

# (420-PS4-AB) Developing ASP .NET Web Applications with ADO .NET Summer 2018

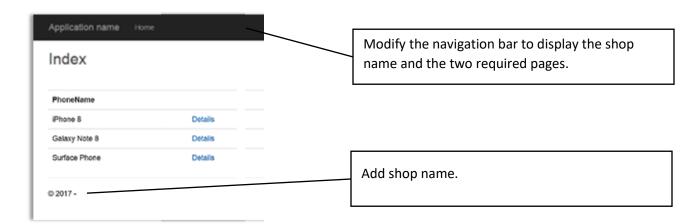
## Assignment #3 & 4 (worth 10%)

Due: Sunday 23 June 2018.

## **PART A**

Write a web application using ASP .NET MVC for the following phone online shop:

The phone shop named "PHONO" would like to have two pages in the navigation bar. The first page "Mobile Devices" that will display in a table all available mobile devices. A "Details" (or specification) link next to each phone will display the phone full features of that phone. Check the snapshot bellow to give you an idea.



Second page is "Brand". It will display all available brands in a table. The displayed names are links that will load a View with available phones from that brand.

Models needed for this project are:

Phone	ID
	PhoneName
	Brand
	DateReleased
	ScreenSize
	PhoneType
Brand	ID
	BrandName
	CountryOfOrigin
PhoneType	ID
	Туре
	OS



The available phone types are only the following:

- 1- Smart, Android
- 2- Smart, iOS
- 3- Bar, NA (not available)
- 4- Flip, NA

You will need to create two controllers: Phone & Brands

Controller	Actions
Phone	Index: to get the list of available phones and send it to the view.
	Details: to get a details of specific phone by id.
Brands	Index: to get the list of available brands.
	AvailablePhones: to get list of phones with the specified brand.

### As for views:

View Folder	Actions
Phone	<b>Index</b> : to display the list of available phones in a table format as shown above.
	<b>Details</b> : to display the details of a phone in a list. (bullet points)
Brands	Index: to display the list of brands in a table. Each entry will be a link to the AvailablePhones.
	AvailablePhones: Displays the brand name at the top with header 2.  And display available phones from that brand in a list.  If there are not phones from that brand display a message stating that there are no phones from this brand.

Use code first and migration process to create the database. Divide your updates to the database and add different migrations.

Finally, modify the home page and remove the content from the default Microsoft project. Add some photos of mobile phones. Look for a bootstrap theme of your choice and change it to have different look.



## **PART B**

#### 1- In the **Mobile Devices**

- a. Check the data type validations in the table below and apply them on the model.
- b. In the index view: Add a link at the top of the table to add a new mobile device
  - i. Create a form to add a new mobile device and add proper validation.
  - ii. In the form, the user should be able to choose the brand name from a dropdown list.
  - iii. Add an action to add the device into the database.
  - iv. Once added, return to the index of mobile devices.
- c. Add the provided links next to each device to include: Details | Edit | Delete
  - i. Add proper actions to edit and delete.
  - ii. To edit or delete a device, the user is required to be logged-in to the application. (authorized user)

#### 2- BONUS: In the Brand

- a. Check the data type validations in the table below and apply them on the model.
- b. In the index view: Add a link at the top of the table to add a new Brand
  - i. Create a form to add a new brand and add proper validation.
  - ii. Add an action to add the new Brand into the database.
  - iii. Once added, return to the index of Brands.
- c. Add the provided links next to each Brand to include: Details | Edit | Delete
  - i. Add proper actions to edit and delete.
  - ii. To edit or delete, the user is required to be logged in to the application. (authorized user)

#### Data type validations:

Phone	ID
	PhoneName (required, 255 char max)
	Brand (required)
	DateReleased
	ScreenSize (not required, range (2-7))
	PhoneType (required)
Brand	ID
	BrandName (required , 255 char max)
	CountryOfOrigin (not required)
PhoneType	ID
	Type (required, 10 char max)
	OS (required, 10 char max)