Lab: Applying Styles to MVC 5 Web Applications

# Scenario

You have created a good amount of the photo-handling functionality for the Photo Sharing web application. However, stakeholders are concerned about the basic black-and-white appearance of the application. In addition, titles and menus do not appear on every page.

To resolve these issues, your manager has asked you to implement the following user interface features:

* A layout for all webpages. The layout should include common elements, such as the main menu, which should appear on every page of the application.
* Icons on every button in order to improve the user experience.
* The web application should be accessible from mobile devices such as mobile phones and tablets. In particular, you need to ensure that devices with narrow screens can access photos easily.

# Objectives

After completing this lab, you will be able to:

* Use layouts to ensure common interface features, such as the menu, are consistent across the entire web application.
* Apply a consistent look and feel to the web application.
* Ensure that the web application renders smoothly on screens of different sizes and aspect ratios.

**Estimated Time**: 40 minutes

# Exercise 1: Creating and Applying Layouts

## Scenario

In this exercise, you will:

* Browse through the Photo Sharing web application without a layout applied.
* Create a new layout and link the application to the view by using a \_ViewStart.cshtml file.
* Modify the home index and photo display views to use the new layout.
* Browse through the resulting web application.

The main tasks for this exercise are as follows:

1. Open and browse through the Photo Sharing application.
2. Create a new layout.
3. Set the default layout for the application.
4. Update the views to use the layout.
5. Browse through the web application.

### Task 1: Modify the layout menu items.

1. Open the layout view of the PhotoSharingApplication project by using the following information:

* File location: /Views/Shared
* Name: \_Layout.cshtml

1. Replace the menu items in the navigation toolbar with links to
   1. View All Photos (Index action of the Photos Controller)
   2. View Latest Photos (Index action of the Home Controller)
   3. Insert a New Photo (Create Action of the Photos Controller)
2. Save the layout.

### Task 5: Browse through the web application.

1. Start the web application in debugging mode and verify the menu on the home page.
2. Stop debugging.

**Results**: After completing this exercise, you will be able to create an ASP.NET MVC Core web application that uses a single layout to display every page of the application.

# Exercise 2: Applying Styles to an MVC Web Application

## Scenario

In this exercise, you will

* Use bootstrap to apply icons and unify the style of every link and button of the application
* Examine the changes to the user interface after the styles have been applied.

The main tasks for this exercise are as follows:

1. Update the element classes to use the styles.
2. Insert the icons on the buttons.
3. Browse the styled web application.

### Task 1: Update the element classes of every button and link of every view to use the same style.

1. Open the Views/Photos/Index.cshtml file
2. Add the classes "btn btn-info" to the link to create a new photo.
3. Save the file
4. Open the Views/Photos/Create.cshtml file
5. Locate the submit input control and replace it with a button of type submit
6. Add the classes "btn btn-info" to the button
7. Locate the link to the Index action
8. Add the classes "btn btn-info" to the link
9. Open the Views/Photos/Details.cshtml file
10. Locate the link to the Index action
11. Add the classes "btn btn-info" to the link
12. Locate the link to the Edit action
13. Add the classes "btn btn-info" to the link
14. Save the file
15. Open the Views/Shared/Components/Photogallery/Default.cshtml file
16. Locate the link to the Details action of the Photos controller
17. Add the classes "btn btn-info" to the link
18. Save the file

### Task 2: Browse the styled web application.

1. Start the web application in debugging mode to examine the home page with the new style applied.
2. Browse to All Photos to examine the page with the new style applied.
3. Display a photo of your choice to examine the new style applied.
4. Stop debugging.

### Task 3: Add the icons to every button and link of every view to improve readability.

1. Open the Views/Photos/Index.cshtml file
2. Add the "glyphicon-plus" icon to the link to create a new photo.
3. Save the file
4. Open the Views/Photos/Create.cshtml file
5. Locate the button of type submit
6. Add the "glyphicon-ok" icon to the button
7. Locate the link to the Index action
8. Add the "glyphicon-home" icon classes "btn btn-info" to the link
9. Open the Views/Photos/Details.cshtml file
10. Locate the link to the Index action
11. Add the "glyphicon-home" icon to the link
12. Locate the link to the Edit action
13. Add the "glyphicon-edit" icon to the link
14. Save the file
15. Open the Views/Shared/Components/Photogallery/Default.cshtml file
16. Locate the link to the Details action of the Photos controller
17. Add the "glyphicon-picture" icon to the link
18. Save the file

### Task 4: Browse the styled web application and verify that the pages resize correctly on a mobile device.

1. Start the web application in debugging mode to examine the home page with the new style applied.
2. Browse to All Photos to examine the page with the new style applied.
3. Resize the browser and examine how the layout changes.
4. Display a photo of your choice to examine the new style applied.
5. Resize the browser and examine how the layout changes.
6. Set the browser profile to a mobile phone and examine how the layout changes
7. Stop debugging.

**Results**: After completing this exercise, you will be able to create a Photo Sharing application with a consistent look and feel.