# Applied Agile Development and Execution

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#### Introduction

January 6, 2014

#### Who am I...

CenturyLink's Vice President of Cloud Development, I oversee the development of CenturyLink's cloud management platform. I have been writing software in various forms for over 30 years (yes, I am really that old).

Prior to CenturyLink, I held leadership roles at Tier 3, Microsoft, and ThoughtWorks.

Earlier in my career, I co-founded Object Mentor, Inc. with Robert C. Martin, a consulting firm that specialized in training and mentoring our clients in C++, Java, Object-Oriented Programming, and Agile Methodologies.

In addition to my day job at CenturyLink, I serve on the <u>Agile Alliance</u> Board.

#### Schedule

```
Monday Night
6:00-9:00p
15-20min Break
Saturday
January 25, 9:00a – 4:00p
March 1, 9:00a – 4:00p
Holidays
January 20 and February 17
```

#### 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 6 – 6:00-9:00p
  Introduction
  Values – Exploring why!
January 13 – 6:00-9:00p
  A Framework for Agile Project
  Management
January 20 – No Class
January 25 (Saturday) - 9:00a-
4:00p
  Collaboration
  Building Teams
January 27 – 6:00-9:00p
  Guest Lecture – TBA
```

```
February 3 – 6:00-9:00p
User Stories
Iteration Planning

February 10 - 6:00-9:00p
Introduction to Agile Development Practices
Unit Testing
Pair Programming
Micro-Pairing

February 17 – No Class

February 24 - 6:00-9:00p
Test Driven Development

March 1 (Saturday) – 9:00a-4:00p
Refactoring
Technical Debt
```

**SOLID Principles** 

#### Schedule - Continued

```
March 3 – 6:00-9:00p
Project Overview
March 10 – 6:00-9:00p
Envision
Speculate
```

March 17 – 6:00-9:00p Sprint #1

March 24 – 6:00-9:00p Sprint #2

March 31 – 6:00-9:00p Project Presentations Class Retrospective CSM Exam



#### Introduce Yourself

Professional Background

Why are you taking the class?



## Exercise – Class Makeup

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

#### Questions

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!** 

## Many companies have nice sounding value statements displayed in the lobby, such as

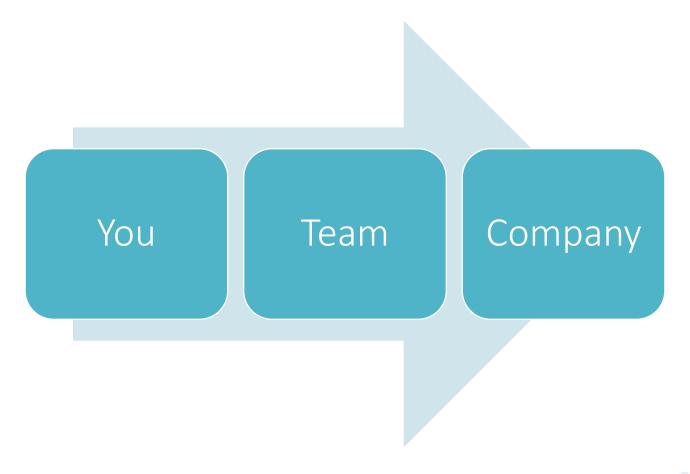
Integrity
Communication
Respect
Excellence

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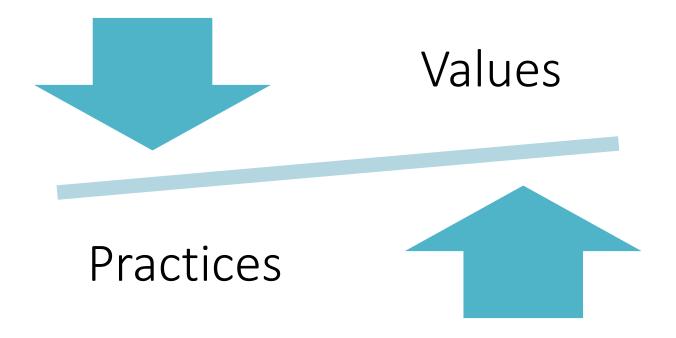
Integrity
Communication
Respect
Excellence

#### Shared values



Recognize and reward
Only those individuals
Who's actions
Demonstrate the values

### DO NOT Recognize or reward Any individual Who's actions Oppose the values



#### An Example

What is this driving position referred to?

Why do this?

Is it correct?



#### Control Vehicle

10 and 2

9 and 3

Values = Why

Practices = How

#### Extreme Programming Values Extreme Programming Explained 2nd Edition, Kent Beck

Communication

Simplicity

Feedback

Courage



#### Simplicity

Incremental Design

Stories

Weekly Cycles



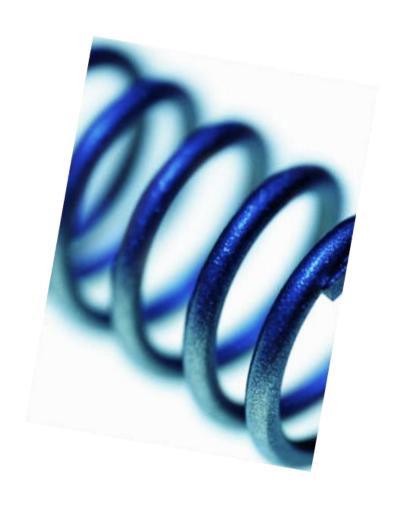
#### Communication

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

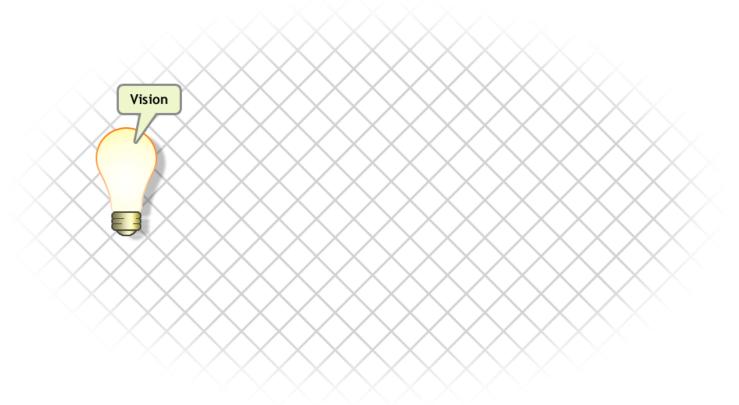
Respect

Courage

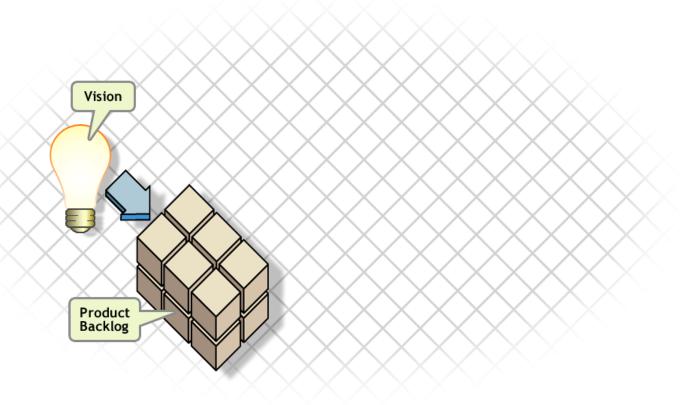
Commitment

Openness

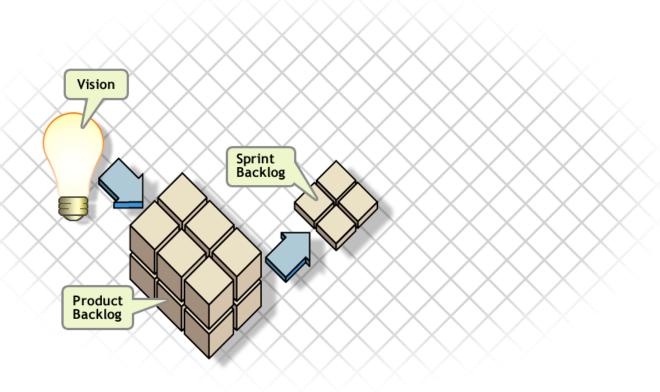
#### Start with a Vision



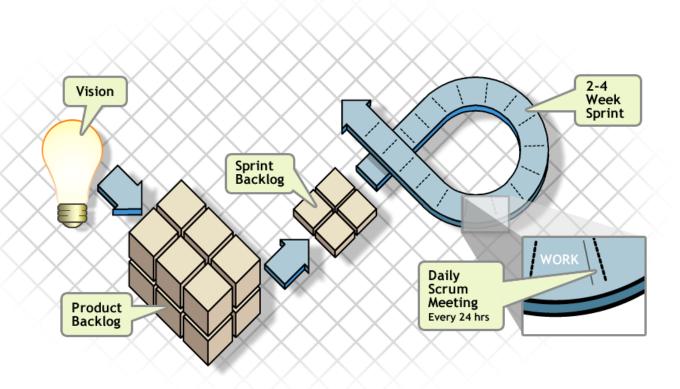
#### Build the Product Backlog



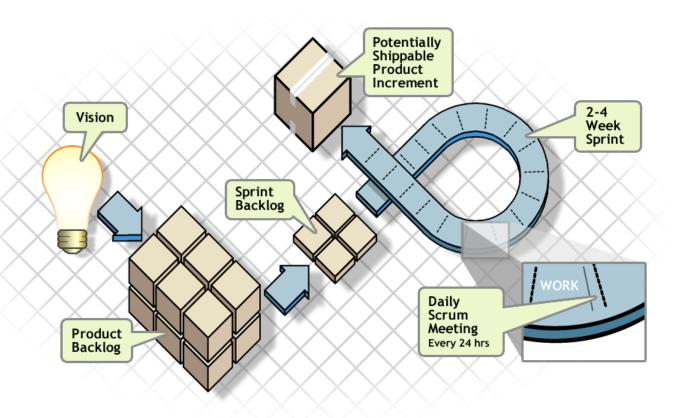
## Decompose Stories Into A Sprint Backlog



#### 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. a. composed of only one substance or element: a simple substance. b. not mixed.18. 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.

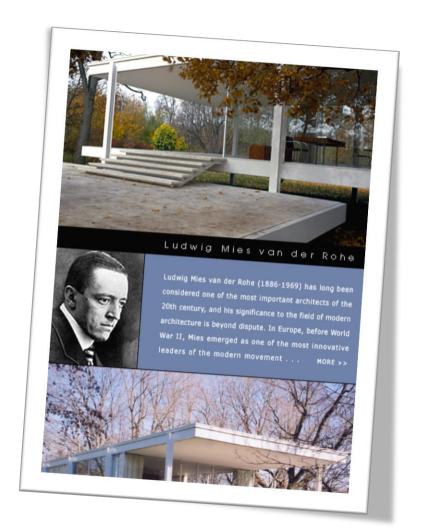
#### Mies van der Rohr

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 current 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.