BTI420 - Web Programming on Windows

Course Introduction

Course Overview

- Course outline

  https://scs.senecac.on.ca/course/BTI420/
- Academic Honesty Policy

  https://scs.senecac.on.ca/page/academic-honesty-policy
- Course Description:
  - This course addresses the concepts, technical skills, and business knowledge required to develop data-driven web sites which are hosted on the Microsoft Web Platform.
  - The course will focus on server-side ASP.NET programming technologies and the C# language. Students will also work with current and full-featured data access technologies, and interact with local and remote data stores.

Course Overview

- You will learn:
  - ASP.NET
  - The .NET Framework, and the Framework Class Library (FCL)
  - The C# programming language
  - Visual Studio 2015
  - Web browser development tools
  - Internet Information Services (IIS) Express
  - Model-View-Controller (MVC) design pattern
  - Event-driven programming
  - Object-oriented and component-based software development
  - User interface design fundamentals
  - Configuring a personal computer to do BTI420 course work
  - Deployment to a hosted service provider (e.g. Windows Azure)
  - SQL Server, and its Management Studio application
  - Microsoft ADO.NET Entity Framework for data access

Course Overview

- Prerequisite:
  - BTP200.
  - BTI220 and BTI320.
  - BTD210 and BTD310.
- In summary, I am counting on you having some experience and success in the following foundational concepts, skills, and technologies BEFORE starting this course:
  - Object-oriented software development using C++
  - HTML5 programming (JavaScript, the DOM, HTML, and CSS)
  - SQL DDL (data definition language) and DML (data manipulation language)
  - Windows operating system experience, so you can install, configure, and use new software
- In addition to the above list, you need the ability to learn quickly and effectively. You will be expected to learn (through watching, listening, reading, doing, and helping others) a significant amount of material.

Course Overview

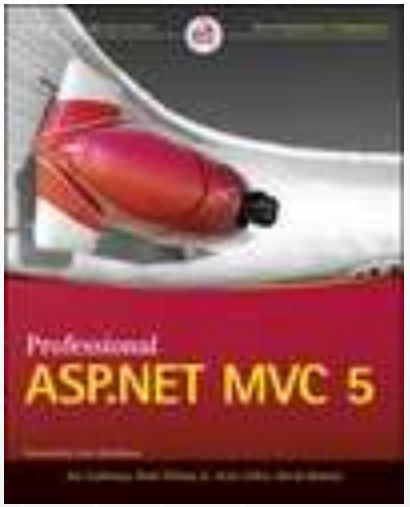
- Textbook

  Professional ASP.NET MVC 5

  by Galloway, Wilson, Allen, Matson

  Published by Wrox, an imprint of Wiley

  ISBN 978-1-118-79475-3



- Reference material:
  - An extensive reading list of online and print material is provided with the detailed weekly outline. The student is expected to use this material extensively during the semester.

Course Overview

- Lecture notes, labs and assignments will on the websites:

  https://scs.senecac.on.ca/~wei.song/

  http://petermcintyre.com/bti420/

- Tests & Quizzes
  - There will be about 10 to 12 tests

- Labs and assignments
  - There will be 9 assignments – 3 small value before study week and 3 large value after study week
- No final exam.
- Grades will be posted on Blackboard

How to use these course notes

- Every class/session will have notes posted on this web site.
- All notes will be linked from the index page:
  http://petermcintyre.com/bti420/notes/ or
  https://scs.senecac.on.ca/~wei.song/bti420/bti420.html
- Study this page's URI to learn the naming convention for a specific notes page.
- Your professor plans to post the notes at least two days before the class/session begins. Before you come into a class, *you are expected* to read / skim / study / contemplate the topics covered in the notes.
- The format and style of the notes pages will vary. At times, they will be terse, with headings and keywords that are intended to guide the student through the topics. At other times, they will be lengthy, with narrative that explains and supports the topics. Expect a full range of formats and styles between these extremes.
- Class/sessions are important. This is *not* a distance education (online) course. The notes do not attempt to capture everything that must be communicated in the process of learning a topic.

Evaluation

9 assignments	50%
10 (up to 12) tests	50%
Final exam	0%
Total	100%

Promotion Policy

To obtain a credit in this subject, a student must:

- Pass the final exam.
- Pass the weighted average of all tests and exam.
- Pass the weighted average of all assessments.
- Successfully complete all of the assignments.
  - Submissions that do not meet specifications may be returned to the student for revision and resubmission.

Expectation

- What do I expect from you?
  - Be present. Be organized/don't fall behind.
  - Be active in class/labs, Ask and answer questions.
  - Write your own notes.
  - Be prepared for lecture classes:
    - Read and study the class notes page
    - Read and study the linked documents
    - Make your own notes, including questions that you have
  - Be prepared for lab periods:
    - Read and study the current assignment
    - Practice its contents, and/or get started on its contents

Expectation

- cont.
  - That being said, you will encounter problems and delays. Please follow my general rule: If you cannot solve the problem within 20 to 30 minutes, then stop and set it aside. Seek help from your professor, or from a classmate who knows the solution to the problem or from google. Do not thrash. Do not attempt to 'wrestle the problem to the ground'. Others will not think any less of you when you ask for help. You're here to learn, so take advantage of the course's resources and delivery to help you learn.
  - Learning strategy:
    - Getting the big picture (concepts, framework, architecture)
    - paying attention to details (coding, syntax, hands-on)
    - Thinking, memorizing and practicing!

Expectation

- In the Wednesday class, I expect you to be an engaged and actively-learning participant. This means:
  - Listening effectively
  - Asking and answering questions
  - Writing notes
  - Doing the in-class exercises and activities
- In the Friday computer-lab-room class, I expect you to be an engaged and actively-learning participant. This means:
  - Being prepared to split your time between new topic learning, and working hands-on with the topic or the current assignment
  - Asking and answering questions
  - Writing notes
  - Working on the current assignment

Getting Started

- Get the required textbook, as shown on the BTI420 Resources page.
- Learn how to use the professor's/course web site. It has general information, and course-specific information.

  https://scs.senecac.on.ca/~wei.song/

  http://petermcintyre.com/bti420/
- Set up your development environment:

  If you want to do BTI420 course work on your own personal computer, get and install Visual Studio 2015. The Microsoft DreamSpark web site enables higher-education students to get and use Microsoft software in their studies. More info is at this link.

  In the DreamSpark Premium WebStore, you are looking for Visual Studio Enterprise 2015 with Update 1. (That's current, as of January 2016.)

Thank You!