CS485/540 Software Engineering
Project Details and Team Roles

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Main Project = 50pts = 50% of grade
  - Scrum participation = 20pts (1 pt each)
  - Presentation of project role = 10 pts
  - Acceptance report (including documentation) = 10 pts

Product Documentation must include:
  - Development “cost” (logs of time spent)
  - Deployment instructions
  - Known issues (bugs)

Work as a team
  - Figure out how to make best use of each person’s time
  - Poor performance by one affects all members
  - Great performance by one improves all members
  - More time ≠ higher grade
Agile Process for Class Project

- Team must be able to adapt & streamline tasks
- Fluid planning at all phases
- Focus only on the essential work products
- Keep design and development lean
- Provide incremental deliveries of working components
- Key elements of an agile team are self-organization and self-direction

Still, some recommendations follow...
Steps for Teams to Take

1. Elect overall Project Lead
2. Assign Lead for each presentation
3. Assign Lead for each deliverable
4. Agree on meeting & work schedules
   - Submit that schedule to Instructor
   - Assign an “Iteration Board Master”
5. Set up initial project meeting with Project Manager
   - Refine user stories
   - Be sure to understand expectations, requirements
6. Configure the working/development environment
   - Decide who will code what parts of the project
   - Decide whether pair programming is useful for this or not
User Stories & Developer Points

- **User Stories**
  - Defined by the “user”—that is, the project manager
  - User stories describe how the product will be used in very specific ways
  - Analogous to functional requirements
  - Act as guidelines on how to plan for testing the product

- **Developer Points**
  - Created from the user stories
  - Should be discrete, codable, testable elements
  - Usually one programmer, but can be pair--programming
  - Can be used to collect “metrics”: how many points per week can a developer complete?
## Project Team and Roles

1. **Project manager:** Cengiz
2. **Software architect:** Valentin
3. **User interface design:** Man Wang/Chi Zhou
4. **Data and database modeler:** Valentin
5. **Lead developer:** Stefan
6. **Lead documentation:** Stefan
7. **Lead testing:** Man Wang
**Fact 5**

*There is no “magic bullet.” Tools & methods are over-hyped: Most only improve productivity/quality by 5 to 35%, and the time-to-improvement is long.*

**Discussion**

- Studies over the past 30 years show benefits are small, incremental
- Tendency to expect that because hardware can be made 10x, 100x better, that some cool software tool will do the same for programs
- Process and experience are better predictors of success than which tool or methodology is used

From Robert Glass, “Facts & Fallacies of Software Engineering”