Lab 4 – Repositories and Unit Testing Controllers

CS296N, Web Development 2: ASP.NET

Objectives

Get practice:

- Designing a domain model
- Using the Repository Pattern
- Testing Controller methods using DI (Dependency Injection)
- Publishing to Azure

Part 1: Textbook Exercise

Do the first part of the project in Freeman Ch. 8, SportsStore: A Real Application, pages 191 to 207.

Part 2: Community Information Web site

New Models

Create a domain model for a forum that you will add to the Community Information web site you already created. First make a UML diagram, and then write the code. The model should hold the following information (you can decide on the exact fields):

Members

- Name
- E-mail address
- Any other information you think is relevant

Messages

- Subject
- Body
- Date
- From
- Topic (like: Events, For sale or rent, Neighborhood watch, etc.)

Repositories

Create a repository for each of your models and add it to your Models folder, or alternatively, create a Repositories folder and put them there (I personally prefer this). For each repository, do the following:

- Create an interface for each repository
- Create a "real" repository
    - This repository should have a few "dummy" members and messages
- Create a Fake repository.

Unit Tests

Add a Test project

- Write tests for at least two Controller methods related to Members
- Write tests for at least two Controller methods related to Messages

Azure

Publish your web site to Azure.

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. A link to your web site running on Azure. (You can put the link on the document containing the screen shots of your exercise).
3. The code review of your work (the one done by your lab partner) with the second column ("Production") completed by you.