General Information

Instructor: Richard C. Fry, PhD, Associate Professor of Computer Science
Instructor Open Office Hours Tuesday, Wednesday, Thursdays 9:30 AM – 11 AM (EH 383)
Preferred Email: rich@richfry.com (direct/fastest) or rfry@weber.edu (forwarded)

LIVE Instruction / Open Labs (TUESDAYs and THURSDAYs 7:30A – 9:20A in TE 104)

Course Description

This course is designed to teach sound concepts in ASP.NET Web Application Development using MVC software design patterns. Students will develop small-scale web applications both individually and in a team environment using Agile and Test-Driven Development techniques. Representative skills mastered in this course will include: ASP.NET programming with C#, RAZOR, Bootstrap, JavaScript, and JQuery, as well as integration of SQL Server databases within the .NET Entity Framework.

Course Objectives & Outcomes

- Learn to design the architecture and implementation of a web application that will meet a set of functional requirements, user interface requirements, and address business models.
- Learn to create MVC Models and write code that implements business logic within Model methods, properties, and events.
- Learn to add Controllers to an MVC Application to manage user interaction, update models, and select and return Views.
- Learn to create Views in an MVC application that display and edit data and interact with Models and Controllers.
- Learn to implement a consistent look and feel, including corporate branding, across an entire MVC web application.
- Learn to use partial page updates and caching to reduce the network bandwidth used by an application and accelerate responses to user requests.
- Learn to describe what a Web API is and why developers might add a Web API to an application.
- Learn to modify the way browser requests are handled by an MVC application.
- Learn to describe how to package and deploy an ASP.NET MVC 5 web application from a development computer to a web server for staging or production.

Course Fees

Course fees for the Computer Science major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Accommodations

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.
Textbook & Required Materials

REQUIRED BOOK: Professional ASP.NET MVC 5
Jon Galloway, Brad Wilson, K. Scott Allen, David Matson

*Note: This book is available in electronic format for FREE, via Safari Books Online with an active Internet Connection FROM CAMPUS (no downloading of content allowed). No login is required if logging on from campus. From off campus, you will need to login through the WSU’s library website to access the Safari materials for free, via proxy.

REQUIRED SOFTWARE – Visual Studio 2015 (available free through the Microsoft Academic Alliance). Also installed on all WSU CS classroom and lab computers (accessible remotely via Remote Desktop).

Discussion Forum

Students are strongly encouraged to use the discussion forum to provide assistance to each other on assignments or any material related to the course. When posting a question, please mark the subject with a #hashtag to facilitate searching. Posting guidance and/or hints on this public class discussion forum is NOT considered a violation of the cheating policy, unless you blatantly post full solutions to an assignment. The discussion forums are for students to help each other outside of class.

Grading Criteria

- 6 – Individual Assignments (60%)
- 1 - Final Group Project (20% - Peer Reviews and Code Commits, 20% Product Testing and Final Deliverables)

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*Minimum passing grade is 71.5%.

Assignment Due Dates

All Assignment due dates are clearly posted several weeks in advance. **The posted due date (normally 11:59PM MST on a SUNDAY – to give me time to grade before class on MONDAY).** All students get ONE FREE late assignment (up to 48 hours only) without penalty. Beyond that, I will not accept any other late work for full credit under any circumstances (even emergencies). Late assignments are my pet peeve and are penalized 10% (1 minute to 12 hours late), 25% (13-24 hours late), 50% (25-48 hours late), 75% (49-72 hours) late, and not accepted after 3 days late.

Cheating and Plagiarism Policy

Although cheating has many forms, I generally consider cheating to be any attempt to claim someone else's work as your own. Any assistance provided and/or received on problem solving or programming assignments without being publically posted on our course discussion forum (so I know about it) is considered cheating...because I always assume you are doing your own original work. **Also, any possession of materials from previous semesters is considered “cheating”**. You are encouraged to assist other students whenever possible or cite internet website resources that provide help, but this help must be transparent, and posted via the discussion forum so everyone gets the same information. If you have any questions about this policy, please ask me.

**WARNING:** CS Department policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor above, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include a detailed description of the student's dishonest conduct.
Calendar (SUBJECT TO CHANGE!! ALWAYS VIEW THE LIVE CALENDAR FOR DETAILS)

PART 1: C#, ASP Web Pages and Visual Studio


• ASP.NET Web Pages Syntax, Layout Pages, Special Files, Forms, Webgrid, and SQL Syntax

Mon 9/5: LABOR DAY - NO CLASS

Wed 9/7: Advanced ASP.NET Webpages (A2 – Due 9/18)

• Reading, Writing and Deleting Cookies, Helpers, Routing

Mon 9/12 and Wed 9/14: Dynamic ASP.NET Webpages (A3 – Due 9/25)

• Insert Data Page, Read Data Page, Edit Data Page, Delete Page

Mon 9/19 and Wed 9/21

• Bootstrap and NuGet Libraries

PART 2: MVC


Mon 10/3 and Wed 10/5: Models and Data Access, Helpers and Data Manipulation (Music Store Demo Part II)

Mon 10/10: NO CLASS

Wed 10/12: Entity Framework (WSU Demo Part I) (A5 – Due 10/23)

Mon 10/17 and Wed 10/19: Sorting, Paging, Search/Filtering, Code First Migrations (WSU Demo Part II) (A6 – Due 11/6)

Mon 10/24 and Wed 10/26: Final Project Intro, Publishing to Azure, More Complex Data Models, (WSU Demo Part III)

Mon 10/31 and Wed 11/2: NO CLASSES Group Project

Mon 11/7 and Wed 11/9: Group Project

Mon 11/14 and Wed 11/16: Group Project

Mon 11/21 (Mid Deliverable / Presentation Due Today)

Wed 11/23: NO CLASS

Mon 11/28 and Wed 11/30: Group Project

Mon 12/5: Group Project

Wed 12/7: Group Project (Final Deliverable/Presentation Due Today)

Last Update: 25 Aug 2016