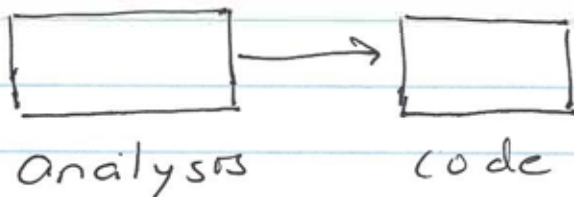
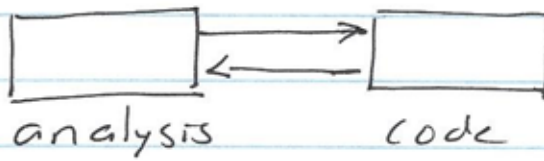


reorganized syllabus a bit, maybe more changes

even SW process includes at least 2 steps

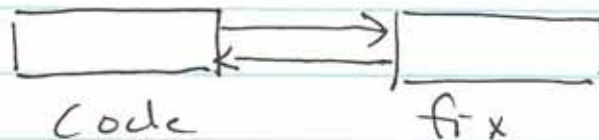


fine for personal use, assuming you get it right the 1st time - but you won't



so iterate

OR



these steps are clearly mandatory

but developing SW for delivery, even to internal customers, requires more steps

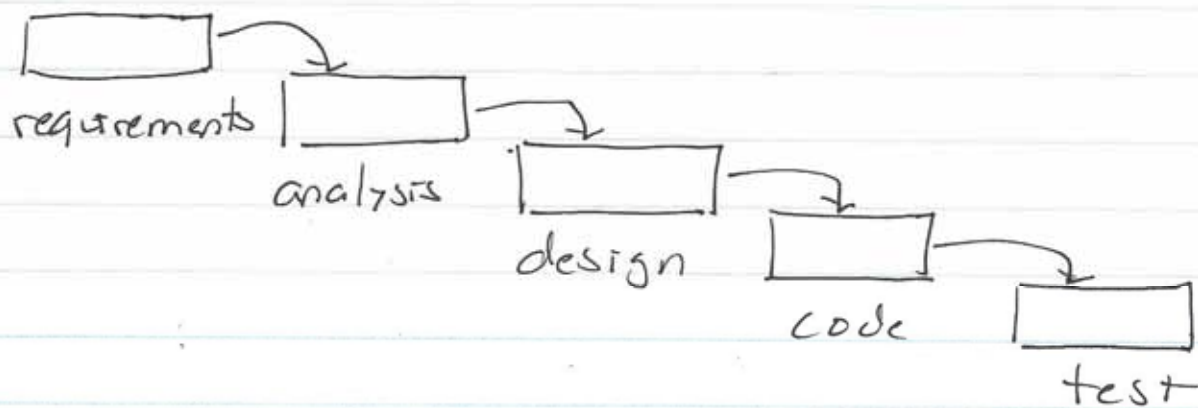
Wm Royce studied current practice in 1960s, and found in practice a more elaborate series of steps

his emphasis on analysis stems from aerospace industry

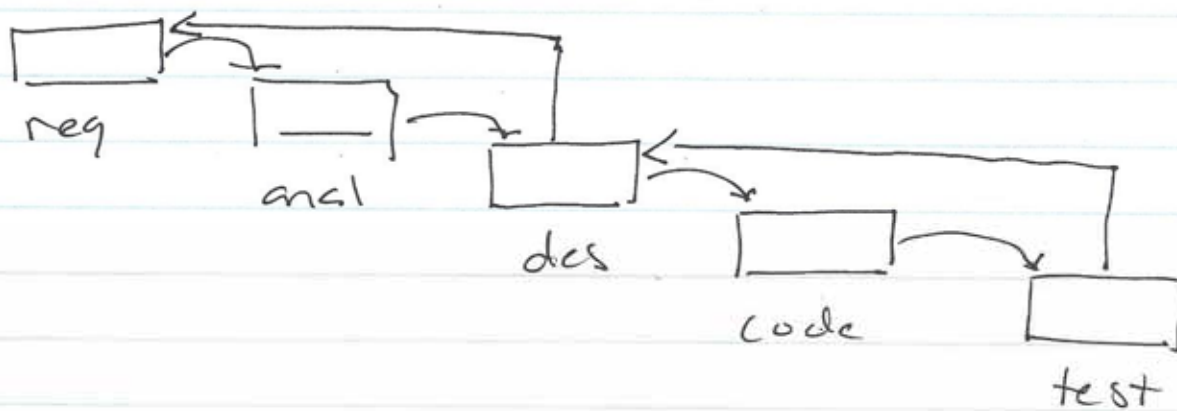
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ideal "waterfall" process



real-world backtracking - may mean 100% overrun in schedule / costs when problems found at testing stage

Royce's solution to problem:

1. preliminary design before analysis

for today's business & consumer SW, this corresponds to choosing a framework

2. document the design

communications
needed downstream

→ keep up to date w/ code

today, much less voluminous
due to UML & frameworks
architecture & design patterns

3. do it twice

build simulation, small scale
pilot prototype

today, iterations & spike solutions

4. emphasis on testing

- independent testers
- code inspection
- test coverage

then computer time was expensive,
today, it is cheap

- static analysis,
continuous integration

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5. involve customer

- commits at various points prior to final delivery

similar today, but based on iterations r.t. waterfall stages

clarification about UML diagrams
& assignments

review for exam on Thursday -
requests for what is most
important to cover

review schedule TBA for 2nd review

combine end / next / patch
add some of design patterns