactus.html file that we have provided for you and then move it to the Con Fusion folder. Now this file we are going to integrate it into our website. So when you open the webpage in a browser, this is what it is going to look like, in the browser.

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So you can see that on the webpage we have the web page already partially styled by us, with some information. Now within this web page, you're going to add some buttons, and also add in a form for the user to submit feedback to their restaurant. Before we get started adding forms and buttons, let's first integrate this web page into our website. So this means that we have to go into the nav bar and then set up all the links correctly in the nav bar, not only for contactus.html page, but also the previous two pages, index.html and aboutus.html. So you all know how to do this, so go and edit the nav bars on these three pages. And update the links there, so that you can move from any page to any other page by just clicking the links on the nav bars. In addition, while you are at it, add two new glyphs, and icon to the Nav bar. One for the Menu item and one for the Contact Us item. So we'll be using a glyph icon for the Menu item and will use another Font Awesome icon for the contact link in our nav bar. So as specified in the instructions, let's update these nav bars and come back and look at the result. Taking a look at the contactus.html page, let me quickly review how I added the two icons into the navbar. For the menu item, you can see that I am using a glyphicon-list-alt for the menu item. And for the contact item, I am using a Font Awesome, Font Awesome envelope icon for the contact links there. Our next step is to add a button bar to the contactus.html page. Now when you go into the page, you will see that we have identified the location where the button group is going to be added. So go into that location and then we'll replace this line there with the code for the button groups.

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After replacing the code, let's quickly review what this new code does here. So you can see that in this new code, I have defined a div with a class called btn-group. So this contains a group of buttons.

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I have three buttons in here, and I am using the a tag to define the button so I am saying a type button, and for the class I am using button button primary for one of the buttons. This button is a button to make a phone call to the restaurant. So, that's why for the H graph I am specifying it as it telephone and the phone number of the restaurant. The second button is for Skype. So I have included, again, Skype button here, and also included a Font Awesome icon for Skype there. The third button is for sending emails. So I have updated the A tag, with the btn btn-success, and then the href, I am setting it to the mail ID of the restaurant. Of course, remember that this is a fake mail ID, so don't try to send mail to that ID.

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And also, I added an envelope icon to the email. So after making this changes, let's go and review our webpage. Returning to our webpage, you would notice that now the,

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Nav bar has been updated with icons for all the links in the nav bar.

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Second point to note is the addition of the three

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buttons, in a button bar, to the contents of the website. So now you can see that I have three buttons here, call, Skype, and email. Now, this blue outline here is because I am using brackets. So whenever I am editing any code in brackets, you will see the blue line appear there. So let me just turn that off so that's it's more clear to you. So let's take a look at the button bar. So you can see that in the button bar now I have three buttons here. The Call button, the Skype button, and the Email button. So if we click on any one of these then the appropriate function will be started. In our next set of step, we're going to add the form element to the contactus.html webpage. So here where it says form goes here, I'm going to create a feedback form that the visitors can used to send feedback to the restaurant. Of course at the end of this exercise this form will not work at the moment because we don't have the server side setup to receive the information from the form, but in the later courses they will activate this form to be able to submit information to the restaurant.

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Returning to our web page. In brackets, I'm going to replace this form goes here with

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a set of code in order to create a simple form.

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I have now substituted the form code in place. In the HTML code let's quickly review the new code that we have added, so you can see that I have added a form tag here, and with a class horizontal, which means that there are items in this form will be layed out in the horizontal manner, so we have already seen the form horizontal class for our bootstrap, when we debuted forms in bootstrap.

7:49

Inside that form class, I have two form-groups here. The first form-group is used to create the entry for the first name. The second form group is to create the entry point for the last name here. So after making these changes let's go and look at the result.

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So you can now notice that on the webpage we now have two fields that have been created for entering the first name and the last name of the users.

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Pertaining to the HTML code, let me just remind you again that the form group class automatically adds the row features to that diff. So inside that, whatever contents we have, we can now apply column classes to that content. So that's why you see me applying col-sm-2 to the label and col-sm-10 to the div in here. So this is a nested set of columns for this row. This is nested inside another column which



is in the webpage itself.

9:05

Our next iteration to the HTML code for the form is to create the input group for entering the telephone number. Now when I clear the info group for the telephone number. You would see that I'm using the form group. Now, inside the form group I'm using an input-group here in the code. This input-group contains an input group add on which allows me to add the left parentheses, and another input group add on that allows me to add the right parenthesis to that particular input element there. So this input element I am using it to allow the user to enter the area code. So if you're familiar with the US phone number representations you will see that the area code is always enclosed inside parentheses. So this allows me to add add ons to the input elements there. Now in addition I have added in one more field for allowing the user to enter their email. So if this is the email ID field here, the label, and the input there. So after making these changes, let's go and have a look at the page. Now in the webpage, you see that we now have the contact telephone number, which can be specified as an area code within

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parenthesis, and the telephone number next to it. The email can be entered in the email field.

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Our next addition to the form is a check box,

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which allows the user to specify whether they want to be contacted or not.

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In addition, I am using a select element in order to let the users specify whether they want to be contacted by telephone or by email. So, adding these two. Looking at the code, you see that I have a form-group here which encloses that. And inside of that I am defining a div with a check box in here. And I have an input type check box in there. And then correspondingly, the message there saying, may we contact you? Question mark. So if the user checks the check box, then the user is indicating that they could be contacted. So that is enclosed inside this check box in here. Now below that, I have a select element there. For the select element I have two options. Telephone and email.

12:00

After making these changes, let's go back and look at our webpage. Now before we go, let me show you how we have styled these elements here, and how we have specified the column classes. Now, as you recall, the form group already provides the row class for us. So inside there, the checkbox div, I have given it appropriate column specification there. And then also, the select element I have given the appropriate column specification there. So I want you to make specific note of this information in the code. Now let's go and look at the page. Now you see that in the web page, we now have a check box which we can check on or off. And then the message there, and also this selector element which allows us to

13:05

specify whether we want to be contacted by telephone or email.

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The next element what we are adding to the form is a textarea. This is the place where the user can type in.

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They're coming. So here I am using another form-group for that. And inside that form-group, I have a label to specify the information. And then I am using another div, which is close text area whose values are set to be 12 rows there so the text area will allow the user to input 12 rows of text in there. So with these changes, again going back to our webpage, this is the next result of adding the text area to our webpage. So now you see that your feedback page is already taking very well. Our last addition to the form is the submit button. So here I am creating a submit button by using the button and specifying its type as submit.

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I specify the classes btn btn-primary and then specify that the contents inside the button that should be displayed the text inside the button. And also, I specified for the dev. I used the classes to appropriately position the button in the. With these changes, let's go and have one final look at our webpage.

14:46

Going back to our webpage, we now see that the form is now complete. So you can see that you have all the various fields in the form.

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And also we have specified the button which the user clicks in order to submit the form information.

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Now, taking one final look at our web page, in this exercise we have added a new page called contact us to HTML to our website. We styled the nav bar

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specifying icons for all the links in the nav bar.

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Then we added the button bar here that allows users to either call, Skype or email the company. And finally we added a form for the users to send back comments to the restaurant. And we used various form elements, and Bootstrap's classes, in order to style the form appropriately.

16:01

This completes this exercise.

## **Displaying Content: Tables, Panels and Wells**

### **Objectives and Outcomes**

In this lesson we will be reviewing the support for tables in Bootstrap. In addition two components in Bootstrap, viz. Panels and Wells and their application to display content will be presented. At the end of this lesson you will be able to:

Present and style tabular data in a table form using Bootstrap support for tables

Display content using panels and wells on a web page using Bootstrap panel and well components

### **4. Bootstrap Tables**

Okay, let's turn the tables on Bootstrap Tables. We'll talk about Bootstrap support for tables using the Bootstrap classes.

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Now when tables were first introduced into HTML, they were meant for displaying tabular data on a webpage. Tables have been hijacked for many other purposes, something completely other than tabular data. We have seen people using tables for formatting contents to be displayed on their pages.

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Those were the days when we had no other means of controlling the display of content on our webpages. Now with the advent of grid systems like the Bootstrap grid, I don't see any more reason to continue using tables for matching content on their pages. Now this is one of my pet peeves, but anyway, aside from that, let's talk about tables as they're originally intended for. Which is to display tabular data on our webpages. In HTML of course, the table tag is meant for displaying tabular data. Bootstrap supplies a class called the table class which you can apply to the table tag. Now you are wondering, why do we need a table class for a table tag? A table tag is itself a table. Now Bootstrap's intention for using the table class use to make it very clear that this table is actually being used to

format tabular data in their pitch. That's the reason why they provide the table class. So we would always see Bootstrap's formatting of tables starting with the table class.

2:00

Besides the table class, we have many other table classes available within Bootstrap. So along with table, you should be using either table-striped, table-bordered, table-hover, table-condensed and table-responsive. Now among these, in the exercise, we will look at the use of table-striped. This creates tables with zebra striped rows meaning that alternate rows have

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somewhat darker color than the other rows. So that we can more easily distinguish between the rows within the table. Table-bordered class puts borders onto the tables. So in case you want tables with borders in place, then you could use the table borders. Table-hover works in this way, when you use your mouse to touch on any of the rows of the table. Then that row will be highlighted for you.

3:08

You can use table-condensed if you want to reduce the amount of cell padding that is standard in Bootstrap tables.

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If you are using tables and you want your table to be responsive. Meaning that when the table is viewed on extra small screens you still want the table to be fairly well displayed. Now on extra small screens that is screen sizes less than 768 pixels,

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the table is turned into something that can be scrolled horizontally. So if your entire table is unable to fit the screen, then Bootstrap will allow that table to be scrolled in order to be read properly by the users.

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In addition, we have five classes that can be used for coloring the table rows, as well as table cells. There are classes are active, success, info, warning and danger. We have already seen these in the context of collage, these adjectives being used. So you can apply these to either the table rows, or individual cells within your table.

4:29

This completes our discussion of tables and Bootstrap table classes.

## 5. Bootstrap Panels and Wells

Let me now talk about two bootstrap components than can be used to display content on your webpage.

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In particular, about Bootstrap Panels and Wells.

0:16

Sometimes, within your webpage you may want to highlight a piece of content. So that it's more clearly visible to the users. Now, panels and wells are two ways that you can highlight content with a new webpage so that it's more easily noticeable to the visitors. Panels as you see, allows you to display a content inside a bounded box, as you see in the picture here. Now within this boundary box you can have a simple boundary around the box. That would be a standard panel. You can also have a panel heading in place. So in the example that you see on the screen, we have a panel heading in place. And within the panel heading, you can specify the content to be displayed in the heading by using the panel-title class. So here in this example, I am using the panel-title class being applied to the h3 tag there. And you can see the display off the panel title in the panel on the right hand side.

1:34

The panel body itself can contain any HTML content. Now in this example, I am using a description

list in order to show some data about the restaurant itself. Now this is one way you can use a description list. In particular, I am using description list with the class dl-horizontal, so that the term and the description are displayed in the same horizontal line here.

2:12

For a panel, you can also specify a footer. If for your specific use situation if footer makes more sense, then just like you applied the panel heading, you can also define a panel footer to be applied to the panel.

2:30

Our next Bootstrap component is a Well. A well, as you'll see from the example here is like a bounded box surrounded with a light gray background here.

2:44

Inside this well, you can include any content. Now to use a well, you just apply the well class to a div. And inside the div, whatever content that you include will be enclosed inside this light gray bounded box as you see on the right side.

3:04

In this example, you can also see me using the block quote to display a quotation from the user. When you use a block code, you will have the content being formatted, as shown in the picture there with a vertical bar on the left side to highlight what content. For the block code, we can also specify a footer. There, you can specify the source of this quotation.

3:38

Wells can also be qualified by using the Well LG and Well SM classes to define a large and a small well. What you see in the picture is a default sized well. If you would like a larger well, then together with the well class, you can use the well-lg class. For a small well, you can use the well-sm class. Finally, we'll move on to the exercise for this lecture, where we will look at the use of Tables, Panels and Wells in our webpage. So we will create style and present some tabular data in the form of a Bootstrap table. And we'll use Bootstrap's table classes to style the table. We'll also include a panel and a well onto the webpage.

## **Exercise (Instructions): Displaying Content: Tables, Panels and Wells**

### **Objectives and Outcomes**

In this exercise, we will examine tables and Bootstrap classes for styling tables. We will also examine two Bootstrap components: Panels and Wells and their use for displaying content. At the end of this exercise, you will be able to:

Create, style and present tabular data in tables in a web page using the Bootstrap table classes

Display content in a web page using Panels and Wells using Bootstrap Panel and Well classes

Set up for the Exercise

In this exercise we will be modifying the aboutus.html page to add a table, a panel with some content and a well with a quotation.

Let us get started by opening aboutus.html page in a text editor.

Bootstrap Tables

In this part, we will add a new row of content after the Corporate Leadership row in the page. We first start by adding a row and columns to the page as follows:

```
<div class="row row-content">
```

```

<div class="col-xs-12 col-sm-9">
  <h2>Facts & Figures</h2>
</div>
<div class="col-xs-12 col-sm-3">
  <p style="padding:20px;"></p>
</div>
</div>

```

Inside the first column of this row, insert the table as follows:

```

<div class="table-responsive">
<table class="table table-striped">
  <tr>
    <td>&nbsp;</td>
    <th>2013</th>
    <th>2014</th>
    <th>2015</th>
  </tr>
  <tr>
    <th>Employees</th>
    <td>15</td>
    <td>30</td>
    <td>40</td>
  </tr>
  <tr>
    <th>Guests Served</th>
    <td>15000</td>
    <td>45000</td>
    <td>100,000</td>
  </tr>
  <tr>
    <th>Special Events</th>
    <td>3</td>
    <td>20</td>
    <td>45</td>
  </tr>
  <tr>
    <th>Annual Turnover</th>
    <td>$251,325</td>
    <td>$1,250,375</td>
    <td>~$3,000,000</td>
  </tr>
</table>
</div>

```

Note the use of table-responsive class to create a responsive table, and the table-striped class for styling the table.

## Bootstrap Panel

Before we proceed we adjust the column classes for the two columns in the first content row to be col-

sm-8 and col-sm-4 respectively so that the two divs span 8 and 4 columns respectively. Next we add a panel to the second div in the first content row as follows:

```
<div class="panel panel-primary">
  <div class="panel-heading">
    <h3 class="panel-title">Facts At a Glance</h3>
  </div>
  <div class="panel-body">
    <dl class="dl-horizontal">
      <dt>Started</dt>
      <dd>3 Feb. 2013</dd>
      <dt>Major Stake Holder</dt>
      <dd>HK Fine Foods Inc.</dd>
      <dt>Last Year's Turnover</dt>
      <dd>$1,250,375</dd>
      <dt>Employees</dt>
      <dd>40</dd>
    </dl>
  </div>
</div>
```

Note the use of the panel and panel-primary classes to style the panel. The panel contains two divs, one with panel-heading class to host the heading of the panel, and the second with the panel-body class to host the content. Note the use of <dl> tag with the dl-horizontal class to create a horizontal description list.

## Bootstrap Well

Next, we add a Bootstrap well component and include a quotation in the well using the blockquote typography style:

```
<div class="well">
  <blockquote>
    <p>You better cut the pizza in four pieces because
      I'm not hungry enough to eat six.</p>
    <footer>Yogi Berra,
      <cite>The Wit and Wisdom of Yogi Berra,
        P. Pepe, Diversion Books, 2014</cite>
    </footer>
  </blockquote>
</div>
```

Note the use of the <blockquote> tag to create a block quote in the well. We can use a <footer> inside the block quote to specify the attribution of the quote to its origin.

## Conclusions

In this exercise, we constructed a table and styled it with the Bootstrap table classes. Thereafter, we added two components, a panel and a well to the web page. We also saw the use of the description list and the block quote in the content.

## Exercise (Video): Displaying Content: Tables, Panels and Wells

In this exercise, we're going to learn about adding tables, panels, and wells in order to display content in our web page. For this exercise, we're going to use the aboutus.html page that have already created earlier. And then we'll go in and add a table there, in the process learn how Bootstrap tables are styled. Then, we will add a panel there with some information. And finally, we'll add a well there, with a quotation. So in this process, we'll learn about how we can arrange to display content on our web page in a more interesting manner.

0:46

Taking a look at the current state of the aboutus.html page. As you can see in this page, we see that on the right hand side here, we have some empty space there. So I'm gonna put a panel here to display some information. And also, right after the history of the restaurant, I'm gonna put in a well there in order to display a quotation. And we'll go in to the bottom of this page, and then add an extra row there. That is where we're going to add a table of information about this restaurant. Along the way, of course, we will learn about the table classes that are available in Bootstrap.

1:37

Going to the HTML code of the aboutus.html page. In brackets, right after the Corporate Leadership row, I'm going to add an extra row there called Facts and Figures. And inside this row, I'm going to add a table that displays some information about this restaurant. So let me add the code, and I will come back and review the code in more detail.

2:08

Let me first show you the result of adding the table and the row containing the table to this aboutus.html page. Now, when you look at the web page itself, you will see that now we have a table there that displaced some information. In particular, this table is designed in such a way that alternate rows are in a slightly darker color. So that easily helps us to distinguish between the rows of the table. This is a class that we use called table-striped in Bootstrap. Let's look at the code to understand how we go about creating a table in this web page.

3:03

Returning to the code, now you see that I have added another row here using the row row-content class. Inside that row, I am declaring a column class here, and inside the column class, I'm going to include the table.

3:24

So to create a table, I am enclosing the table in a div called table-responsive. This makes the table responsive so that when it is viewed even on a very small screen, the table will adjust appropriately. And then if the table needs extra space, then we'll be able to horizontally scroll the table and look at the details of the table. Now, the table itself, we use the table HTML element to design the table. So here, I have table. For that, I have given the class table table-striped. So this way, we make it very clear to Bootstrap that we are using this table as a real table. Now, you do realize that people often use the table class for styling HTML pages themselves. So we want to be clear that this table is actually being used as a table itself. So that's why we use the class table here, to specify that this is a real table. And then the second qualification that we are using is table-striped. So, the table-striped class will lead to a table with alternate rows being in a different color so that the table looks more clear. There are many different table styling classes that are available within Bootstrap, so you should explore some of those to understand how they are used better.

5:00

Now, the table of contents themselves are styled like a standard table that you might have created earlier. So there is no specific Bootstrap classes that I am using for the table content itself. So here, you see there is a table row. And inside the table row, I have all the table information, the table. These are

the table headers here, so I am using the th tag here so that these will be displayed in bold in the table. So this particular row contains all the heading information for the table, header row for the table. The next row contains information that is displayed on the first table row below the header row. So that's why only for the first column I am using the th. For the remaining columns, I am using td to display the information. Like that, you can go through the remaining rows of the table. And that is how we include a table in a web page using the Bootstrap classes. Returning to the web page, the next component that I'm going to add to this page is a panel. A panel allows you to display content in the web page in an enclosed box here. So here, if I scroll up, I see that there is some empty space on the right hand side in this row. I'm going to leverage that empty space, and then put a panel in place there. Now, I want the panel to occupy more number of columns. So I'm going to shrink the column for this particular part of the content in this row so that this occupies only eight columns and then I'll be left with four columns there to put a panel into place. So let me go to the code and then add in the panel code. And then we'll come back and look at the change to the web page. And then, we'll review the code. I have now added a panel to the web page. So as you can see on the right side, I have a panel which displays some information. Now, the panel carries a panel header here, and also some content. This content that I am displaying here, I am making use of the description list, the dl that is part of HTML. So that is what I am using to display the information inside this panel. So let's go and review the code to understand how this panel has been created. So coming to the code, you see that I have

8:02

added a div class with the panel in place there. And the panel classes that I am using is panel and panel-primary. So that is the reason why the panel itself is displayed in blue color, because I am using panel-primary color there. Inside the panel, you see that I have two divs here. The first div is a panel-heading, so that is what contains the heading that I am using for the panel. So in here I define the panel-title as an h3 class here, so that will be displayed in the panel-heading. Down below here, I have the panel-body. So this is where the content of the panel has been enclosed.

8:49

Now, looking at the content here, you see that I have a description list here, a dl. And the class that I am using for this is dl-horizontal. What this means is that in the description list, the term is displayed on the left side and the actual description of the term is displayed on the right side in the same horizontal line. So here, I have the first group here, so I have the dt that I am using to specify started. Then I am using the dd to specify what goes into the description. And similarly, repeating dt and dd here for the second line there, and so on. So I have four of these enclosed inside of this dl class here. So that is what creates the content of this panel that is being displayed in the web page.

9:49

Taking one final look at the panel, you see that now, the panel head is being displayed here on the top. And then the contents of the panel, the dl, is being displayed inside the panel here. Panels can be used to highlight pieces of information on your web page. So this is a very interesting component that is useful for certain parts of our web page and design.

10:18

The last component that I'm going to add to this web page is a well. Now, I'm going to put a well here in this row to display a quotation. Now, this quotation I am going to make use of the blockquote that is available for typography in Bootstrap to style that particular well. Let me add in the code, and then we'll come back to look at the web page itself. Coming back to the web page, now you can see the use of a well on the web page. Inside the well, now I have a quotation which I am using the blockquote typography support in Bootstrap to style. So when I use a blockquote, the blockquote will put a vertical bar to the left side of this quotation. And in addition, I am using some additional features of the blockquote in order to display the actual content here. Let's go and look at the code for creating the well and the quotation here. Now coming back to the code here, the well is created by using a div for which I am specifying the class as well. I can even specify the size of the well as well followed by



well-lg or well-sm for large and small wells. Or, if I don't specify the size, it'll be the default size well. In this example, I am using a default size well here. Now, inside the well, I can enclose whatever content that I wish to. So inside the well, I am using a blockquote to enclose the quotation there. Now if I use a blockquote and put some content inside the blockquote, what Bootstrap will do is to display a vertical bar to the left hand side of the blockquote to highlight that as a quotation on the screen. Now inside the blockquote, you see that I have a p element here which encloses the actual quotation. And then in addition, I am making use of the footer here.

12:35

This footer inside a blockquote allows me to specify the author, or the person who said the quotation. So in this case, this quotation was by Yogi Berra, which I found to be funny enough to include in the web page. And also, I can use this cite tag to display the source of this information. So here, I say cite and then I say the title as source title. And then, I specify the information inside there. So this will be displayed as the source of this quotation.

13:14

Coming back to the web page, now you can see how this well and the quotation inside the well have been created using the well class and the blockquote class in Bootstrap.

13:27

So this completes this exercise. So in this exercise, we have looked at the use of tables, panels, and wells in displaying content on our web page. Now, you can make use of these components at many other locations on your web page, depending on what you're trying to display there. But, this is just one example to illustrate how we can leverage these components to display content on our web page.

## **Images and Media: Objectives and Outcomes**

In this lesson we will look at the use of images and media on websites. In particular we will review the Bootstrap classes to support the inclusion of images and media, supporting responsiveness of images and media, and the use of these as thumbnails and part of other components, in particular the media component. At the end of this lesson you will be able to:

Use images and media and include them in your website

Support responsive images and media using responsive Bootstrap classes for images and media

Use thumbnails and media components using Bootstrap classes

## **6. Images and Media**

Today imagining a website without any images and media is very hard to do. But when you think back about when websites were first designed, they were purely content, text content. But of course today you can't envision a YouTube without the videos or a Pinterest without the images. So, images and media add enormous value to web sites these days.

0:36

You were expecting me to say that, weren't you? Well, not quite. This is what I was planning to say. A picture is worth \$12 on iStockPhoto.com. Okay, enough with those corny jokes. Let's move on to talking about images and media and how to include them on websites.

1:03

Paying a quick visit to your course website yourself, you can now begin to look for images and media that are already included in this website. Now, you can easily see that we have a logo up there, which obviously didn't get there without an image being included into the website design. And obviously you see those pictures there, images all over again.

1:32

Go into your course content and there you have, video on your website.

1:40

So, anywhere you turn you can't run away from images and media and their use on websites.

1:49

Let's now talk in particular about Bootstraps classes to support images. Now when you include images on your website, you would of course use the `img` tag there. Now inside the `img` tag you will supply the source as an attribute.

2:05

The class that you can use for images

2:11

using Bootstrap classes to make the images responsive, you would specify them as `img-responsive`. This way your image will automatically adapt as the website is viewed on different screens.

2:30

The image will automatically adapt itself to the size of the parent element, and appropriately, will display on the screen.

2:43

Now, you can also use additional classes to control the shape in which the image is being displayed on the screen. You can use `image rounded circle` and `thumbnail`.

2:58

`Rounded` will put rounded corners to your image, `circle` will obviously display your image inside a circle. And `thumbnail` would add some borders to your image.

3:11

I wonder who that is? In the example, you can see me using `image rounded`, `image circle` and `image thumbnail` on the image being displayed there.

3:26

This is the result of using the image classes in Bootstrap.

3:33

Another interesting class in Bootstrap is the `thumbnail` class. In a `thumbnail` class, as you can see from the code there, you would surround the content in a `div` with the class `thumbnail`. Now inside the `thumbnail`, you will specify your image, and in addition to the image, you can also specify a caption for the image. If you don't include the caption, then it'll be displayed like a thumbnail on this grid. Now the `thumbnail` class is very useful for creating a gallery of images on your webpage.

4:09

If you want to you can also include additional caption to your image. In this example, you see me using the caption to include some additional information together with the image there.

4:27

Another class that you can use to display images in media, is the `media-object` class. To use the `media-object` class you would enclose everything inside a `media` `div`. And inside the `media` `div` you would have two inner `divs`. One with the `media-left` or the `media-right` option. And the second one with the `media-body`. Now, the display of the content will be as shown in the example to the right. The image will be displayed as a thumbnail or whichever way you choose to on the left side, and on the right side the actual content will be displayed.

5:10

The `media-object` class is very useful to construct a list of items together with a thumbnail on the left.

5:18

You have seen the usage of these on many different places on websites. For example, if you want to display a list of comments, you could include also the image of the commenters. If you have a list of items being displayed for example, on a mobile device, you would often see that there is a thumbnail along the left, and some description on the right in the list of items being displayed on the screen. All of

these will benefit from the media-object class. So exploring further, the media-object class includes the media class, which you apply to the outermost div. The media-object class, which you apply to the inner div. The media-body class. Then the media-heading class. The media-heading class is applied to the heading that is displayed inside the media-body. Now, positioning of the image is controlled by using the media-left and the media-right classes. The media-right div, if you are using, should always be placed after the media-body div. Media-left div as you saw in the example, is placed before the media-body div.

6:39

The media objects can also be included inside lists, by using a ul media-list class being applied to it. So, this would be one way that you can display a list of comments on your website.

6:58

You can also use another class called a responsive embed for embedding content on your websites. We have seen when you embed content, like videos on your website, you would use tags like embed or iframe or video tags there. Now, any one of these can be embellished using the Bootstraps embed-responsive tag. And then together with embed-responsive-16by9, or embed-responsive-4by3, to specify the size of the embedded object being displayed. The embedded object itself carries the embed-responsive item class there. So, embedding media content on your webpage and making it responsive, means that you apply the embed-responsive-item class to either the embed iframe, video, or object tags. You enclose that inside a div. And for the div, you apply the embed-responsive and embed-responsive-4by3 or embed-responsive-16by9 to the embed div itself.

8:18

We'll now move to our next exercise, which examines images and media. So in this exercise, we're going to use the Bootstrap classes to embed a sponsored image on our website. We'll also use the media-object class to include images on description on our website.

## **Exercise (Instructions): Images and Media**

### Objectives and Outcomes

In this exercise, we will explore the Bootstrap classes to support image and media on a website. In particular, we will look at how to include images on a website, how to make use of images within a media objects. At the end of this exercise you will be able to:

Use Bootstrap classes to include a responsive images in a website

Use a media object to include images and description on a website

Set up for the Exercise

Download the img.zip file that we provide and unzip it in the conFusion folder. This should create a folder named img there.

We will now update the index.html file to include images and media objects on the web page.

Adding the Restaurant Logo

We will now add the restaurant logo to the Jumbotron. In index.html go to the header row inside the jumbotron and replace the second <div> column with the following code:

```
<div class="col-xs-12 col-sm-2">
  <p style="padding:20px;"></p>
  
</div>
```

You will immediately notice the restaurant logo being displayed in the jumbotron.

Next, we will add the logo to the navbar where we display the restaurant brand. Go to the navbar and replace the code there for the `<a>` tag with the "navbar-brand" class with the following code:

```
<a class="navbar-brand" href="#"></a>
```

Note the inclusion of the logo in the navbar.

Repeat the above two steps for the aboutus.html and the contactus.html page also to update their navbars and jumbotrons.

### Adding Media Objects

Next we will work with the content on the web page and use the media object classes to style the content in the content rows.

Go to the first content row, and replace the content in the second column containing the description of Uthappizza with the following code:

```
<div class="media">  
  <div class="media-left media-middle">  
    <a href="#">  
        
    </a>  
  </div>  
  <div class="media-body">  
    <h2 class="media-heading">Uthappizza</h2>  
    <p>A unique combination of Indian Uthappam (pancake) and  
    Italian pizza, topped with Cerignola olives, ripe vine  
    cherry tomatoes, Vidalia onion, Guntur chillies and  
    Buffalo Paneer.</p>  
    <p><a class="btn btn-primary btn-xs" href="#">More  
    &raquo;</a></p>  
  </div>  
</div>
```

Note the use of the media class and the related Bootstrap classes to style the content. Also, note the application of the button classes to the more link to turn it into a button.

Next, we will go to the third row and replace the contents of the second column containing the description about Alberto with the following content:

```
<div class="media">  
  <div class="media-left media-middle">  
    <a href="#">  
        
    </a>  
  </div>  
  <div class="media-body">
```

```

<h2 class="media-heading">Alberto Somayya</h2>
<h4>Executive Chef</h4>
<p>Award winning three-star Michelin chef with wide
International experience having worked closely with
whos-who in the culinary world, he specializes in
creating mouthwatering Indo-Italian fusion experiences
.
</p>
<p><a class="btn btn-primary btn-xs" href="#">More
&raquo;</a></p>
</div>
</div>

```

Finally, update the more link in the second row as follows:

```

<p><a class="btn btn-primary btn-xs" href="#">More
&raquo;</a></p>

```

## Conclusions

In this exercise, we learnt about the Bootstrap classes to support images and media in a web page. We saw how we can include responsive images on a web page. In addition, we saw the use of images within a media object to style and display content.

## Exercise (Video): Images and Media

Okay, next exercise. We're going to examine images in media, and how we can include them into our webpages.

0:14

First step, download the image dubbed zip file that we have provided for you.

0:20

Move the zip file to the confusion folder, unzip it. You'll be left with a folder named img in the confusion folder. This img folder contains all the images that we're gonna make use of in this exercise.

0:37

Next, let's open our project in brackets and then have a look at the current state of the webpage. In particular, we'll be updating the index for our HTML page by adding some images and media objects into this pitch. So looking at the current state of the webpage, you'll see that there is hardly any images on this webpage, and it looks fairly bland. Well of course we had to wait until we learned about images in media before we could add these to our webpage. So in this exercise we are going to add images and media to make the webpage a little more exciting to look at.

1:22

As our first step in adding images to this webpage, we are going to add the restaurant's logo to this webpage. Now you see that there is some space to the right hand side in this jumbotron. We are going to put the restaurant's logo in that location in the jumbotron. In addition, you recall that in the nav bar we had used the brand,

1:47

link there, and we'll use just text there to represent the name of the restaurant. We're gonna replace that with the logo of this restaurant.

1:59

Going to our index.html page, we first scroll down to the jumbotron.

2:10

In the jumbotron, I'm going to replace the second column that we have there by the restaurant's logo. So we're going to use an image for the restaurant's logo and then replace that

2:25

div class, or include the image into the div class. And then update the div class appropriately. So let's do that. And then we'll come back and examine the code. So here I have replaced the div class. Now, I have reduced the size of the div class to two column widths. So I updated column sm to column sm 2 rather than column sm 4 which was earlier. Now I'm going to use the remaining two columns for some other purpose in the assignment, so we're gonna leave that as such. Inside this div, now you see that I have included the image of the restaurant's logo there. So I'm using image, and the class that I'm using for this image is img-responsive. What this means is that this image will automatically adapt to the size of the containing parent element which is the div class. So, as the div class's size changes from different screen

3:28

widths, the restaurant logo image will automatically adapt. This is part of Bootstrap's class support for sponsored images.

3:43

While we are at it, we will as well update the navbar. In the navbar you'll see that we have the a tag with the navbar brand class. We're going to replace that navbar brand inside of the text. We're gonna replace it with the image of our restaurant's logo. And then I will size the image appropriately, so that it can be nicely placed in the navbar.

4:12

After updating the code inside the a tag, you can now see that I have replaced the text with an image which is the logo of our restaurant. I am using the height and width attributes of this image to control the size of the logo that is displayed in the nav bar.

4:33

After making these changes, let's go and have a look at the current state of our webpage.

4:40

Going back to our webpage, you can now see that the restaurant's logo is included in the jumbotron. In addition, in the nav bar you can see that the restaurant's name has been replaced with the logo of the restaurant. Now if you click on the logo, you're going to be taken back to the home page.

5:00

Go ahead and apply the same changes to both the jumbotron and the navbar. In contactus.html file and also the aboutus.html file. Remember that all these should have uniform design of the jumbotron and the navbar. So, go ahead and make those changes to the remaining two HTML files also. And then we'll go to the next step.

5:32

After updating the remaining two HTML pages, you will see that when you navigate to those pages, you will see the logo in the navbar. And also in the jumbotron.

5:45

Our next step is to use the media object class in Bootstrap to update the descriptions that we have in the rows of our index.html page. So now you see that in the first row we have the description of our dish there, and in the third row we have information about our master chef. So we're going to use the media object classes to update these two to include both images as well as the content as such.

6:26

I'm not going to update the content in the second row. That will be left as an exercise for you in the second assignment.

6:36

Getting back to the index.html page, we are now going to replace this description that we have for our dish there with a media object. I am going to include an image that we already provide for you in the

img folder. And also, update the remaining contents there to make use of the media object to display the description. You can now see that I have used the media class applied to a div and inside of the div, I am using the media left and the media middle class applied to an inner div. Which includes the images of the dish.

7:21

Also, the description itself, what was earlier in the div, now I have moved into a media-body div in there, the description as it exists. The h2 tag that is showing the name of the dish. I am using the media heading class for the h2 tag there.

7:48

Also, while I'm at it, I also updated the a class that contains the mode link there, to turn it into a button.

8:01

Moving to the third rule that contains the information about our executive chef. I have also updated the using the media object. So I am including an image of the chef. And also shifted the description into the media body class in there.

8:25

Finally in the second row, I am just updating the mole link there to turn it into a button.

8:34

With this we complete all the updates to the index.html page. Let's save it and then go and have a look at the final version of the index.html page.

8:49

Returning to our webpage, you will now see that in the webpage the description of our dish has been replaced by a media object. You can notice that we have included an image. I'm using the image to the image there and then the description on the right-hand side. Notice how the More link has been updated into a button there.

9:16

In the second row also, you see there are more data to a button. And in the last row, again, you see the description of the Executive Chef updated, with a picture of the Executive Chef in place.

9:33

This completes this exercise.

9:37

In this exercise we used the image classes and the media object class available within Bootstrap to include images onto our web page.

## **Alerting Users**

### **Objectives and Outcomes**

In this lesson we examine various ways of delivering alert information to users. We examine labels, badges, alerts and progress bars. At the end of this lesson, you will be able to:

Include labels and badges in your web page

Create, style and include alerts in your web page

Appreciate the use of progress bars and controlling the state of the progress bars.

### **7. Alerting Users**

Many a times, you may wish to draw the attention of visitors to your website, to certain parts of your website. Or maybe you may want to deliver a message to users. This is where the radius, available mechanisms to deliver alerts to users, becomes very, very valuable. So in this lecture we will examine

bootstrapped support for alerting users. We have labels, we have badges, we have alerts and progress bars.

0:36

For simple updates to users labels and badges may be more than sufficient. They just display a small piece of information within the website. Say, for example, display the number of unread e-mails. Or maybe an item that is new or updated at this moment. These kind of things can easily be delivered using labels and badges. Alerts or error or warning messages can easily be delivered to users by highlighting the messages on the website by surrounding it with appropriate

1:15

background so that it's clearly visible to the users. Progress bars are a way of indicating progress of any activity that is going on on your website, like uploading or downloading a file for example. Here is an example of the use of labels and badges on your website. Now, to use a label in bootstrap we will use the span tag and then apply the class label and depending on the color that you want your label to be, you would use label primary info danger and so on. And you can also specify the size of the label.

1:58

Similarly, badges also use this span tag with the class badge applied to the span tag.

2:06

So as we have already seen Labels. Use the class's label and label-color of the label that you want to use, and also the size.

2:20

Badges are fairly straightforward. There's a single class called badge that you apply to the span tag, and then whatever is the contents inside the span tags will be displayed as a badge.

2:32

The badge will automatically adapt to where it is displayed. So for example if the item for which it is included is with a darker background, the badge will be displayed in lighter color to match the other lettering within within the parent tech. Badges are interesting in the sense that if there is no content within the badge, the badge just will automatically collapse. So that it won't be visible on the screen. So that's one easy way of using badges on your website.

3:08

Alerts are another way of delivering messages to the user. An alert will be displayed at the location indicated within the webpage. That alert will be surrounded by a bounding box with a background color that is determined by the specification. So in this example, you see me saying alert warning. So that's why the background color is yellow in color. In addition, within this alert, I am including the icon the cross icon there which when clicked will dismiss the alert. To make this work, of course, I need to include an icon for that I am using the button tag. And inside the button tag I am applying the close class. And also the class is displayed by using the times

4:00

icon from HTML and for the alert itself, I need to apply the alert+dismissible class for this to work correctly. We can also include links within the messages that we displayed in the alerts, so in this example you see me using a link being displayed in the alert. So the links are actionable which means that the user can click on the link

4:28

to perform the appropriate link action there. As you saw in the example, the alert class is applied to the div. And inside there you can specify colors and also include links and make the alert dismissible by including the cross button in the alert. For the dismissible action to work you need the JavaScript plugin to be installed within your webpage.

4:57

Finally, we have progress bars. Progress bars as I mentioned is a way of indicating progress of any action that is going on on a website. See, uploading a file or playing some music, whatever mechanism



that you want to indicate the progress of the action would be well shown on the webpage, using a progress bar. To use a progress bar, you would use `<div class="progress">`. And inside the div, you will have an inner div to which you will apply the progress bar class. The progress bar can also take on the color representation using one of the standard colors there. So that's why in this example you see me using progress bar danger. You can also make the progress bar striped so you can apply the class `progress-bar-striped` to make a striped class, if you don't apply that, it'll be a solid color.

5:59

The width of the progress bar is indicated by specifying the style for the progress bar. So in this case I'm specifying `style="width:80%"` so, that's why in the progress bar, 80% is covered. We can also include a text that can be directly displayed inside the progress bar.

6:24

Now whatever we include in the span with the class `sr-only` is meant for screen readers. So if screen readers are being used, then that information will be read out to the user. We can also include the text directly in the progress bar, as you see, using the 80% right in the example there. So, to use progress bars, we apply the progress class to an outer div and then inside that we'll have an inner div that's a progress bar. Now within the outer progress div you can have multiple progress bars, if you want. If you do include multiple progress bars, then they will be stacked so you can create stacked progress bars if required.

7:10

And for a progress bar you can define the color and also whether it is striped or not. You can even activate the animation of the striped display by using the `active` class for the progress bar.

7:25

This completes our discussion on various ways of alerting users.

7:31

We'll now move on to a short exercise, where we will look at the use of both labels and badges on our website.

## **Exercise (Instructions): Alerting Users**

### Objectives and Outcomes

In this short exercise we will examine the use of labels and badges as a way of alerting users. At the end of this exercise, you will be able to:

Add a label to your web page using the Bootstrap label class

Add a badge to your website using the Bootstrap badge class.

Adding a Label

We will continue to edit the `index.html` file. In this file, we will add a label **HOT** next to the name of the dish **Uthappizza** in the first content row. To do this, add the following code inside the `<h2>` containing the name of the dish:

```
<span class="label label-danger">Hot</span>
```

Adding a Badge

Next we will add a badge right next to the label in the web page. Add the following code to the `<h2>` tag:

```
<span class="badge">$4.99</span>
```

## Conclusions

In this short exercise, we learnt how to add labels and badges to our web page.

### Exercise (Video): Alerting Users

Our next exercise, which is going to be a very short exercise, is going to look at various ways of alerting users. We have already seen that we have labels, badges, alerts and progress bars to inform the user. In this exercise, we're going to examine labels and badges.

0:22

Alerts will be explored further in the assignment that follows. Progress bars are a bit difficult to illustrate at this moment because we don't have any dynamic behavior on our website yet. That requires some server-side support. So we'll come back to examine progress bars

0:42

in more detail in some of the later courses.

0:48

Getting back to our webpage, in the index.html page we see that we are displaying a dish on the page here. Now, I'm going to add a label and a badge to this dish name. Thereby, explore the use of labels and badges.

1:08

Moving to our HTML code. Right next to the name of the dish, I'm going to add a label.

1:18

So I have added the label using the span tag. With the class label, label-danger and label-xs with the letters Hot inside the span. So this should display a label right next to the name of the dish with Hot in there, in red color.

1:40

Going back to the webpage, you can now notice that there is a label right next to the name of the dish.

1:49

In the next step, I'm going to add a badge, right next to the label. Here I am using the span with the class, badge. And then I am adding a price of the dish, right next to the label there. So you can see in the code how I have added the badge into place. Now looking at the result of adding this you will notice on the website that right next to the label you now have the price of the dish being displayed there. Now I have leveraged the badge class in order to display the price of the dish here. Now the badge class is a lot more versatile than that. We'll explore more about using badges when we have dynamic behavior on our website. This completes this exercise. In this short exercise we examined labels and badges. We'll look at alerts and progress bars later.