

# **A Short Introduction to Scrum**

Andrew Shirk

2.13.2013

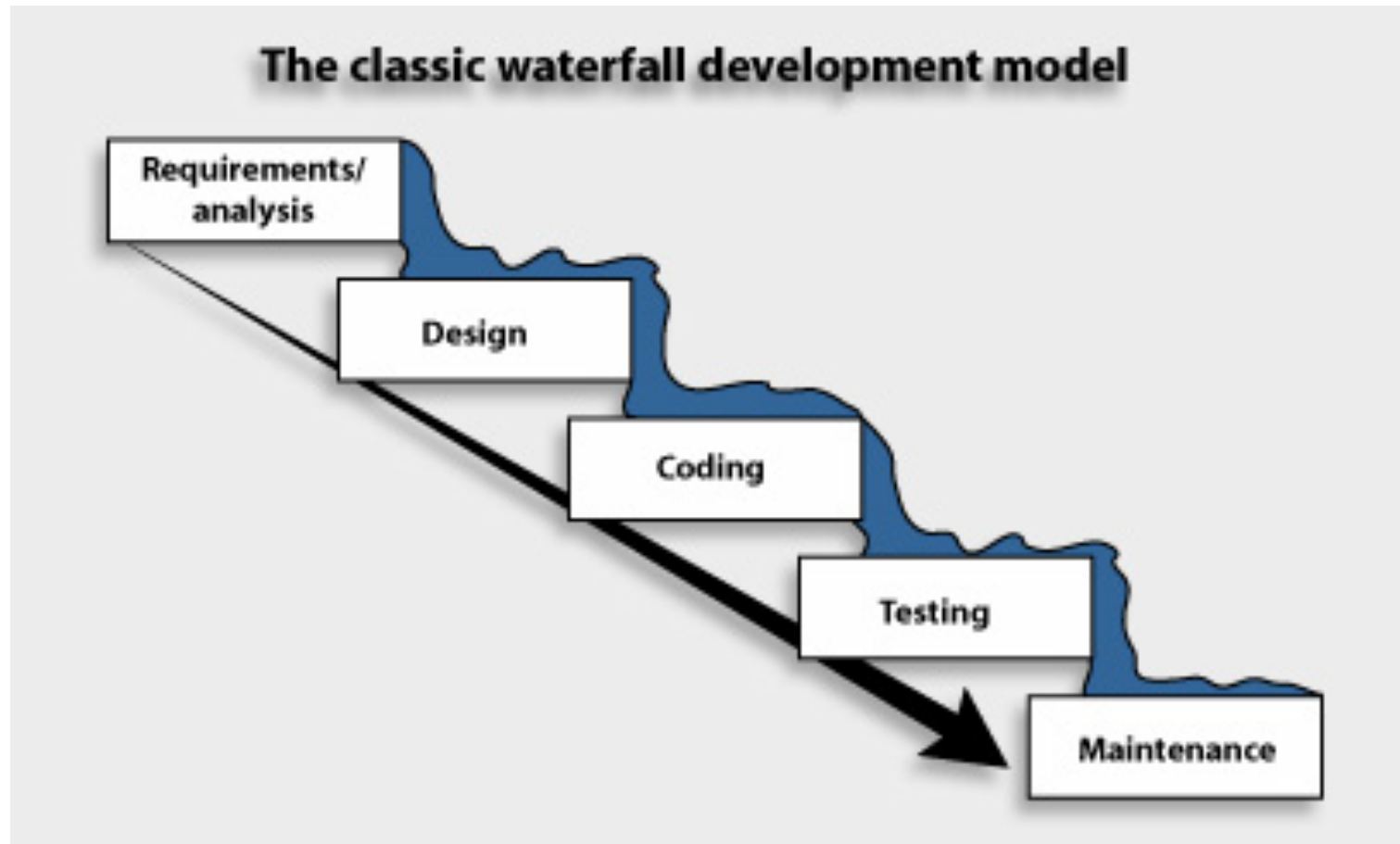
# Agenda

- What is Scrum?
- Benefits
- Key Scrum concepts
- Roles
- Meetings
- Tools
- Benefits revisited
- Commitments
- Q & A

# What is Scrum?

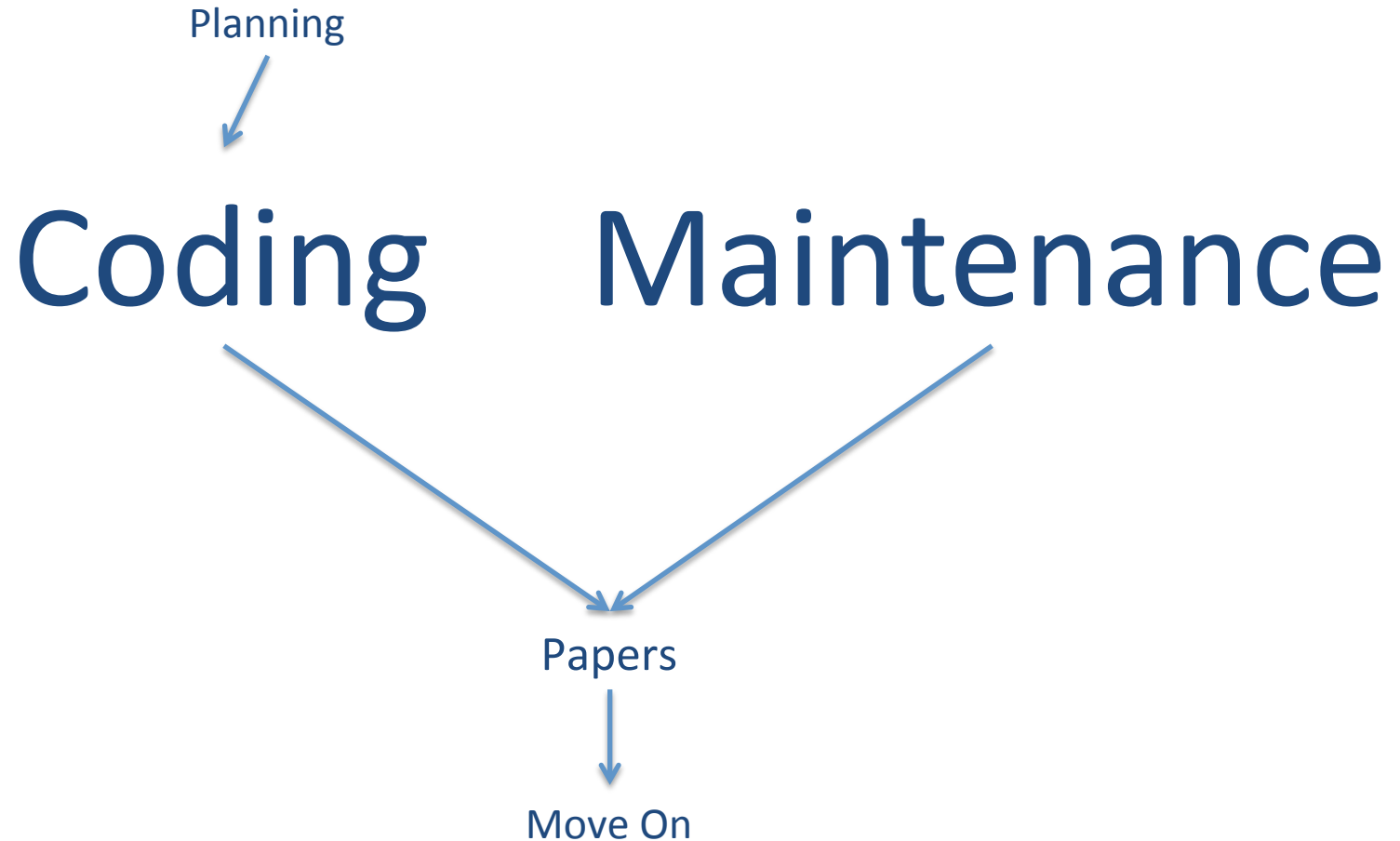
- Scrum is an agile project management process for developing software.
- Agile processes are marked by small development iterations and frequent feedback from stakeholders.
- Agile processes were popularized in response to waterfall processes which resulted high project failure rates.

# A Waterfall Process

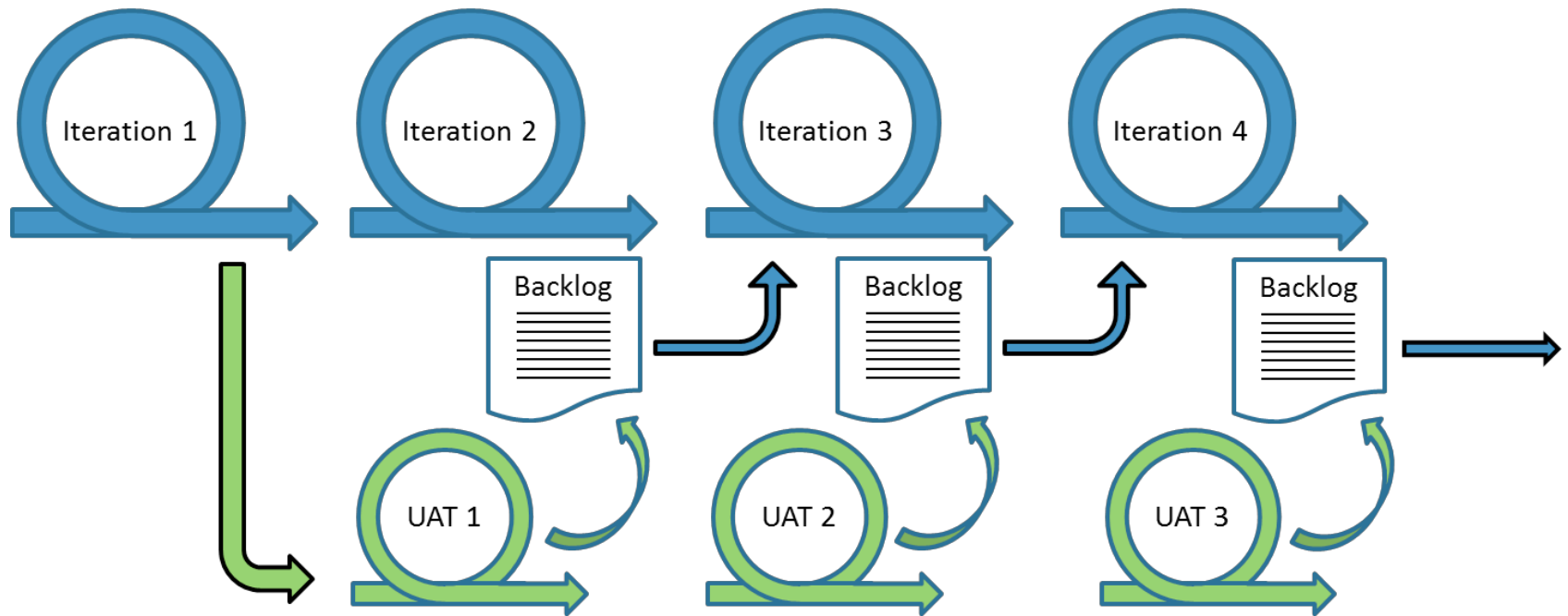


Source: <http://snailonabike.files.wordpress.com/2010/05/waterfall.jpg>

# Our Process



# An Agile Process



Source: <http://bit.ly/WHzWqZ>

# Benefits

- When properly implemented, Scrum usually works
- Avoids wasteful development
- Higher productivity
- Developer engagement
- Customer satisfaction
- Accurate estimations
- Adaptability to changing requirements

# Key Scrum Concepts

- Product backlog
- Stories
- Story points
- Sprint
- Sprint backlog
- Definition of done
- Velocity



# Story Cards

Front of Card

173

As a student I want to purchase a parking pass so that I can drive to school

Priority: ~~High~~ Should  
Estimate: 4

Back of Card

Confirmations:

~~The student must pay the correct amount~~  
One pass for one month is issued at a time  
The student will not receive a pass if the payment isn't sufficient  
The person buying the pass must be a currently enrolled student.  
The student may only buy one pass per month.

Copyright 2005-2009 Scott W. Ambler


Source: <http://www.agilemodeling.com/artifacts/userStory.htm>

# Story Cards

Print Story Cards

Iteration 6 (R2)

Print Story Cards


S113Paul**[Unfinished] Validate Customer Contact/Shipping info**

As a customer, I want my email and shipping addresses validated to make me known to the system, and to add another layer of protection against fraud.

Acceptance Criteria:

- Email address validated

3


S72Paul**Spike: Cancel the Order**

Investigate architecture approaches to order cancellation process.

Acceptance Criteria:

- Order must not be shipped
- credit card refunded
- Fulfillment process reversed
- restocking fee applied
- undo 'cancel' functionality

1


S71Tom**Persistent Shopping Cart**

As a user I want to store things in my shopping cart and see them next time I am logged in, so I can save an order for payday.

Once a user enters an item into their shopping cart, persist that information in their profile so that it is available next time they login.

Acceptance Criteria:

2

S70Sara**Purchase Your Items**

As a customer, I want to be able to purchase items online and to be prompted to enter payment information as well as their preferred shipping method and destination, so that I can pay and have my stuff shipped to me.

Acceptance Criteria:

- Create New Billing Profile
- Use Existing Billing Profile
- Create One Time Payment Profile

2

S69No Owner**Recent Purchases View**

As a user I should be allowed to select overnight shipping for their order so I can pay to get my stuff as fast as possible.

Acceptance Criteria:

- User is defaulted to standard First Class USPS shipping
- User can change shipping options to Overnight (FEDEX)

2

Source: <https://prod.help.rallydev.com/sites/default/files/multimedia/print-story-cards.png>

# Story Cards

Trees in BioCro - Bug #1453: Canopy Parameters for Tree Simulation - PEA Modeling Workflow

https://ebi-forecast.igb.illinois.edu/redmine/issues/1453

EBI Ruby/Rails Etc APIdock RoR API Ruby-Doc.org The Ruby Toolb... PHP: PHP Manual... Hacker News Stack Overflow

Home My page Projects Timesheet Administration Help

Models » BioCro » Trees in BioCro

Logged in as andrew start #1453 My account Sign out

Search: Jump to a project...

Overview Activity Roadmap Issues New issue Gantt Calendar News Documents Wiki Files Settings

Bug #1453

Update Log time Watch Duplicate Copy Move Delete

Canopy Parameters for Tree Simulation

Added by Deepak Jaiswal 3 months ago. Updated about 1 month ago.

Status: In Progress

Priority: Normal

Assignee: Deepak Jaiswal

Category: -

Target version: BioCro - BioCro 0.3 (WillowCro)

Start date: 11/13/2012

Due date: 01/28/2013

% Done: 0%

Spent time: -

Description

Quote

Please have a look at the attached picture:

It appears that (final) canopy development of the original tree and tree after regrowth is quite different. If this is the case, we may want to see if someone reported differences between the two in terms of LAI development and relation fraction of stem and leaf.

List of parameters are

(1) height factor(as a function of LAI or GDD or Days after planting: I might need to make littl4 change in code depending on what data we find)

(2) SLA (does it change with days or phenological stanges? what is the rate of change?)

(3) Leaf Angle distribution (for evaluating light interception)

(3) Coefficients for evaluating Growth and Maintenance Respiration of different plant organs.

(4) Diffuse Extinction Light Coefficient ( can be approximated or borrowed from Miscanthus). there is a computationally intensive method in Morgan's Book. I think for now, we are OK with using a simple value of diffuse light coefficient (Kd).

(5) For Tall trees, we might have to provide information about canopy shape (trapezoid, inverted V etc.), Leaf area density (LAD), etc. However, if out current tree of interest is somewhat similar to the ones shown in attache dpicture, then we can go ahead using the approach used for Miscanthus.

coppice-canopy.png (60.7 kB)

Deepak Jaiswal, 11/13/2012 01:35 pm

Subtasks

Add

Related issues

Add

History

Updated by Deepak Jaiswal 3 months ago #1

(6) Exponential Decay Coefficients to determine leaf N profile within canopy. This may be useful, if we decide to simulate spatio (with respect to leaf)-temporal (time or seasonal) dynamics of leafN or Vmax.

Updated by Deepak Jaiswal 3 months ago #2

• Status changed from New to Needs feedback

Issues

View all issues

Summary

Calendar

Gantt

Custom queries

Carl Crott

Feature Requests

Patrick Mulrooney

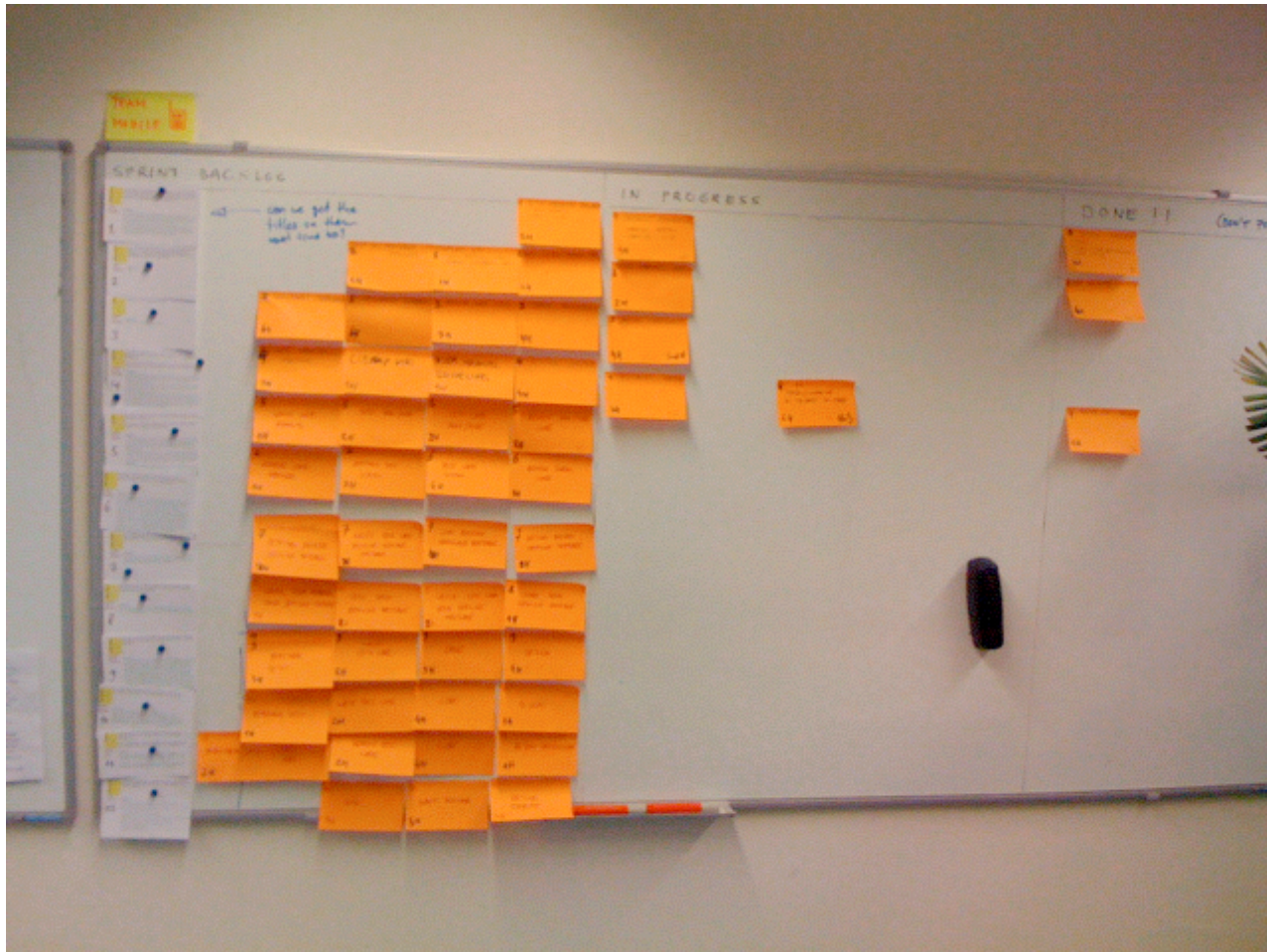
Web Programming

Watchers (2)

Dan Wang

David LeBauer

# Sprint Backlog



Source: [http://media.agile42.com/content/Whiteboard\\_Product\\_Backlog.JPG](http://media.agile42.com/content/Whiteboard_Product_Backlog.JPG)

# Roles

- Product owner
- Stakeholders
- ScrumMaster
- Development Team

# Meetings

- Daily standup
- Story writing
- Planning poker
- Sprint planning
- Sprint review
- Sprint retrospective

# Tools

- Version control system
  - Github & Bitbucket
- Continuous integration
  - In place for PEcAn
- Wiki
  - Redmine
- Backlog & task board
  - Redmine + Backlogs plugin
- Open office space

# Benefits Revisited

- When properly implemented, Scrum usually works
- Avoids wasteful development
- Higher productivity
- Developer engagement
- Product owner satisfaction
- Accurate estimations
- Adaptability to changing requirements



# Commitments

- Product Owner (Steve)
  - Sprint planning & sprint review meetings
  - Readily available for questions & feedback
    - Can be done via Skype or email
- ScrumMaster (David)
  - All meetings
  - Backlog grooming
- Development Team (Deepak, Dan, David)
  - All meetings
  - Demo prep

# Q & A

- Questions?