Syllabus – CS 4750 Software Engineering II

Instructor: Ted Cowan
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Office hours @SLCC Redwood, Technology Building, 1st floor, Room 133. Summer office hours: May: Tue, Thu 1-4pm. June: Tue 1-4pm. July and Aug: email/phone. All by appointment only. Call 801 626-7929 and ask for an appointment with Ted Cowan.

E-Mail: tedcowan@weber.edu

Texts: Software Engineering, 9th edition, Sommerville

Location: SLCC Redwood Road Business Building BB312

Website: https://weber.instructure.com/courses/288642

Course Objectives: This course is a continuation of the project work organized and begun in CS 3750 using the same group organization and project objectives defined in CS 3750.

The objective of this course is to give students an opportunity to apply the skills learned in the prerequisite courses to design and prototype an enterprise-class application in a programming language and environment of their choice. This enterprise application will be created to meet the real-world business needs of a community partner, typically a non-profit organization. Your enterprise application will be placed into the open source public domain and made available to the community partner to address the public need for freely available, engineered, well-tested, business-class software. This course is designated as a Community Engaged Learning (CEL) course.

You will work directly with key stakeholders representing the community partner in design, prototyping, testing and user acceptance of your application in an agile development environment, delivering value in each biweekly software delivery. You will meet regularly with your customer for approval of user interface, feature design and functional as well as non-functional system requirements.

As part of your CEL experience, students will submit a weekly reflection journal that summarizes their experience that week. Journals will include a summary of the accomplishments of that week, upcoming milestones, challenges, customer interaction and the student’s feelings about the activities of the week.

At the end of the semester, each student will submit a peer evaluation of each of his or her team members, which the instructor will factor into the final grade for each student.

The software engineering practices emphasized include software modeling, architecture, design, development, testing and deployment.
while including security, configuration management, project management and human interface design. Students will use Project Management methodologies to plan their work, quality and testing methodologies to test their product and deliver a refined, complete and user-accepted application by the end of the semester.

**Students with Disabilities:** 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 on the Weber State Ogden campus. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.

**Allocated Time:** You should anticipate spending two to three hours of study per week for each credit hour of a university course. Computer and programming classes typically require time in the upper range.

**Class Format:** Class will consist of lecture and discussion on topics related to the study guide. Questions and comments during class time are encouraged. It is expected that students will have read the covered chapters prior to the class on the topic. Normally, time will be set aside each week as group time so that groups can meet to complete their assignments and the instructor can help students with specific problems and topics. The schedule is subject to change to meet the needs of the class.

Teams of 3-5 students will complete all project work. Lecture will occur during the first half of the semester with lab time but lab time will be scheduled each week.

**Assignments:** Homework problems are to be submitted for grading on the date specified in the schedule. It is HIGHLY recommended that you complete the assigned homework problems since the project is based off of the material learned within the assigned chapter.

**Grading:**

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<tr>
<td><strong>Journals</strong></td>
<td>10%</td>
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<td><strong>Midterm</strong></td>
<td>20%</td>
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<td><strong>Demos</strong></td>
<td>30%</td>
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<td><strong>Final Delivery</strong></td>
<td>40%</td>
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<td><strong>Total</strong></td>
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Letter Grades:

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\begin{array}{lll}
\text{Total } & \geq 94\% & \quad \text{... A} \\
90\% & \leq \text{Total} < 94\% & \quad \text{... A-} \\
87\% & \leq \text{Total} < 90\% & \quad \text{... B+} \\
84\% & \leq \text{Total} < 87\% & \quad \text{... B} \\
80\% & \leq \text{Total} < 84\% & \quad \text{... B-} \\
77\% & \leq \text{Total} < 80\% & \quad \text{... C+} \\
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\begin{array}{lll}
74\% & \leq \text{Total} < 77\% & \quad \text{... C} \\
70\% & \leq \text{Total} < 74\% & \quad \text{... C-} \\
67\% & \leq \text{Total} < 70\% & \quad \text{... D+} \\
64\% & \leq \text{Total} < 67\% & \quad \text{... D} \\
60\% & \leq \text{Total} < 64\% & \quad \text{... D-} \\
\text{Total} < 60\% & & \quad \text{... E} \\
\end{array}
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Incompletes can only be given in extraordinary circumstances.
<table>
<thead>
<tr>
<th>Week #</th>
<th>Week of</th>
<th>Topic</th>
<th>Chapters/Assignment</th>
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| 1      | Jan 6   | Syllabus and Final Project  
Reorganize Groups (if needed)  
Chapter 8: Software Testing | Revise Team Responsibilities  
Weekly Journal |
| 2      | Jan 13  | Chapter 24: Quality Management | Weekly Journal |
| 3      | Jan 20  | Chapter 25: Configuration Management | Weekly Journal  
Biweekly Status Report 1  
Midterm Review |
| 4      | Jan 27  | Midterm | Weekly Journal |
| 5      | Feb 3   | Source Code Version Control  
Development and Testing | Biweekly Status Report 2  
Weekly Journal |
| 6      | Feb 10  | Development and Testing | Weekly Journal |
| 7      | Feb 17  | Development and Testing | Biweekly Status Report 3  
Weekly Journal |
| 8      | Feb 24  | Development and Testing | Weekly Journal |
| 9      | Mar 3   | Development and Testing | Mid-Semester Demo (To the entire class)  
Weekly Journal |
| 10     | Mar 10  | SPRING BREAK | |
| 11     | Mar 17  | Development and Testing | Weekly Journal |
| 12     | Mar 24  | Development and Testing | Biweekly Status Report 4  
Weekly Journal |
| 13     | Mar 31  | Development and Testing | Weekly Journal |
| 14     | Apr 7   | “Red Zone” Cleanup and Go Live Prep  
Project Go Live | Weekly Journal |
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<tr>
<th></th>
<th>Date</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>15</td>
<td>Apr 14</td>
<td>Development and Testing</td>
<td>Final Project Demo (To the entire class)</td>
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<td>Weekly Journal</td>
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<td>Peer Review</td>
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<td>16</td>
<td>Apr 21</td>
<td>No class meetings this week</td>
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