## **CPSC8720 Internet Pramming Final Exam**

For this project, you will build a multi-page, data driven app – Contact Manager. It looks like the one that's shown below.

## The Home page

$\leftarrow$ $\rightarrow$ C $\square$	× localhost:5001	+	Q	☆
	Co	ontact N	lanager	
Add Contact				
		-	-	
First Name	Last Name	Phone	Email	Category
First Name Delores	Last Name Del Rio	555-987-6543	Email delores@hotmail.com	Friend

The Add and Edit pages (both use the same view)

Add Contact × +	
← → C	/ ♀☆ :
Conta	ct Manager
Add Contact	
First name	Edit Contact     ×       ←     →       C     ■ localhost:5001/contact/edit/2/delores-del-rio/       Q     ☆
Last name	Contact Manager
Phone	Edit Contact
Email	First name Delores
Category	Last name Del Rio
Organization	Phone 555-987-6543
Add Cancel	Email delores@hotmail.com
	Category Friend
	Organization
	Edit Cancel

## **UI/Functional Specifications:**

- When the app starts, it should display a list of contacts and a link to add a contact.
- If the user clicks the first or last name of a contact, the app should display the Edit page for that contact.
- If the user enters invalid data on the Add or Edit page, the app should display validation errors.
- Here are the requirements for valid data:
  - The Firstname, Lastname, Phone, Email, and Category fields are required.
  - The Organization field is optional.
- If the user clicks the Cancel button on the Add page, the app should display the Home page.
- If the user clicks the Cancel button on the Edit page, the app should display the Home page.

## **Technical Specifications:**

- Use Microsoft ASP.NET Core MVC template and C# language to create this application.
- To reduce code duplication, the Add and Edit pages should both use the same view.
- Use Entity Framework (EF) Code First Development or Database First Development to create a new database that maps to a "Contact" entity.
- When displaying, adding, or editing contacts, data are retrieved from or saved into database.