

CSE 403 Software Engineering

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Valentin Razmov
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Background question

- Describe in a sentence or two your current understanding of what software engineering is.
- Write your answer on an index card, with your name on the card

Introductions

- Richard Anderson
 - Instructor
 - In charge of operational details of the course
- David Notkin
 - Instructor
- Valentin Razmov
 - Teaching assistant

Richard Anderson

- Professor Computer Science and Engineering
- Joined the department in 1986
- Research Focus
 - Educational Technology
 - Pen based computing
 - Algorithms
- Industrial Experience
 - Microsoft Research – Sabbatical, 2001 – 2002
 - Design Intelligence – Consultant, 1998 – 1999
 - Control-C Software, 1981

David Notkin

- Professor (and Chair), Computer Science & Engineering
- Joined UW in 1984, created CSE403 (and CSE503)
- Research interests
 - Software engineering, especially software evolution
 - Former students at industrial labs and at universities including MIT, Virginia, UCSD, UBC, ...
- Leadership positions in software engineering
 - Chair of ACM SIGSOFT
 - Associate editor, *ACM Transactions on Software Engineering and Methodology*, *IEEE Transactions on Software Engineering*, *Journal of Programming Languages*
 - Program chair/co-chair, 17th International Conference on Software Engineering, 1st ACM/SIGSOFT Symposium on the Foundations of Software Engineering

Valentin Razmov

- Ph.D. student, Computer Science & Engineering
 - M.Sc. (from UW) in 2001
- Course-related Experience
 - 5th quarter TAing CSE403
 - Will teach CSE 403 this summer
 - Authored 4 conference papers on education-related experiences from CSE403
- Career Interests
 - Teaching; Project Management
- Research Interests
 - Computer Security
 - Methods for Effective Teaching and Learning

Project

- It's difficult to appreciate software engineering issues without working on a large project
- Issues only become real on larger projects

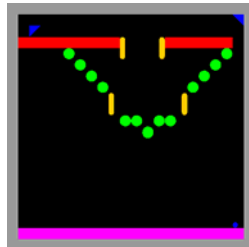
However

- 10 weeks is too short
- There will be a natural tendency to over emphasize development
- Teams will be homogenous

- But that won't stop us

Course Project

- Gizmo Ball
 - Pinball Game
 - Course Project from MIT
- Team Project
 - Groups of size 6-8
 - Java or C# (group decides)



Team selection

- Fill out background survey
- Survey will be used only for assignment of teams
 - It will *not* be used for assignment of roles in team
- Team assignments will be announced Wednesday
- Teams should appoint a Program Manager, but will otherwise be self organizing

Evaluation

- Project grade will have a large impact on course grade
- All artifacts will be considered in the evaluation
- Quality matters

Teams

- Independent and non-competing
- Think of other teams as working for other organizations
- Code and document sharing between teams is not permitted

Milestones (Subject to change)

- Preliminary Design, April 15
- Preliminary Release, May 6
- Test Plan, May 20
- Design Critique, June 3
- Final Release, June 3

Course goal

- To gain an understanding that *developing a software product is not merely a matter of programming*

If it's not merely programming

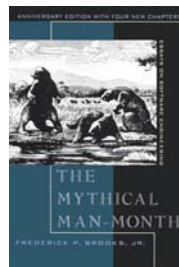
- What is it?

Reading

- Assigned text
 - The Mythical Man Month, Frederick Brooks
- Text NOT available in the bookstore
 - Find a copy from another bookstore, or online
- Supplementary papers
- Strictly Optional
 - Code Complete, Steve McConnell

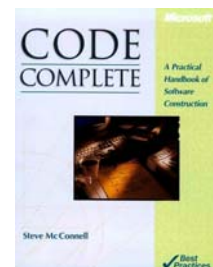
The Mythical Man-Month

- Expresses many key ideas of large scale software development
- Written in 1975, based on IBM OS 360 Project (1965)
- Read past ancient technology
 - Microfiche
 - Renting memory for \$12 per KiloByte-Month



Code Complete (Optional)

- Overview of Software Construction
- Practical developer oriented advice





Reading assignment

- Friday, April 1
 - M M-M Chapters 1-3
- A short writing assignment will be based on this reading



Administration

- It's on the web . . .
- Course mailing list – cse403@cs
- Instructor/TA mailing addresses
 - anderson@cs.washington.edu
 - notkin@cs.washington.edu
 - valentin@cs.washington.edu