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.
* A consistent look and feel on every page.
* 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 all the 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. Update the views to use the layout.
3. Browse through the web application.

**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

* Update the project to use bootstrap 4
* Use bootstrap to and unify the style of every view 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 project to use bootstrap 4
2. Update the element classes to use the styles.
3. Browse the styled web application.

### Task 1: Update the project to use bootstrap 4

1. Download the npm packages for bootstrap, jquery and popperjs
2. Remove old versions of bootstrap and jquery
3. Copy the new versions of bootstrap and jQuery into your project (usually done by tools like gulp / grunt / webpack and so on)
4. Update the \_Layout to use the new files

### Task 2: Update the element of the views to use the same style.

1. Update the Layout navigation
2. Update the PhotoGallery ViewComponent so that each photo becomes a card. Ensure that a maximum of 3 photos per row are displayed. In the end your code could look like this:
3. Modify the Details ad Delete view by using a card as well.
4. Modify the Create view

### Task 3: 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. Create a photo 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

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