Contact Information

Instructor: Jesse Hartloff
Email: hartloff@buffalo.edu
Office: Davis 344
Office Hours:
  Tuesday 2-3
  Thursday 2-3

Lectures

MWF 10:00 - 10:50am, Talbert 107
MWF 2:00 - 2:50pm, Hoch 114

Course Description

This course will help bridge the gap between academia and industry through the experience of a semester long group software project. Students will learn a variety of software engineering concepts and realities while functioning as a software development team. Students will also learn career oriented topics such as resume writing, the hiring process, and the importance of continual career development through self-learning.

Catalog Description:

References

The following resources are recommended for this course:

- Scrum: The Art of Doing Twice the Work in Half the Time
  - By: Jeff Sutherland
  - Audiobook: [http://www.audible.com/pd/Business/Scrum-Audiobook/B00NJ3WS9G]
  - A book about scrum written by its creator
The Internet

– By: Everyone

Grading

Grades will be determined by a simple point system.

• Project: Group assessment (7 points)
• Project: Individual assessment (3 points)
• Career advancement (2 points)

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>A</td>
</tr>
<tr>
<td>11</td>
<td>A-</td>
</tr>
<tr>
<td>10</td>
<td>B+</td>
</tr>
<tr>
<td>9</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>B-</td>
</tr>
<tr>
<td>7</td>
<td>C+</td>
</tr>
<tr>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>C-</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>0-3</td>
<td>F</td>
</tr>
</tbody>
</table>

Grading notes

• All assignments will be submitted electronically.
• No late submissions will be accepted. If a submission is late, it will be assigned a score of 0.
• Each assignment will receive a binary score. For borderline submissions where both a 0 or 1 could be justified, you may be asked to do some followup work in order to earn a 1.
• I have the final say in the scoring for this class. Due to the loose structure of this course, there are bound to be many judgment calls when it comes to grading. I will attempt to make grading simple and transparent to avoid potential surprises, but in the end these calls will be based on my judgment.
• If you and your team complete all the assignments on time and with honest effort, you will likely earn an A in this course.

Project: Group assessment

The course project will consist of 3 submissions with increasing functionality. Submissions will consist of YouTube videos that show a demo of a working version of your software. The projects will vary greatly since each group has full freedom to choose their project, but as a guideline the first submission is a prototype, the second has some functionality, and the third is a finished product. Each group is also required to give a presentation to the class to display their software.
All group submissions must be original work produced by your group. You are allowed, and encouraged, to utilize publicly available code for your project, but if there is no major contribution of original code written by your group then no points will be awarded for the submission. These decisions will be made at my discretion.

Groups will be graded as follows. Each bullet is worth 1 point.

- Submission 1 is uploaded to YouTube on time and shows something related to the project.
- Submission 1 gives a meaningful idea of what the final product might look like.
- Submission 2 is uploaded to YouTube on time and shows something about the project that is different from submission 1.
- Submission 2 has some meaningful functionality related to what was pitched.
- Submission 3 is uploaded to YouTube on time and shows something different than the prior two submissions.
- Submission 3 provides an adequate amount of functionality based on the project description. If the project is sufficiently ambitious, this point can be awarded without achieving the full functionality proposed.
- The group delivered a presentation that gave an accurate display of their project, preferably through a live demo of the resulting software.

In certain cases, it is possible for members of the same group to receive different scores in this category. If a member of your group is not contributing, you can come to me with your concern and I will decide how to proceed after weighing all the factors. These decisions will not be made lightly and your goal should be to succeed as a group.

**Project: Individual assessment**

*Writing software can be frustrating. Share your stories with us.*

The individual project assessment will consist of 2 separate “snag submissions”. These submissions will be short writeups (< 1 page) describing a specific snag that was encountered while working on the project that caused problems and was/is difficult to debug or solve. The writups must describe how the snag affected progress that is specific to your individual effort within the group, and not just the group as a whole.

Each bullet is worth 1 point.

- Snag submission 1 was submitted on time and described a snag specific to a task assigned to you. This will be due shortly after project submission 1.
- Snag submission 2 has the same requirements as snag 1, but must describe a different issue. This will be due shortly after project submission 2.
- You must present one of your snag submissions to the class. A conversational presentation will suffice. Slides or demos are not required, but are welcome if it helps show the issue.
Career advancement

Career assignments will be due early in the semester and will be subject to multiple revisions. For students who want to be employed after graduating, it is important that these submissions are of high quality and no points will be awarded until this is the case.

Each bullet is worth 1 point.

- Write a quality resume.
- Create a LinkedIn account and populate it sufficiently.

Final exam

There will be no exams in this course. The final exam time will be used for presentations.

Topics

Lecture topics will include, but are not limited to:

- Version Control
- Scrum
- Design Patterns
- Code Testing
- Project Management
- Resume Writing
- Interviewing
- Law and Ethics

A more detailed schedule will be available on the class webpage.

Integrity

You can, and should, use external libraries and code that’s publicly available. There is a thriving software community that is eager to share code and help others. Just give credit where credit is due. If your group submits code that no one in the group wrote and you present it as your own work, everyone in the group will earn an F in this course.

Behavior that is unacceptable includes, but is not limited to:

- Using large portions of publicly available code verbatim without a reference.
- Having someone outside the group write code specifically for the project.
- Violating the licensing agreement of publicly available code.

In this course, you are constructing software that is available to the public. Keep this in mind if you are considering making a decision of questionable integrity.
University/Department Policies and Services

Counseling: http://www.student-affairs.buffalo.edu/shs/ccenter/
Disabilities: http://www.student-affairs.buffalo.edu/ods/
Grading: http://undergrad-catalog.buffalo.edu/policies/grading/explanation.shtml
Academic Integrity: http://www.cse.buffalo.edu/undergrad/policy_academic.php