Software Engineering

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Software Process

- This time I was prepared to take notes
  - Last time I just waited for him to tell us to go to our groups and it never happened

Software Engineering

- SWE is a systematic approach for development of industrial strength software
- Gotta deal with quality and productivity (Q&P)
  - This is basically output and cost
  - We can be very productive if we lower the quality or we can be very quality oriented and not very productive
  - Industry standard is like 5-10 lines of code every hour
- The core of SWE is the process and how we manage all of the processes that are involved in software development

Software Process

- Process is distinct from pdocuts
  - products are outcomes of process execution
- SWE focuses on process
  - proper processes will help with completing objectives that are high in quality and productivity
- The software process breaks down into the product engineering process and the process management process
  - The product engineering process breaks into the:
    - Software configuration management process Least investigative part, ties back to multiversion aspect. If you have to have the same functionality across different OS's, shit gets harder.
    - Project management process
      - How are we going to manage our projects? Will talk about this later
    - Development process (this will be the most familiar to us from classes)
- This whole class is really just about processes
- We'll deal with two major processes;
  - development
  - project management
    - the weakest part in software engineering: haven't found the best/surest way to control the development process
    - what goes into controlling the development process?
      - daily/weekly updates

ETVX Specification

- This is an approach to specify a step
- E: Entry criteria
  - what conditions must be satsified for initiation

  - if it calls for a tangible item, it's gotta be there
  - an intangible item (like a condition) means that the team and the client gotta be there to witness it
- T: Task
  - what is to be done
- V: Verification
  - the checks done on the output
- X: eXit criteria
  - was everything satisfactory? missed this part