INFO 530 Systems Development

Term: Fall 2024
Instructor: Dr. Ugo Etudo
Course Meetings: Mondays & Wednesdays 5:30PM – 6:45PM
Classroom: Snead Hall B2125
Office: Snead Hall B4129
Office Hours: M,W 2PM – 3PM (Other times by appointment)

Course Overview

In this course, students are introduced to modern software development practices through a series of lectures and a months-long practicum. Students will form permanent groups and work as a Scrum team on a software development project. Students will follow an agreed upon Scrum methodology, utilize a version control system and produce a functioning, modern full-stack application at the end of the semester.

This course will de-emphasize lectures in favor of resourcefulness. Students will be expected to independently problem solve using every resource available to them. You are *encouraged* to use generative AI tools for your code when needed. However, you must never use code that you cannot explain. As a class, we will learn collaboratively and transparently.

Course Objectives

Upon completion of the course, students are expected to:

1. Have a strong understanding of Scrum and be exposed to the different roles within a Scrum team.
2. Be proficient in the use of Git and GitHub both as a VCS and as a project management tool for Agile teams.
3. Have a working understanding of the technical stack undergirding modern Web-based applications
4. Obtain proficiency in:
   a. Javascript
   b. HTML & CSS
   c. React.js
   d. Express.js
   e. MySQL
5. Have experience managing team dynamics professionally and courteously

Course Materials

There are no required texts. Course materials will be shared on the LMS (Canvas)

Course Schedule

Week Starting	Topics	Notes	Assessments
8/21/2024	Introduction + Skills Survey		Skills Survey is mandatory and must be completed in class
8/26/2024	Introduction to Agile: Scrum		
9/2/2024	Project Brief and Team Assignments	9/2 (No Class)	Present Initial Product Backlog
9/9/2024	Systems Development with Git and GitHub		
9/16/2024	Modern Full Stack Development (HTML & CSS Refresher + Node Setup)		
9/23/2024	Modern Full Stack Development (Express & React; Javascript Supplement))		
9/30/2024	Modern Full Stack Development (database refresher)		Teams demonstrate their practice applications (10/2)
10/7/2024	Modern Full Stack Development (More Express, React & Javascript)		
10/14/2024	Sprint Planning Meeting (Presentation of the Project Brief)		Submit Semester Project Backlog (10/14)
10/21/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		Submit completed sprint backlog #1 (10/21)
10/28/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		
11/4/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		Submit completed sprint backlog #2 (11/6)
11/11/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		
11/18/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		Submit completed sprint backlog #3 (11/20)
11/25/2024	No Class (Fall Break)		
12/2/2024	Weekly Standups; Sprint Retrospective; Sprint Planning		Submit completed sprint backlog #4 (12/4)
12/9/2024	Customer Presentation; Product Demo		Teams demonstrate their semester project and submit peer-reviews

Assessments

There are several planned assessments in this course, and they are outlined below. Please keep in mind that these assessments may change in composition and quantity as the semester unfolds.

Homework

There are 5 planned homework assignments. The first of these assignments is a completed, practice application using the technical principles learned in the first few weeks of class. The rest of the assignments are completed Sprint backlogs, and other Sprint-related documents.

Examinations

There are no examinations in this course. In lieu of exams, teams will present their completed applications at the end of the semester.

Attendance

All students are expected to attend every class unless excused by the instructor for an approved reason prior to class. Attendance and participation are significant components of the class.

Grading

Assignments will be graded and returned between 1 and 2 weeks from *timely* submission. Below is the distribution of grades across assessments.

Assessment	% Weight
Practice Application	15%
Sprint Backlogs (~ 4)	35%
Attendance & Participation	20%
Final Presentation	30%

Important University Notices

Students should visit http://go.vcu.edu/syllabus and thoroughly review all of the listed syllabus statement information. The full university syllabus statement includes information such as safety, registration, the VCU Honor Code, student conduct, withdrawal from courses, and more.