General Information

Instructor: Richard Fry, PhD, Associate Professor, Department of Computer Science
E-mail: rich@richfry.com

Official Class Time*: Mondays and Wednesdays (5:30 PM - 7:20 PM) Davis 303
Office Hours: Virtual, by appointment
Textbook: None

*Students will not necessarily physically meet at this time/location, but a classroom has been reserved, if needed. Rather, it is up to the student teams to determine their meeting locations and times. Note: Students will be expected to meet a minimum of eight times during the semester, with the instructor (either virtually or in person) during official class times (see calendar for specific dates). During virtual meetings, a high speed internet connection and a headphone with microphone is highly recommended.

Course Description

In this course, we will continue to build upon the overall software engineering prototype presented in CS 3750 (the prerequisite for this course) while focusing on issues of software quality and software correctness, in particular. No matter how quickly or cheaply a piece of software can be developed, if it does not meet the needs for which it was intended, then the time and money spent on it have been wasted. However, achieving correctness of software can be very difficult. Since resources are typically limited, software developers must tailor their software quality efforts to the needs of each specific project. In this course we will focus heavily on Project and Time Management skills as well as N-Tier programming principles, to fully implement the prototypes of the systems designed in CS 3750.

We will use a range of approaches to ensure on-time delivery of a quality software project (started in CS 3750), by examining project and configuration management and quality control through unit testing and peer reviews. You may or may not be working on the same project you started in CS 3750.

There will be several graded progress checks throughout the semester. Additionally, this class has a CBL designator, meaning it is a community based learning class. You are expected to spend at least 10 hours, over the semester, engaging with your client in person. These hours must be recorded and logged at the Community Involvement Center, located in the student union building on the main campus.

Course Delivery

There will be very few formal meetings with the professor. Rather students are expected to continue working with their teams on the project BETA (No later than 3 March 2013) and FINAL DELIVERY (No later than 31 March 2013). The professor will rotate his time and resources to meet with all four teams periodically during the semester. During these meetings, all students are expected to BE ON TIME with all their team members (preferably in the same room and location). On other days, when students are not meeting with the professor, they may work on their own (in or outside of the designated class time). There is no textbook required for this course.

The final project is the key component of the course! Therefore, 100% team participation is expected. NOTE: One of the projects is being delivered to Thailand, in April, as part of our Study Abroad initiative. The instructor will be taking a group of 8 students, from the course, for 11 days, as noted on the course schedule. During this time, other teams are still expected to be working on their projects. If you’re interested in the Study Abroad option, let me know ASAP.
# Evaluation

Your final grade will be based on individual and team assessment. Brief overviews of these assessments are provided below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points / % of Final Grade</th>
<th>Deliverables</th>
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<tbody>
<tr>
<td><strong>Milestone Meeting 1</strong></td>
<td>10 Points (2%)</td>
<td>You will be awarded points for attendance and must participate in the milestone meeting to receive full credit. During this MS meeting, your team will be presenting me a modified charter and project plan describing when and where you will be meeting, as well as your project goals between now and the next MS meeting. We will discuss any goals and/or concerns. <strong>This first time, I will LEAD the discussion, but the team is expected to be prepared with their plan before the meeting.</strong></td>
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<td><strong>Milestone Meetings 2-8</strong></td>
<td>175 Points (35% total - 5% each meeting)</td>
<td>You will be awarded points for attendance and must participate in the milestone meeting to receive full credit. During these meetings I will grade heavily on TEAM PERFORMANCE, ACCOMPLISHMENTS AND OVERALL PROGRESS TOWARDS YOUR GOALS. During these MS meetings, your team will need to specifically show me a list of what has been accomplished since the last MS meeting, and perhaps demonstrate some of the code. If I feel you have wasted your time (and/or not putting forth appropriate effort, your grade will reflect accordingly). We will go over remaining goals, obstacles, individual responsibilities, and objectives for the next MS meeting. You must account individually for ALL your hours (towards the project itself, as well as meetings with the client). <strong>Your team will LEAD the discussion during these MS meetings, so be prepared with an agenda.</strong></td>
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<tr>
<td><strong>Peer Reviews 1-6</strong></td>
<td>120 Points (24% total - 4% each review)</td>
<td>Milestone meeting points (awarded by professor) will be adjusted individually based on these peer reviews (to be turned in just before Milestone meetings 2-8).</td>
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<td><strong>Peer Review 7</strong></td>
<td>40 Points (8%)</td>
<td>The final peer review will encompass the whole project, and will count double.</td>
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| **Recording and submitting Hours** | 55 Points (11%) | This semester you will be recording two kinds of hours:  

1) Official CBL hours whenever you PHYSICALLY meet with the client (train them on-site, present to them, set up or install hardware/software). **Unlike last semester, you MUST REGISTER with the CIC center and record these hours.** You will not turn them in via Canvas, but rather I will get a report from the CIC each month. The only report I really care about is the CUMMULATIVE APRIL REPORT showing total hours submitted by 15 April (tax day). I encourage you to record frequently, and not wait until April 15, so there's a running total. Remember, you are responsible for REGISTERING with the CIC, getting the client to sign your hours, and turning the hours into the CIC for credit. If you do not register with the CIC, your hours will not be reported to me.  

2) Unofficial hours where you will account for what you actually did in between Milestones towards the project itself. These hours will be reported via Canvas, and **submitted before each MS meeting.** I want to know what YOU did to contribute to the project in between MS meetings. Of course, I’ll still get feedback from Peer Reviews, but this is your opportunity to tell me yourself what YOU did. |
**Overall Project – Meeting the Beta Deadline No Later than 3 March 2013 and the Final Deliverable Deadline No Later than 31 March 2013.**

April 1-21 should be used exclusively for maintenance & support.

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<tr>
<th>Points Total</th>
<th>100 Points Total</th>
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| 50 Points - Beta (10%) | Did the team do what they set out to do? Did you PROFESSIONALLY deliver a TESTED product? Was the customer satisfied? Would they have paid for the software? Was it that good? Was there enough training – or did you deliver at the last minute? Your grade will be based on overall success/failures (and my interviews with the client) during these two release periods.

* A 20% hit in this area will affect your overall final grade in the course. You will probably still pass with a “failed project, but most likely not get an “A” very easily). |

**TOTAL 500 Points Possible** - It’s easy to figure your grade at ANY TIME during the course, just divide your current points by possible points (to date).

**Grading Scale**


A Student with less than 360 points will not pass the course

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**Schedule (Subject to change – Please see the LIVE calendar on course website)**

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<thead>
<tr>
<th>Week</th>
<th>Goals</th>
<th>Due by end of week - (Sunday at Midnight)</th>
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<tbody>
<tr>
<td><strong>1: Jan 7-13</strong></td>
<td><strong>Milestone Meeting 1:</strong> Centracor (Wednesday, Jan 9 at 5:30 PM) – 7:30 AM Thursday the 10th <strong>my</strong> time.</td>
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<td><strong>Milestone Meeting 1:</strong> PARC (Wednesday, Jan 9 at 6 PM) – 8 AM Thursday the 10th <strong>my</strong> time.</td>
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<td><strong>Milestone Meeting 1:</strong> CCS (Wednesday, Jan 9 at 6:30 PM) – 8:30 AM Thursday the 10th <strong>my</strong> time.</td>
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<td><strong>Milestone Meeting 1:</strong> Thailand (Wednesday, Jan 9 at 7 PM) – 9 AM Thursday the 10th <strong>my</strong> time.</td>
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<td>*Read description of MS 1 above, and be prepared prior to the meeting. A TeamViewer meeting <strong>ID</strong> will be posted prior to the meeting.</td>
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<td><strong>2: Jan 14-20</strong></td>
<td><strong>Milestone Meeting 2:</strong> PARC (Wednesday, Jan 16 at 5:30 PM) – 7:30 AM Thursday the 17th <strong>my</strong> time.</td>
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<td><strong>Milestone Meeting 2:</strong> Thailand (Wednesday, Jan 16 at 6:30 PM) – 8:30 AM Thursday the 17th <strong>my</strong> time.</td>
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<td>*Prior to this meeting, students are expected to have turned in their Peer Reviews (from the beginning of the semester to MS2), as well as their individual hours they have logged towards the project and/or with the client.</td>
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<td>Date</td>
<td>Location and Timezones</td>
<td>Milestone Meetings</td>
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<td>3: Jan 21-27</td>
<td>Dr. Fry is in Chiang Mai, Thailand (+14 hours ahead)</td>
<td><strong>Milestone Meeting 2:</strong> CSS (Wednesday, Jan 23 at 5:30 PM) – 7:30 AM Thursday the 24th my time.&lt;br&gt;<strong>Milestone Meeting 2:</strong> Centracor (Wednesday, Jan 23 at 6:30 PM) – 8:30 AM Thursday the 24th my time.&lt;br&gt;*Prior to this meeting, students are expected to have turned in their Peer Reviews (from the beginning of the semester to MS2), as well as their individual hours they have logged towards the project and/or with the client.</td>
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<td>4: Jan 28-Feb 3</td>
<td>Dr. Fry is in Chiang Mai, Thailand (+14 hours ahead)</td>
<td><strong>Milestone Meeting 3:</strong> PARC (Wednesday, Jan 30 at 5:30 PM) – 7:30 AM Thursday the 31st my time.&lt;br&gt;<strong>Milestone Meeting 3:</strong> Thailand (Wednesday, Jan 30 at 6:30 PM) – 8:30 AM Thursday the 31st my time.&lt;br&gt;*Prior to this meeting, students are expected to have turned in their Peer Reviews (between MS 2 and 3), as well as their individual hours they have logged towards the project and/or with the client.</td>
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<td>5: Feb 4-10</td>
<td>Dr. Fry is in Bali, Indonesia (+15 hours ahead)</td>
<td><strong>Milestone Meeting 3:</strong> CSS (Monday, Feb 4 at 5:30 PM) – 8:30 AM Tuesday the 5th my time.&lt;br&gt;<strong>Milestone Meeting 3:</strong> Centracor (Monday, Feb 4 at 6:30 PM) – 9:30 AM Tuesday the 5th my time.&lt;br&gt;*Prior to this meeting, students are expected to have turned in their Peer Reviews (between MS 2 and 3), as well as their individual hours they have logged towards the project and/or with the client.</td>
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<td>6: Feb 11-17</td>
<td>Dr. Fry is in Bali, Indonesia (+15 hours ahead) and Phuket, Thailand (+14 hours) this week</td>
<td><strong>Milestone Meeting 4:</strong> PARC (Monday, Feb 11 at 5:30 PM) – 8:30 AM Tuesday the 12th my time.&lt;br&gt;<strong>Milestone Meeting 4:</strong> Thailand (Monday, Feb 11 at 6:30 PM) – 9:30 AM Tuesday the 12th my time.&lt;br&gt;*Prior to this meeting, students are expected to have turned in their Peer Reviews (between MS 3 and 4), as well as their individual hours they have logged towards the project and/or with the client.</td>
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<td>7: Feb 18-24</td>
<td>Phuket, Thailand</td>
<td>+14 hours</td>
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<td>Gold Coast Australia</td>
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<td>students are expected</td>
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<td>8: Feb 25-Mar 3</td>
<td>Sydney, Australia</td>
<td>+17 hours</td>
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<td><strong>YOUR TEAM SHOULD BE</strong></td>
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<td><strong>RELEASING BETA THIS WEEK!</strong></td>
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<td><strong>SPRING BREAK MARCH 4-10</strong></td>
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<td><strong>SPRING BREAK! TAKE A BREAK!!</strong></td>
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<td>9: March 11-17</td>
<td>Rotorua, New Zealand</td>
<td>+19 hours ahead</td>
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<td>10: March 18-24</td>
<td>Paris, France</td>
<td>+6 hours ahead</td>
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<td>11: March 25-31</td>
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<td>12: April 1-7</td>
<td>Caribbean cruise</td>
<td>limited internet</td>
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| 13: April 8-14 | **Milestone Meeting 7:** Thailand (Monday, April 8 at 5:30 PM) – DAVIS CENTER IN PERSON  

LAST MINUTE PREPARATION FOR STUDY ABROAD TRIP (LEAVING 11 APRIL).  
YOU SHOULD HAVE DELIVERED THE FINAL COPY OF THE SOFTWARE BY NOW, AND SHOULD BE PROVIDING MAINTENANCE AND SUPPORT (with the exception of Thailand). MINOR REVISIONS TO SOFTWARE ARE OKAY.  
Dr. Fry is back home in Utah (April 8-10 only) |
| 14: April 15-21 | **Milestone Meeting 8:** Thailand with Client this week (Students back in Utah will have to meet with us on-line at a time TBD)  

YOU SHOULD HAVE DELIVERED THE FINAL COPY OF THE SOFTWARE BY NOW, AND SHOULD BE PROVIDING MAINTENANCE AND SUPPORT (Thailand Study Abroad doing it this week).  
NO MORE REVISIONS – UNLESS A WORK STOPPAGE. SPEND THIS WEEK WORKING UP A “HAND OVER” PLAN FOR FUTURE STUDENTS.  
Dr. Fry is in Chiang Mai and Bangkok, Thailand (+13 hours ahead) this week. STUDY ABROAD PROGRAM WITH STUDENTS. |
| **FINAL’S WEEK: April 22-24** | **Milestone Meeting 8:** PARC with Client this week (M-W)  
Milestone Meeting 8: CSS with Client this week (M-W)  
Milestone Meeting 8: Centracor with Client this week (M-W)  
Dr. Fry is back home for the summer.  

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