

Conclusion

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CPSC:480

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Pressman Ch 30

Agenda

- Return quiz 10 and practice final
- Finish Lecture 25-Skills (starting at SWE representation in employee groups),
- Lecture 28b-Final Review, incl examinable parts of Lecture 26-Python
- Review practice final models and code
- Lecture 28a-Conclusion (this deck)
- Post-Class Survey (due on Brightspace tomorrow)

Notes

- Final Wednesday, Dec 7, 5:15-7:15 PM, CAS 134 (regular classroom)
 - One page of notes **single sided** allowed. You will turn this in with the exam.
 - Comparable to the practice final exam in length and composition (~75% content since midterm).
 - All lecture and assignment content is examinable except as listed in Lect. 28b.
 - Scenario for later sections to be posted ahead of time
- Extra review/study/office hr Monday, Dec 5, 5:15, CAS 230 (my office)
- Project 4 all artifacts due Friday, extra credit for early submission.
- Quiz 11 was the presentation evaluations, 12 will be the final class survey due tomorrow on Brightspace, and 13 will be project 4 team survey, due Friday on Brightspace, all graded only for completion.

Software Engineering Discipline

- Software engineering can be a fulfilling and lucrative professional career; most software engineers make six figures within 5 years!
- Software has a huge (and growing) impact on modern society, and even an average engineer can still affect billions of people.
- It is important to follow an engineering process when building software products, to facilitate project success at reasonable cost.
- The skills required go well beyond mastery of any set number of programming languages. In fact, knowing any particular language is *not an essential skill* beyond entry level.
- What matters most is ability to understand & apply concepts of object-oriented programming, program design and architecture, code quality, and the software development lifecycle, regardless of language.

Personal Recommendations

- Maintain your GitHub and LinkedIn presence throughout your career.
- Whenever you solve a problem, document the solution.
- Automate everything you can, and share your automated solutions.
- Keep learning elements of good coding style through code reviews, articles, and experience. Investing in this early pays off.
- Commit to memory the jargon for the discipline, including all the vocabulary covered in class, so that you can communicate effectively.
- Explore DevOps and cloud computing, IoT, data science/AI/ML, and security (especially cryptography). These are all essential topics that will have a major role in the coming decade.

Final Remarks

- In this class, we discussed and practiced many activities that are essential as software engineers, and it's my hope that you'll be able to apply them toward a successful career in software engineering
- Everyone should feel free to use me as a reference for job applications; I can find something good to say about everyone. Email me at jd.kilgallin@keyfactor.com or jd.kilgallin@gmail.com.
- Thank you all for your active participation in this class! I've enjoyed the teaching experience a lot.
- Thank you all for your patience with a first-time curriculum. Final grades will be curved by 1% to compensate for any issues with assignment scope/clarity. In effect, grade cutoffs will be lowered 1%.

Feedback on the Class

- Please fill out the surveys online and submit on Brightspace by tomorrow.
- Please also complete the university evaluation for the class.
- I may teach the class again, so any feedback is much appreciated.
- My thoughts are to change my approach on:
 - Exercise 1 with GitHub setup
 - Connecting architecture, complexity, and refactoring lecture to other material
 - Managing team project requirements prioritization
 - Managing expectations for final software capabilities on team projects
 - Team project timeline scheduling (move everything 1 week earlier)
 - Team project build processes (maybe pre-defined projects with starter code?)
 - Software testing requirements in team projects (starter code again?)
- In the future, there will also be pre-written materials and assessment questions, and all the experience from this class. Thank you all again!