

COMPSCI 2212B Winter 2017 Plan

| Week           | Wed Lecture  | Friday Lecture  | Project Stage   | Notes   |
|----------------|--|---|---|---|
| Jan 30 - Feb 3 | <ul style="list-style-type: none"> <li>Software Design (Part 2)</li> </ul>                                   | <ul style="list-style-type: none"> <li>Software Design (Part 2, continued)</li> <li>UML Diagrams</li> <li>Implementation of Data Model in Grails</li> </ul> | <ul style="list-style-type: none"> <li>Initial project design. Focus on identifying classes, required web resources (APIs, data). Play around with Groovy and Grails, or your chosen framework. Try to break everything and learn how to resolve issues.</li> </ul>   | <ul style="list-style-type: none"> <li>Marking Scheme to Students for Stage 1</li> <li><i>OWL Quiz: Class Relationships</i></li> </ul>  |
| Feb 6 - 10     | <ul style="list-style-type: none"> <li><i>Tutorial: Git and GitHub</i></li> </ul>                            | <ul style="list-style-type: none"> <li>Databases Overview</li> <li>Data Querying</li> <li>Data Persistence in Grails</li> </ul>                             | <ul style="list-style-type: none"> <li><i>Stage 1 Due - Friday Feb 10th</i></li> <li>Establish repository on GitHub. Make sure team members understand how to branch and merge.</li> <li>Set goals and milestones according to features. Identify dependencies.</li> </ul>  | <ul style="list-style-type: none"> <li>By the end of this week, team members should have a clear understanding of the project and their individual roles on the team. Your project's core framework should be chosen by this point (e.g. Grails, Java-only, etc.)</li> <li>Stage 1 Peer Evaluation will be Posted</li> <li><i>OWL Quiz: Data Querying</i></li> </ul>                                  |
| Feb 13 - 17    | <ul style="list-style-type: none"> <li>User Interface Design</li> </ul>                                      | <ul style="list-style-type: none"> <li><i>Tutorial: React UI</i></li> <li><i>Tutorial: Java/Swing UI</i></li> </ul>   | <ul style="list-style-type: none"> <li>Implement your data model. Check that it reflects your UML design.</li> <li>Implement classes that communicate with APIs.</li> <li>With TA, identify 1/3 of user stories for inclusion in your prototype (Stage 2). Decide on UI framework (e.g. React, HTML, Java/Swing)</li> </ul> | <ul style="list-style-type: none"> <li>TAs will help you identify appropriate weights for user stories. 1/3 will be required for Stage 2, the rest due with Stage 3. Your project's UI framework should be set. If you are changing frameworks (e.g. from React to Swing) you should decide as early as possible.</li> </ul>  |
| Feb 20 - 24    | -  | -   | <ul style="list-style-type: none"> <li>Implement user stories. Implement UI components.</li> <li>Establish communication between UI and backend.</li> </ul>   | Reading Week  |
| Feb 27 - Mar 3 | <ul style="list-style-type: none"> <li><i>Tutorial: Twitter APIs, Security and Authentication</i></li> </ul> | <ul style="list-style-type: none"> <li>Entrepreneurship with Ian Hasse</li> <li>Software Pitching</li> <li>Tutorial Continued</li> </ul>                    | <ul style="list-style-type: none"> <li><i>Stage 2 Due - Friday March 3rd</i></li> <li>Continue project development. Integrate security and authentication, tackle</li> </ul>  | <ul style="list-style-type: none"> <li>You can still propose new or modified features up to Stage 2. Include these with your prototype submission.</li> <li>Prototypes must be functional and testable, to a degree. If your project requires user data, you should create it. (e.g. sample user profiles)</li> <li>Stage 2 Peer Evaluation will be Posted</li> </ul>                                 |
| Mar 6 - 10     | <ul style="list-style-type: none"> <li>Managing Software Process (Part 1)</li> </ul>                         | <ul style="list-style-type: none"> <li>Managing Software Process (Part 2)</li> </ul>  | <ul style="list-style-type: none"> <li>Project Development</li> </ul>   | <ul style="list-style-type: none"> <li>During your TA meetings, this week, you will discuss the final specification and your plan to make it work. The final specification will define EXACTLY what features will be graded. Note that any additional features you implement that are not part of the final specification WILL NOT BE GRADED.</li> <li><i>OWL Quiz: Software Processes</i></li> </ul> |

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|-------------|---|--|--|---|
| Mar 13 - 17 | <ul style="list-style-type: none"> <li>• Testing (Part 1)</li> </ul>  | <ul style="list-style-type: none"> <li>• Testing (Part 2)</li> </ul>   | <ul style="list-style-type: none"> <li>• Project Development</li> </ul>  | <ul style="list-style-type: none"> <li>• <i>OWL Quiz: Software Testing</i></li> </ul>   |
| Mar 20 - 24 | <ul style="list-style-type: none"> <li>• Testing (Part 3)</li> <li>• Automated Testing in Grails</li> </ul> | <ul style="list-style-type: none"> <li>• Open Topic (<i>Introduction to Machine Learning</i>)</li> </ul>             | <ul style="list-style-type: none"> <li>• <i>Stage 3 Due - Friday March 24th</i></li> <li>• Project code is due.</li> </ul>                             | <ul style="list-style-type: none"> <li>• Stage 3 is your final product. Focus on stability.</li> <li>• Stage 3 Peer Evaluation will be Posted</li> </ul>      |
| Mar 27 - 31 | <ul style="list-style-type: none"> <li>• Open Topic (<i>Software Engineering Interviews</i>)</li> </ul>     | <ul style="list-style-type: none"> <li>• Open Topic (<i>Introduction to Network Security, Encryption</i>)</li> </ul> | <ul style="list-style-type: none"> <li>• <i>Acceptance Testing</i></li> <li>• Code from Stage 3 <i>must</i> be used for acceptance testing.</li> </ul> | <ul style="list-style-type: none"> <li>• During this week, each team will subject their project to acceptance testing per the final specification.</li> </ul> |
| Apr 3 - 7   | Review or Open Topic  | No Lecture or Review   | <ul style="list-style-type: none"> <li>• <i>Stage 4 Due - Friday April 7th</i></li> <li>• Documentation, presentation video.</li> </ul>                | <ul style="list-style-type: none"> <li>• Stage 4 Peer Evaluation will be Posted</li> </ul>  |

Additionally:

- We will have only 4 tutorials (graded) and so they are now each worth 2.5% instead of 2%.
- Everything listed here is tentative and subject to change, though I will try to adhere to this as best I can.
- Open Topics are just suggestions. If there is a full topic you would like a lecture on, please let me know and I will try to work it in.
- Depending on scheduling, we may not have lectures during March 27th to March 31st due to presentations and acceptance testing. We will have at least one lecture in the last week of the semester for exam review.
- Extra tutorials will be posted on the course website.
- Links to helpful online resources will be posted on the course website.
- Throughout the course, I will add additional features to my example Grails project(s) on GitHub. You are free to use this code however you like and ask questions.