
A Brief Introduction to Agile Development

CS580 Advanced Software Engineering

<http://cs580.yusun.io>

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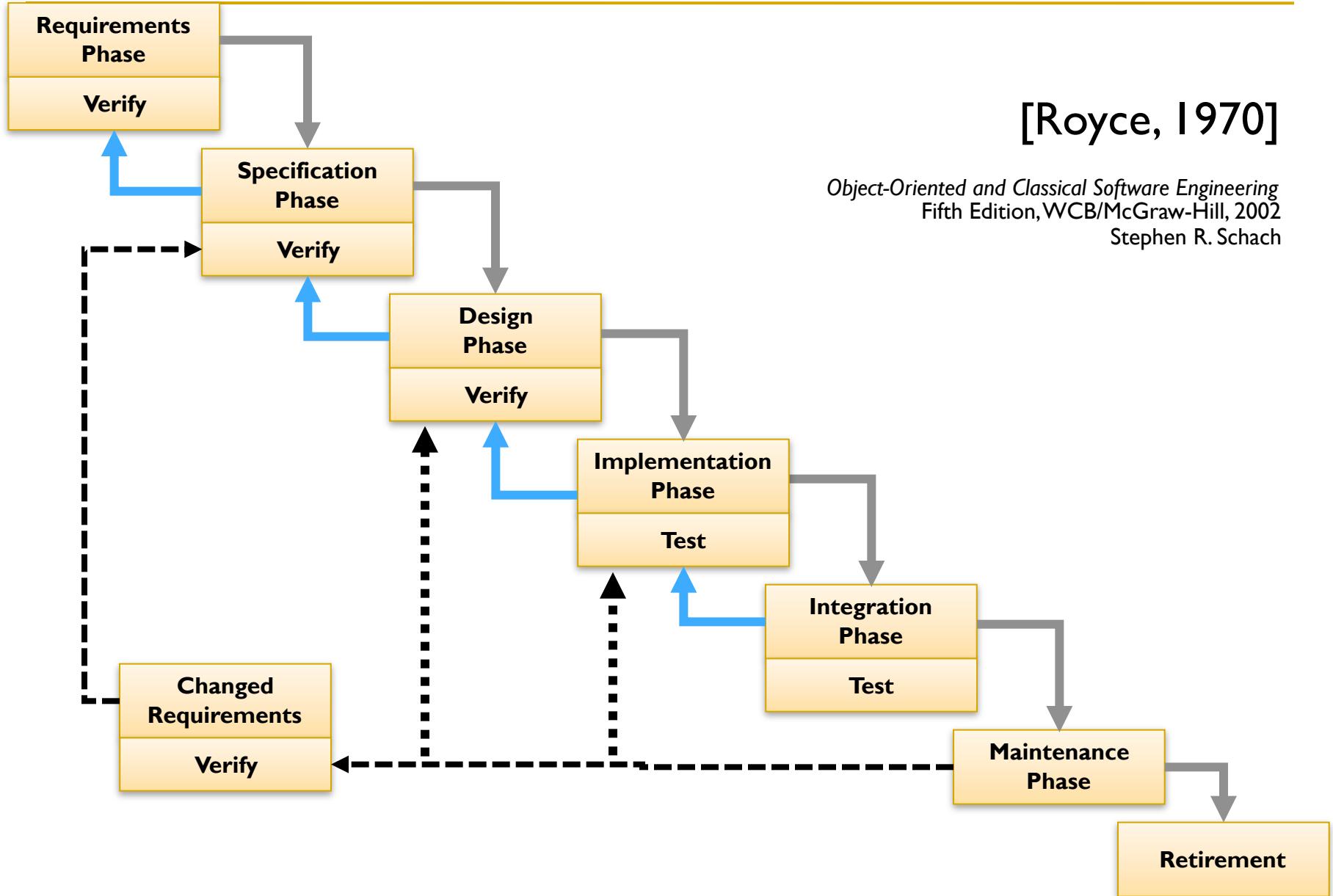
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Software Lifecycles – Waterfall Model



From Requirements to Agile



How the customer explained it



How the project leader understood it



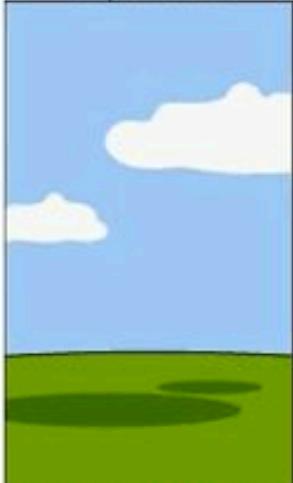
How the engineer designed it



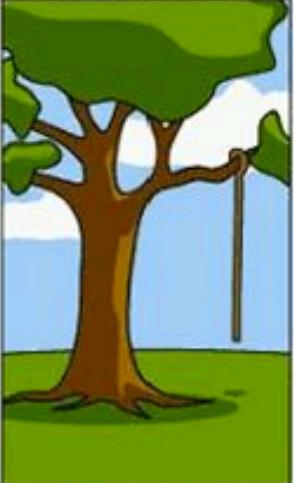
How the programmer wrote it



How the sales executive described it



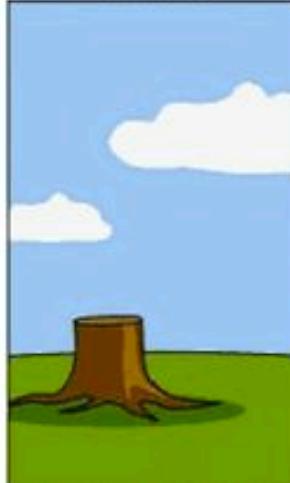
How the project was documented



What operations installed



How the customer was billed



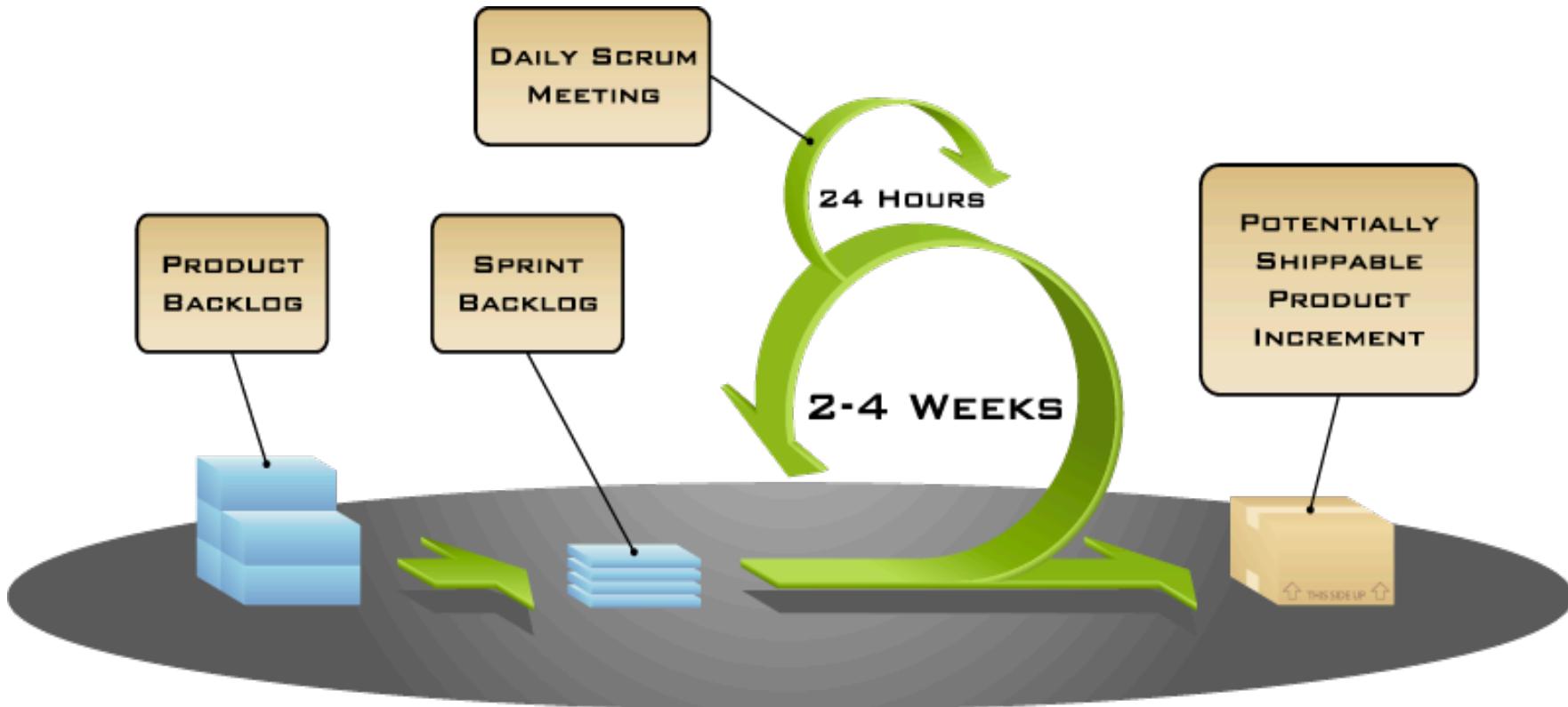
How the helpdesk supported it



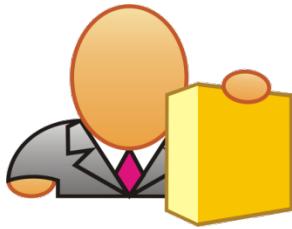
What the customer really needed

Agile - Build Software Incrementally

- ◆ Agile software development encourages rapid development iterations, welcomes requirement changes, and makes deliveries more frequently



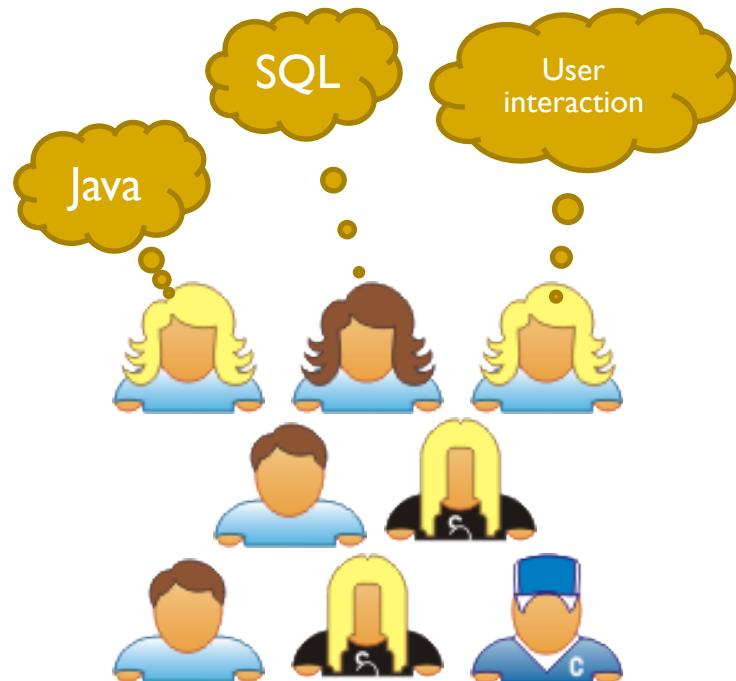
Scrum Team



Product owner

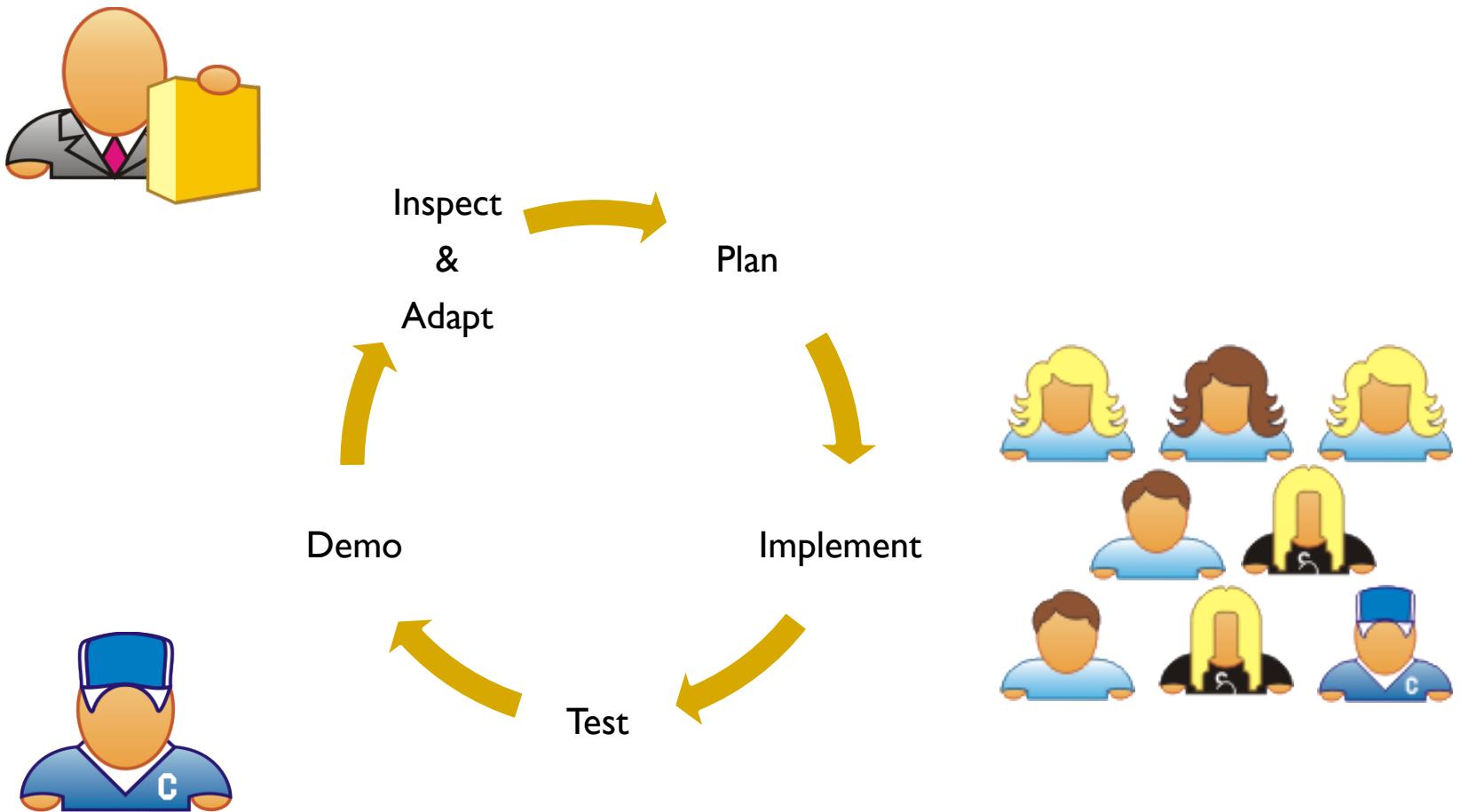


Scrum Master



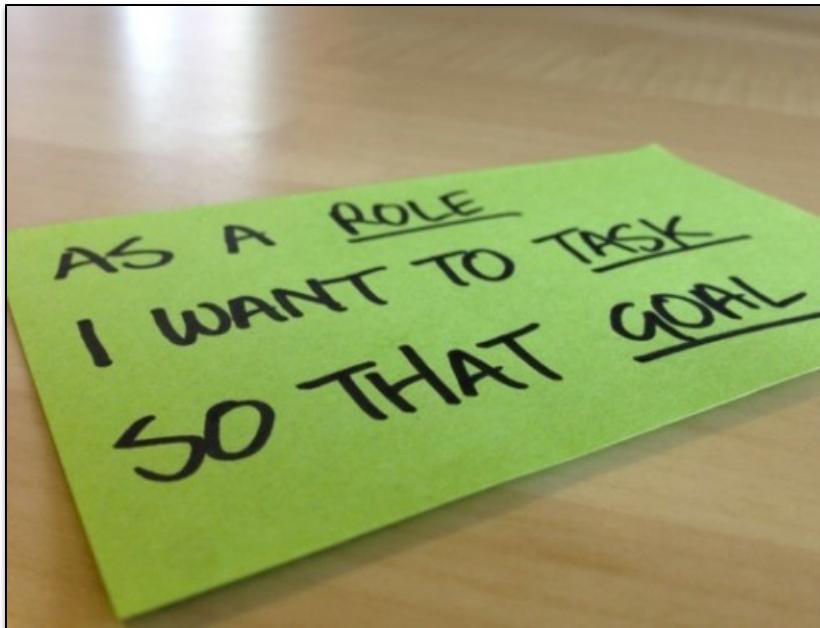
Team

Scrum Team



Planning Step 0 – Write User Stories

- ◆ A piece of functionality valuable for the end-user



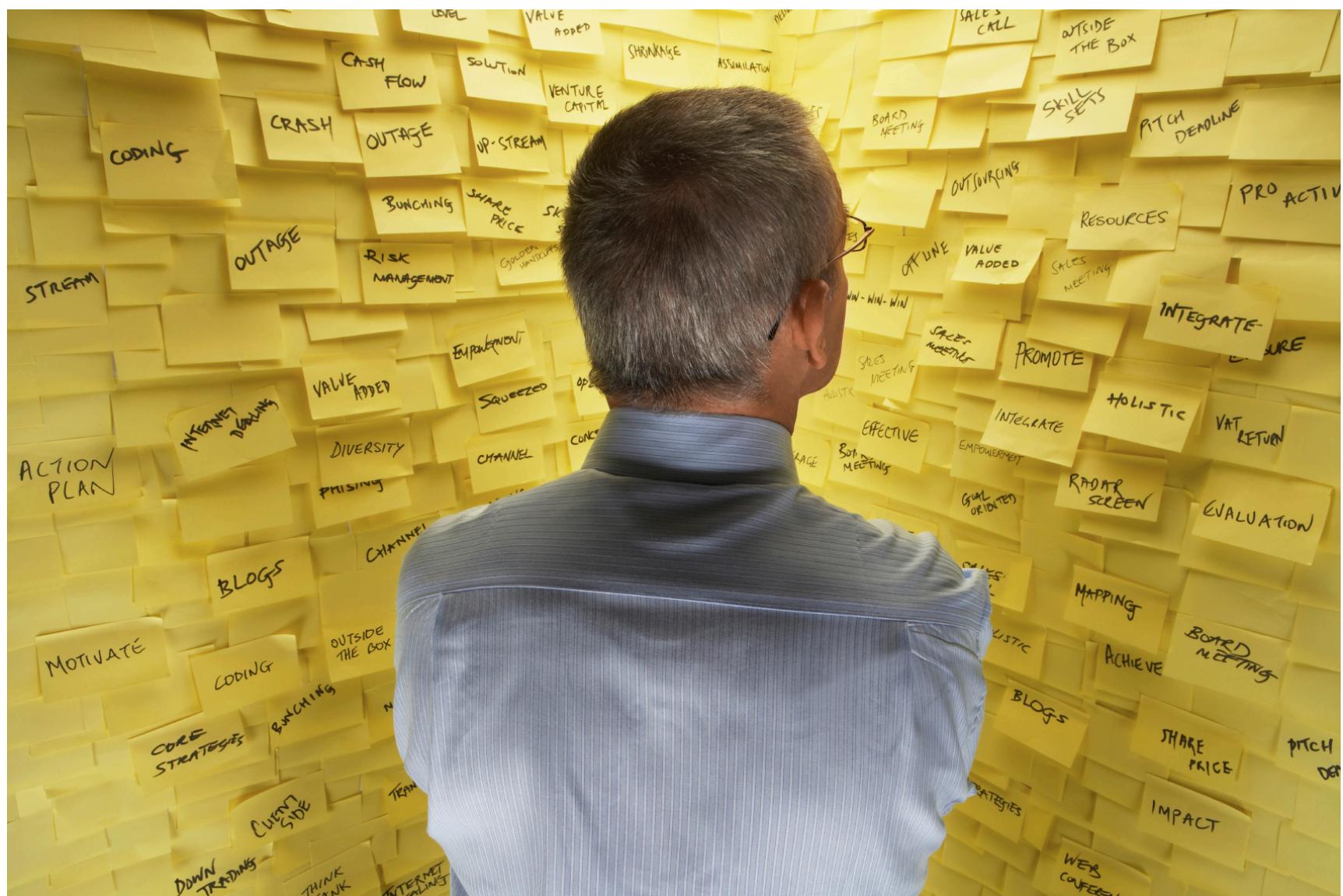
As **who** I want
what so that
why

CSV Stats

As an administrator
I want to download page views as CSV
So that I can graph them in Excel

2

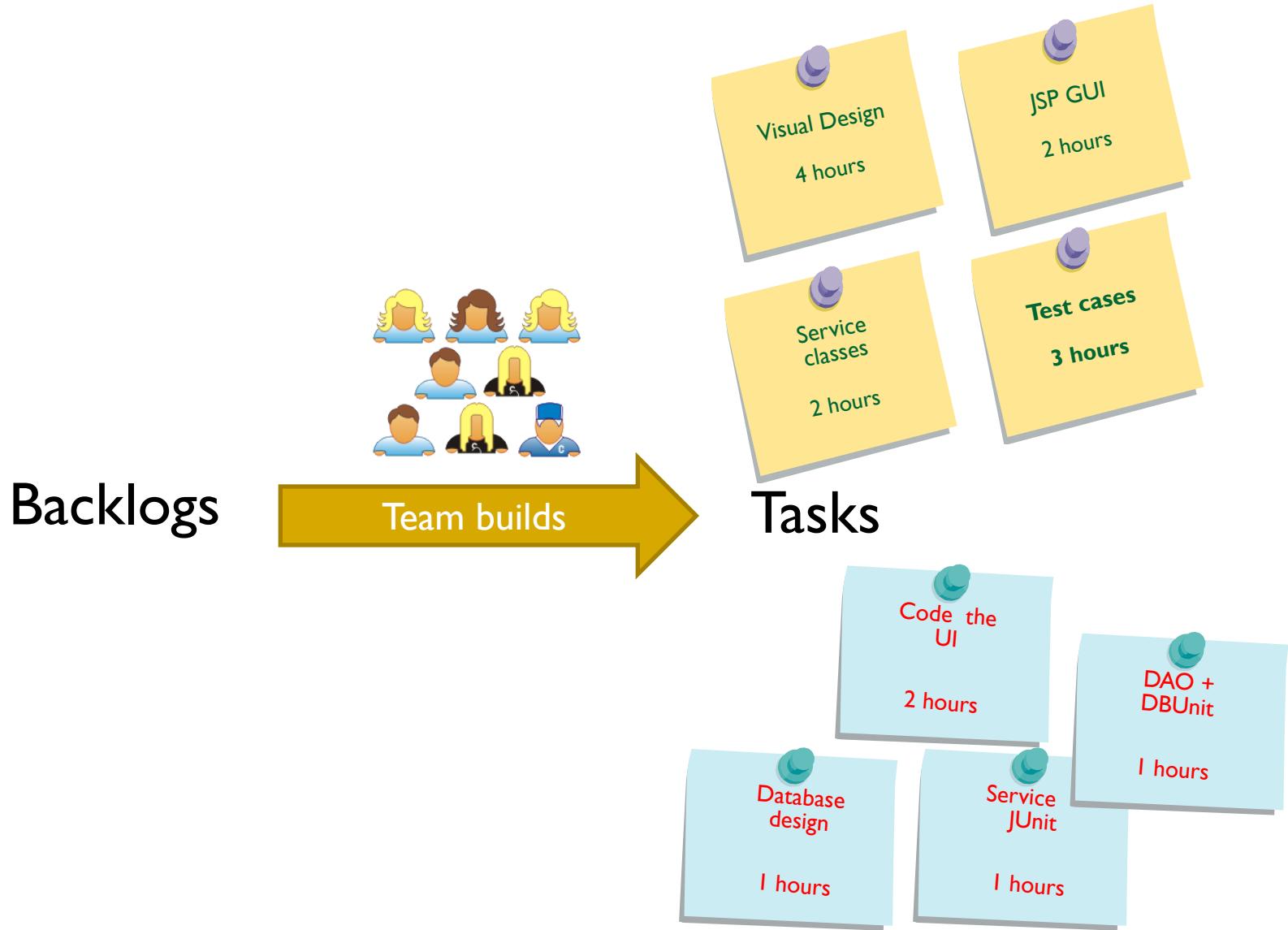
Planning Step 1 – Prioritize Tasks



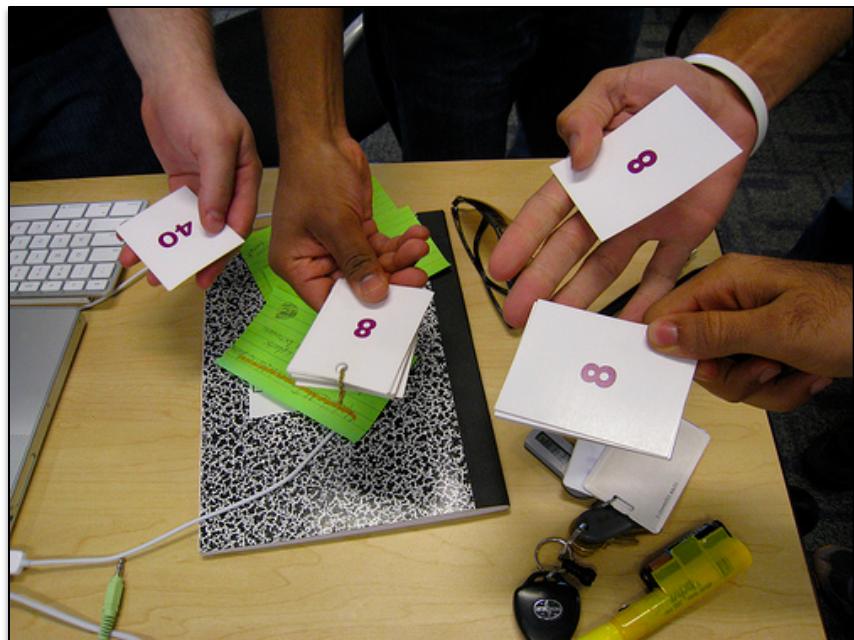
Planning Step 1 – Prioritize Tasks



Planning Step 2 – Estimate Efforts



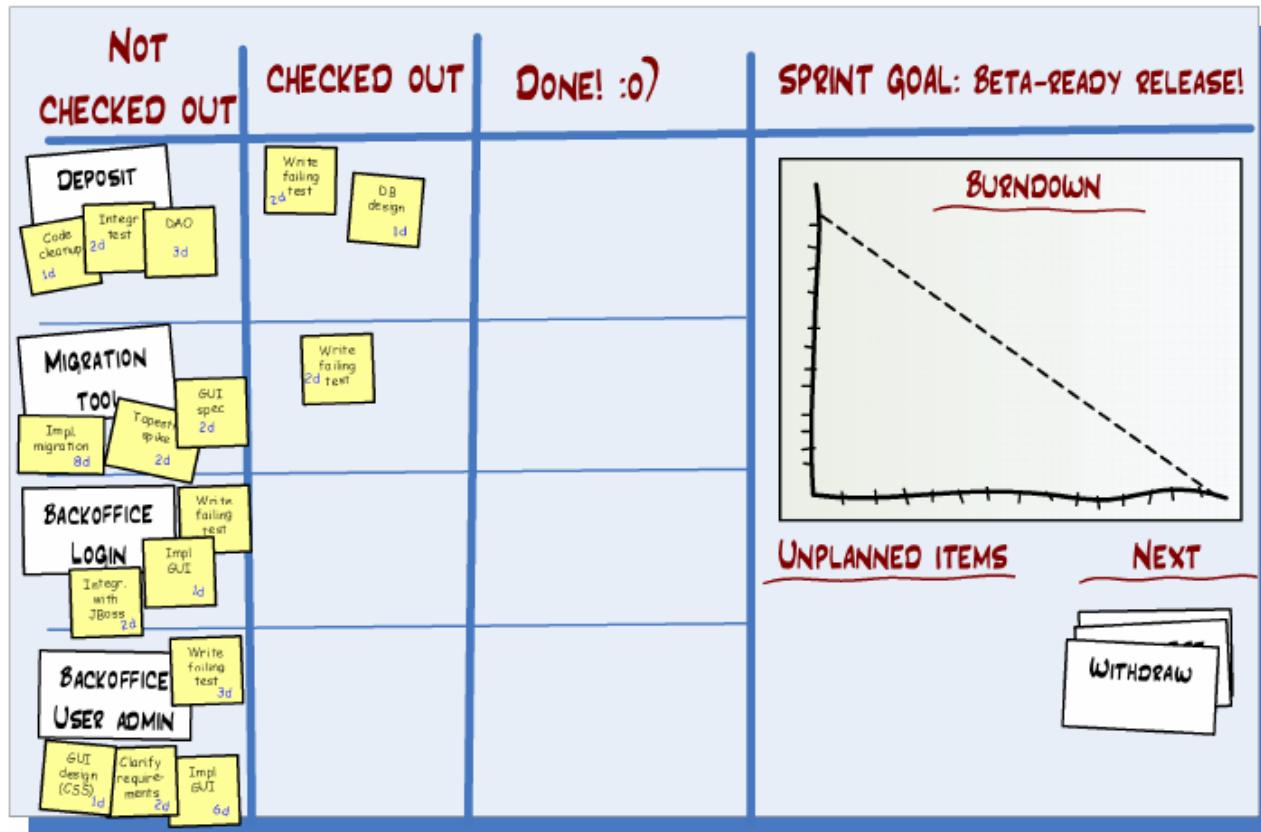
Planning - User Story Points Estimation



Just Do It!



Daily Scrum (Standup)



Max. 15 minutes

- What did I do yesterday?
 - What will I do today?
 - Is there anything in my way?

After the Sprint

Sprint Review

Present what team accomplished



Demo new features developed or underlying architecture

Invite whole world

Sprint Retrospective



Whole team discusses the results of last sprint

Start doing

Stop doing

Continue doing