**Objectives**

The purpose of this lab is to help you learn to:

* Create a Domain Model
* Create real and fake repositories
* Write controller methods that use the repositories
* Write Unit tests to test the controller methods

**Part 1: Chapter 7 Exercise**

Do the exercise in Freeman, *Pro ASP.NET Core 2*, chapter 7 through page 185 (stop before the section on Moq).

**Part 2: Community Information Site**

You will be adding capability to the Contact page so that users can send messages to the site administrator. At this point, messages will just be stored in memory, not in a database. Here is what you need to add:

* A domain model with separate classes for Message and User
  + Choose properties for each model class that make sense
  + Each class should have at least two properties
* A Message repository which means you will need:
  + An interface
  + A real repository that can hold messages entered by the user
  + A fake repository that contains hard-coded messages for testing
* A new view that displays all the messages that have been sent.
* Modify the Contact controller to add any new methods needed and to use the Message repository.
* Unit tests for the methods in the Contact controller. The tests should use the fake Message repository

**Submission to Moodle**

Beta Version

Upload the following to the Code Review Forum:

1. A document containing screen-shots of the web app in exercise running in your browser. (please use .docx or .pdf format)
2. A zip file containing your web app’s Visual Studio solution folder.  
   Or, a link to a repository containing your web site solution source code. You can put the link on the same document with the report on your tutorial exercise.
3. A code review of your lab partner’s work. (You do this after your lab partner submits items 1 and 2 and you review them.)

Production Version

* 1. Items 1 and 2 above, but revised as needed.
  2. The code review of your work (the one done by your lab partner) with the second column (“Production”) completed by you.