

APPLIED AGILE DEVELOPMENT AND EXECUTION

James Newkirk

twitter: @jamesnewkirk

email:

newkirk.jim@gmail.com

INTRODUCTION

January 7, 2013

HOUSEKEEPING

Monday

- 6:00p-9:00p
- 15-20 Minute Break

Saturday

- February 2 – 9:00a – 4:00p
- March 9 – 9:00a – 4:00p

Holidays

- January 21 and February 18

GUIDELINES

Ground rules

- Laptops / mobile phones by exception

Parking Lot

- An open forum to drop notes anytime throughout the course
- Will be revisited and discussed at regular intervals

Ask Questions

- Do not be afraid to stop me at any time!

SCHEDULE

January 7 – 6:00-9:00p

- Introduction
- Values – Exploring the why behind the what we do!

January 14 – 6:00-9:00p

- A Framework for Agile Project Management

January 21 – No Class

January 28 - 6:00-9:00p

- Guest Lecture – Peter Provost

February 2 (Saturday) – 9:00a-4:00p

- Collaboration
- Building Teams
- User Stories
- Iteration Planning

February 4 – 6:00-9:00p

- Introduction to Agile Development Practices
- Unit Testing

February 11 - 6:00-9:00p

- Pair Programming
- Micro-Pairing

February 18 – No Class

February 25 - 6:00-9:00p

- Test Driven Development

March 4 – 6:00-9:00p

- Refactoring
- Advanced Testing Topics

SCHEDULE - CONTINUED

March 9 (Saturday) – 9:00-4:00p

- Advanced Testing Topics Continued
- Project Overview

March 11

- Envision
- Speculate

March 18

- Sprint #1

March 25

- Sprint #2

April 1

- Project Presentations
- Class Retrospective
- CSM Exam

INTRODUCE YOURSELF

Professional background
and why you are taking
the class

EXERCISE — CLASS MAKEUP

Goal: Align yourselves in a row

Setup: Imagine a line running across the room on which you will place yourselves.

How effective are the existing processes and development practices within your organization?

How familiar are you with Scrum?

Managers, Project Leaders, QA, Developers

- 10 = Developers
- 8 = QA
- 5 = Project Leaders
- 3 = Managers
- 1 = Senior managers

EXERCISE — WHAT DOES AGILE MEAN?

Please take a few minutes to jot down your individual ideas and thoughts

Then work together with 3-4 of your neighbors to create a definition.

Discuss how your team definition relates to software development

EXERCISE — WHAT WOULD YOU LIKE TO GET OUT OF THIS CLASS?

Please take a few minutes to jot down your individual ideas and thoughts

Share 1-2 of them with the class

VALUES

Exploring Why

LETS GO BACK IN TIME...

February 10, 2001



A PRACTICE EXAMPLE

What is this steering wheel position referred to as?



VALUE AND PRACTICES



VALUES

Extreme Programming Explained 2nd Edition, Kent Beck

Large scale criteria we use to judge what we see, think, and do.

Need to be explicit: Without values practices become rote, activities performed for their own sake but lacking purpose or direction

Values bring purpose to practices

PRACTICES

Extreme Programming Explained 2nd Edition, Kent Beck

Practices are clear

Practices provide evidence of values

***Practices bring
accountability to values***

Values



Practices

EXTREME PROGRAMMING VALUES

Extreme Programming Explained 2nd Edition, Kent Beck

Communication

Simplicity

Feedback

Courage

SIMPLICITY

Incremental

Design

Stories

Weekly Cycles



COMMUNICATION

Sit together
Whole team
Informative
Workspace
Continuous
Integration



FEEDBACK

Test-First
Programming
Incremental Design
Ten Minute Build
Continuous
Integration
Weekly Cycles



COURAGE

Informative
Workspace

Pair Programming

Energized Work

Weekly Cycles

Slack



SCRUM VALUES

Focus

Respect

Courage

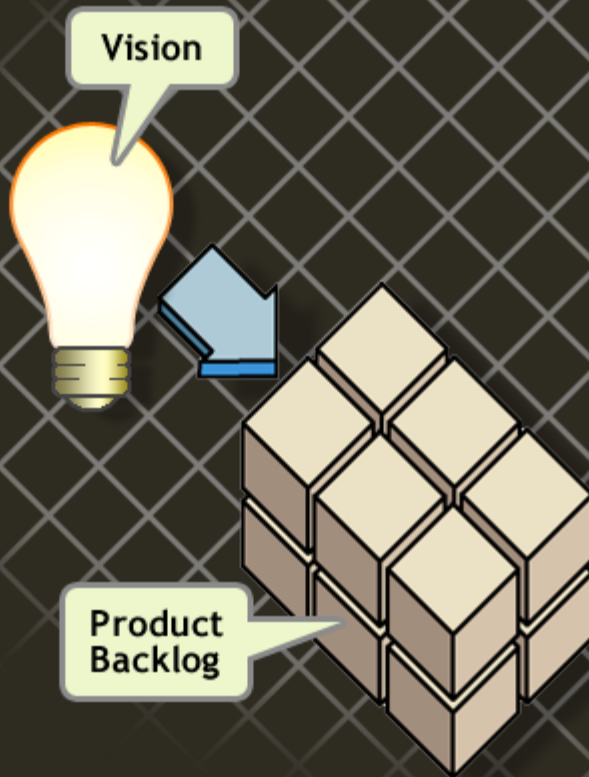
Commitment

Openness

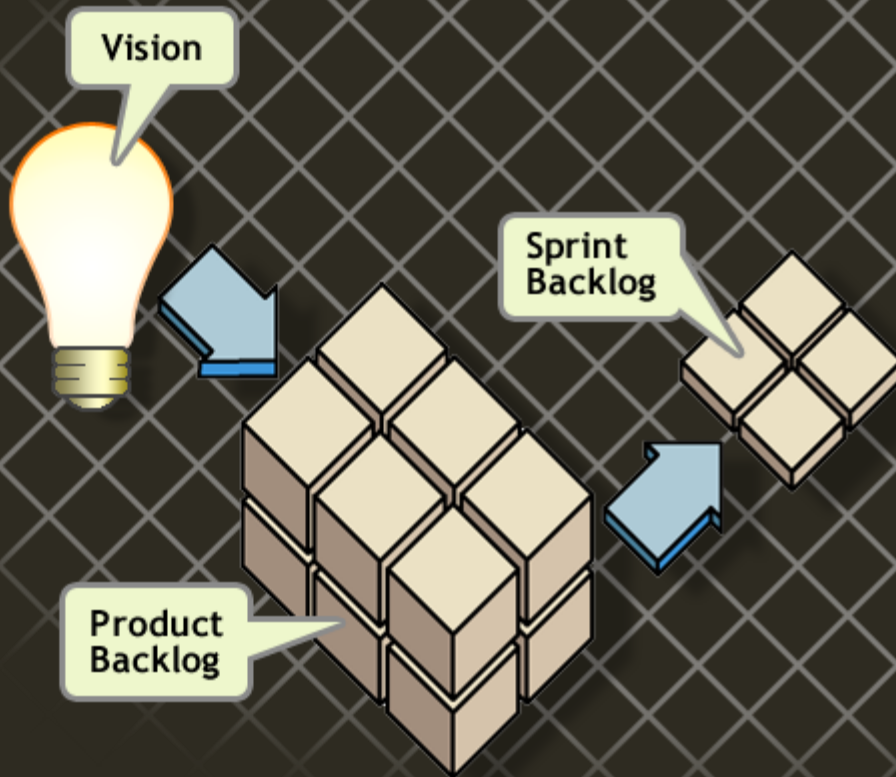
START WITH A VISION



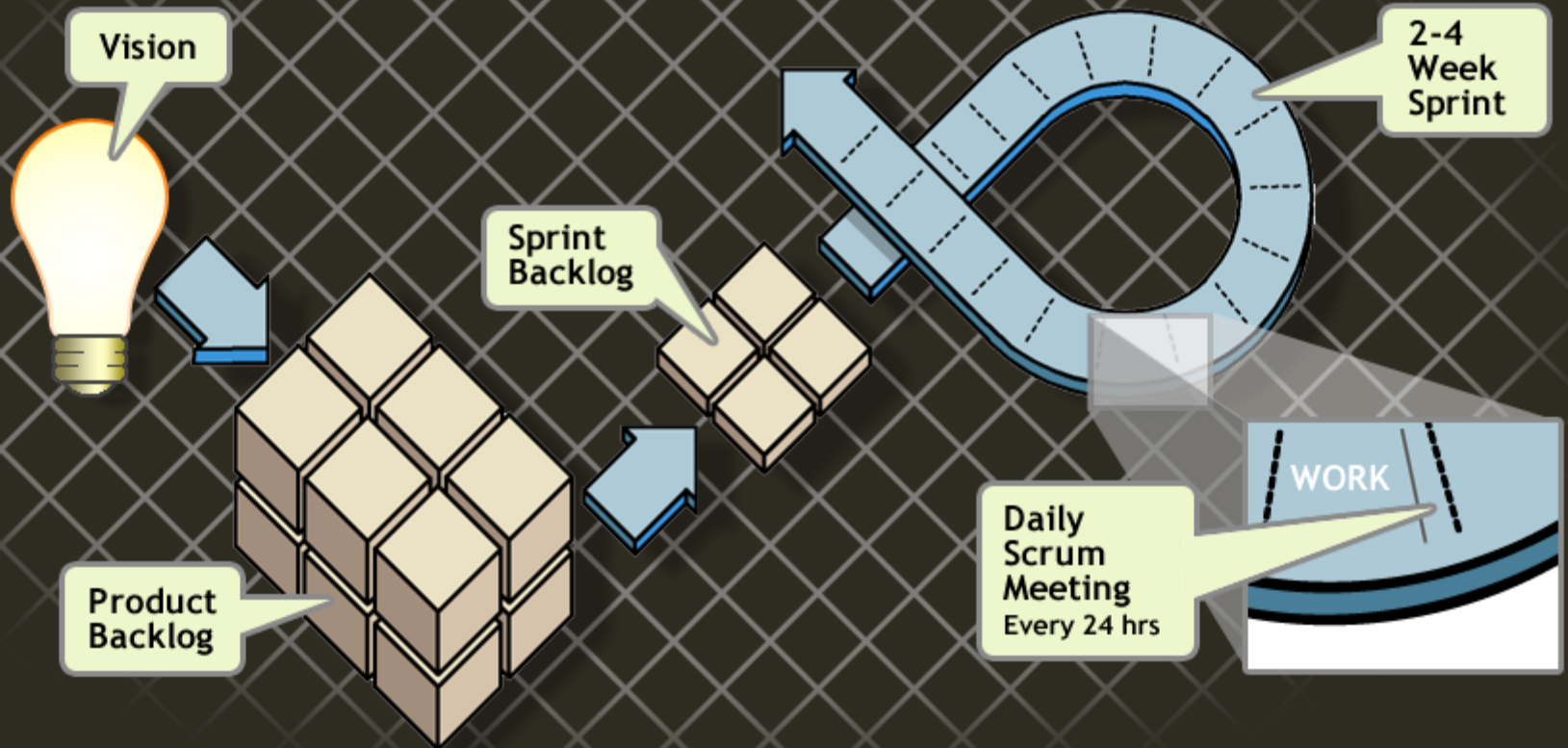
BUILD THE PRODUCT BACKLOG



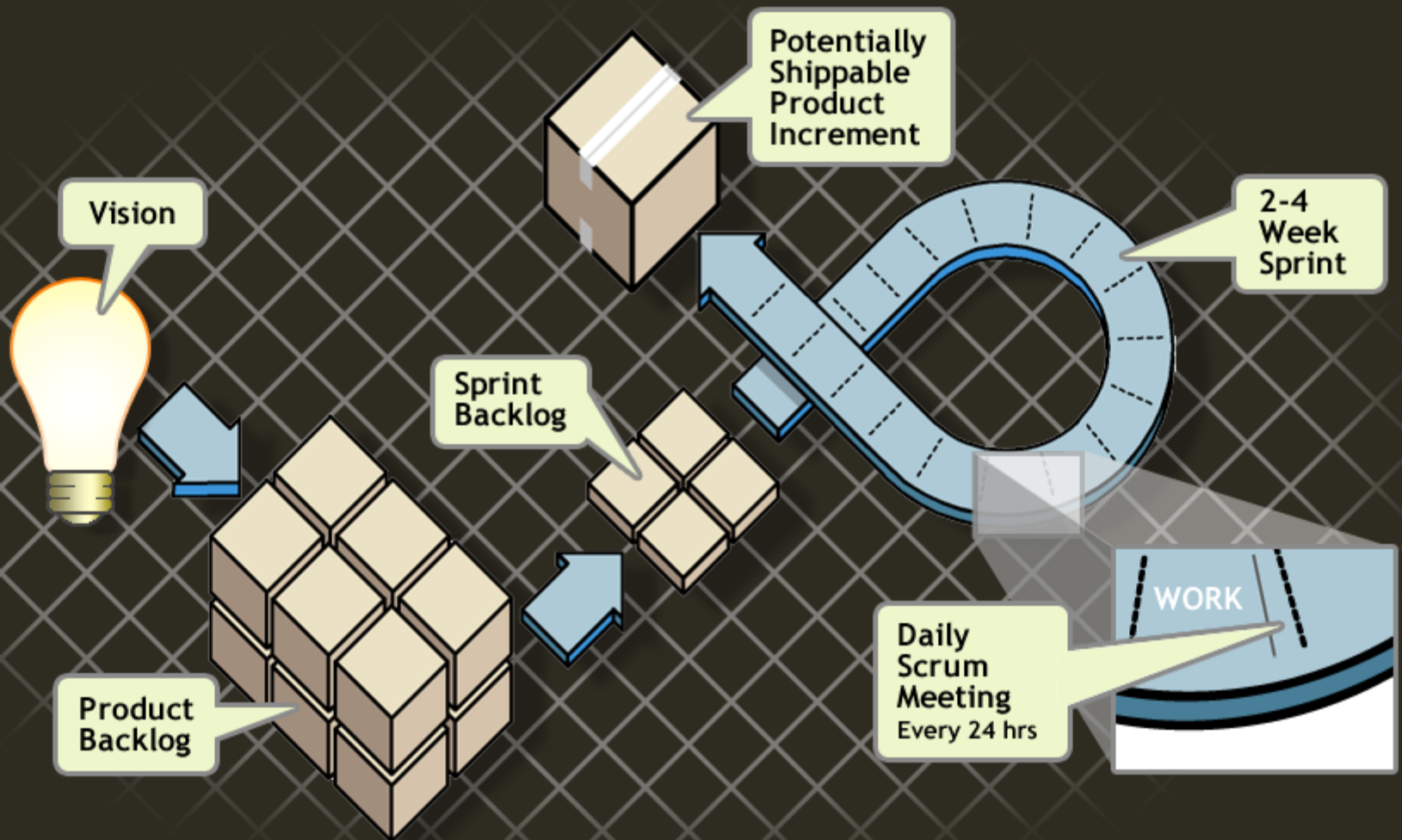
DECOMPOSE STORIES INTO A SPRINT BACKLOG



DO THE WORK



RELEASE



AGILE PROCESS VALUES

AGILE PROCESS VALUES

Minimalism

Disciplined

Reality
Based

Sustainable

MINIMALISM

What is simple?





SIMPLE

1. easy to understand, deal with, use, etc.: a simple matter; simple tools 2. not elaborate or artificial; plain: a simple style. 3. not ornate or luxurious; unadorned: a simple gown. 4. unaffected; unassuming; modest: a simple manner. 5. not complicated: a simple design. 6. not complex or compound; single. 7. occurring or considered alone; mere; bare: the simple truth; a simple fact. 8. free of deceit or guile; sincere; unconditional: a frank, simple answer. 9. common or ordinary: a simple soldier. 10. not grand or sophisticated; unpretentious: a simple way of life 11. humble or lowly: simple folk. 12. inconsequential or rudimentary. 13. unlearned; ignorant. 14. lacking mental acuteness or sense: a simple way of thinking. 15. unsophisticated; naive; credulous. 16. simpleminded. 17. Chemistry. a. composed of only one substance or element: a simple substance. b. not mixed. 18. Botany. not divided into parts: a simple leaf; a simple stem. 19. Zoology. not compound: a simple ascidian. 20. Music. uncompounded or without overtones; single: simple tone. 21. Grammar. having only the head without modifying elements included: The simple subject of "The dappled pony gazed over the fence" is "pony." Compare complete (def. 5). 22. (of a verb tense) consisting of a main verb with no auxiliaries, as takes (simple present) or stood (simple past) (opposed to compound). 23. Mathematics. linear (def. 7). 24. Optics. (of a lens) having two optical surfaces only. 25. an ignorant, foolish, or gullible person. 26. something simple, unmixed, or uncompounded. 27. simples, Textiles. cords for controlling the warp threads in forming the shed on draw-looms. 28. a person of humble origins; commoner. 29. an herb or other plant used for medicinal purposes: country simples.

SIMPLE

easy to understand, deal with, use, etc. : a simple matter; simple tools
unsophisticated; naive; credulous.

MIES VAN DER ROHR

Modern Architecture Pioneer

“Less is More”

Minimalism - work is
stripped down to its
most fundamental
features

Creates impression of
extreme simplicity



MINIMALISM

Incremental Design

User Stories

Weekly Cycles

Test-Driven Development

DISCIPLINED

Test-Driven Development

Continuous Integration

Ten Minute Build

Weekly Cycles

Collective Ownership

REALITY BASED

Sit together

Whole team

Informative Workspace

Collective Ownership

SUSTAINABLE

Slack

Energized Work

Pair Programming

EXERCISE — IDENTIFY YOUR PROCESS VALUES?

Please take a few minutes to jot down your individual ideas and thoughts

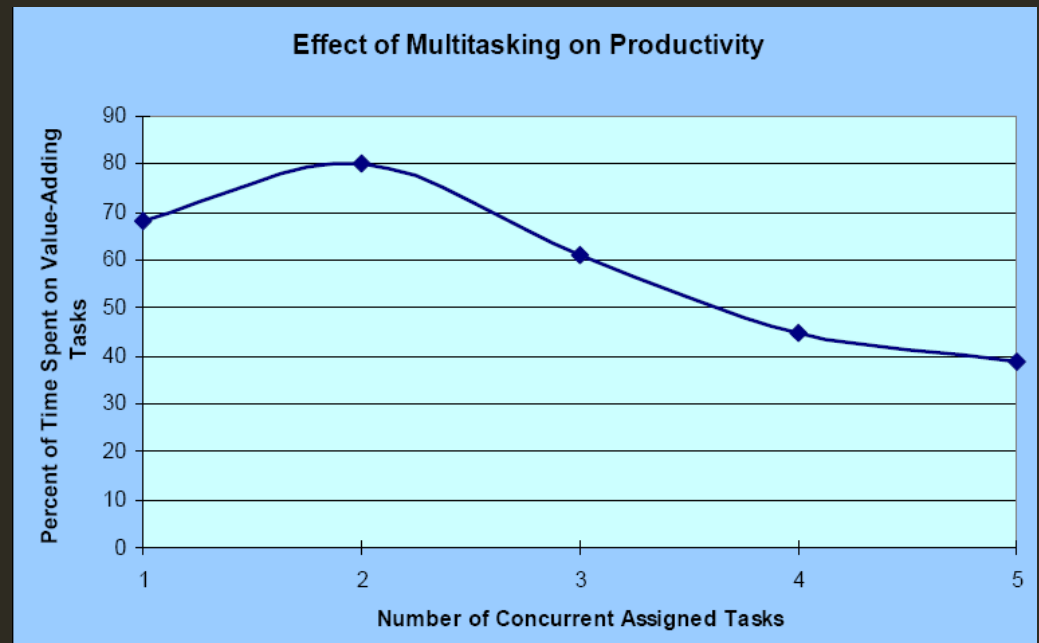
Discuss with 3-4 of your neighbors to get their feedback.

MULTI-TASKING

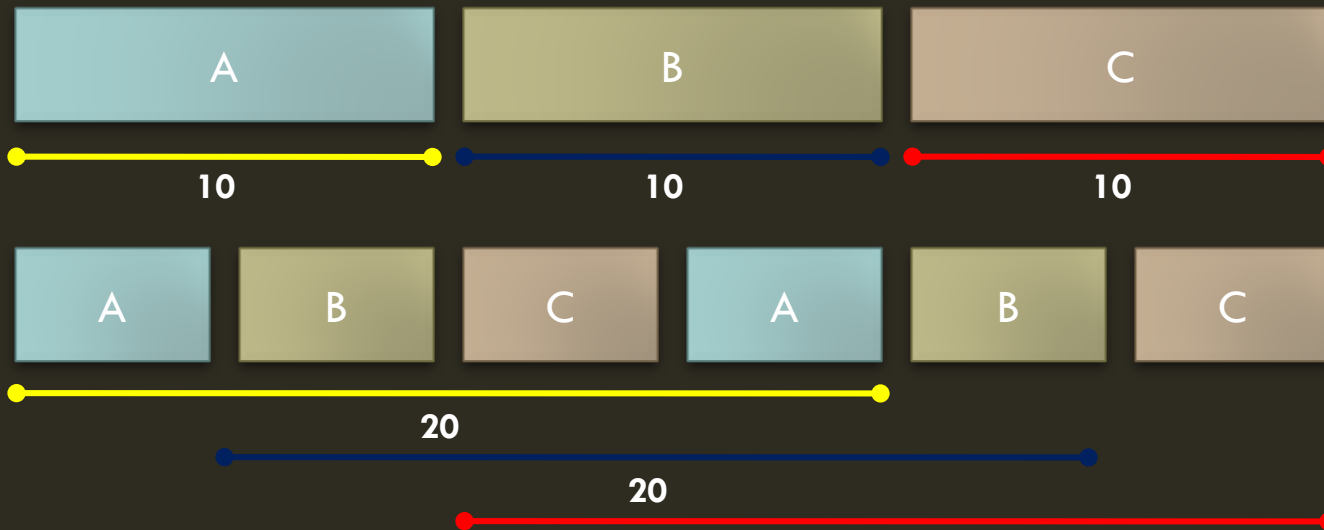
Don't do it...

MULTITASKING

When working on more than two tasks, a person's time spent on value-adding work drops rapidly - Clark and Wheelwright (1993)



MULTITASKING



MULTITASKING

Multitasking causes delays

Instead of multitasking, use small units of work

You want work to flow as fast as possible

More efficient transfers to next person

EXERCISE: MULTI-TASKING

Goal: Demonstrate that multi-tasking is less efficient

Setup: Run 3 Simultaneous projects

- Project #1 – Write the numbers 1-26 in a column
- Project #2 – Write the letters A-Z in a column
- Project #3 – Write the Roman numerals 1-26 in a column

Rules

- #1's – do it by column
- #2's – do it by row

Duration: 10 minutes