

# Introduction to Agile – TC Geekettes

*Natalie Warnert – ScrumMaster/Coach*



June 10, 2014

# Surescripts 2014 Adherence Challenge: Closing Gaps in Data and Care \$25,000 Prize

- Challenge Kicked Off at 2014 Datapalooza in Washington DC
- Poor adherence to medications is responsible for over 125,000 deaths and 30 to 50 percent of treatment failures each year, at an estimated cost of \$100 billion to \$289 billion. The goal of the Surescripts Adherence Challenge is to develop a technology solution that leverages medication history data to identify gaps in care and create actionable intelligence for use in treating patients at risk of harm from poor adherence.
- Video of last year's winner: <http://vimeo.com/76337329>

# Surescripts 2014 Adherence Challenge: Closing Gaps in Data and Care \$25,000 Prize

## Challenge Requirements and Eligibility Criteria

- We are seeking women-led teams for this challenge, as we did last year at our Tracking Influenza in Real Time Challenge. Men are welcome to participate as part of teams led by women. Our goal is to provide a platform for encouraging women to lead in the areas of technology, health, and science.

## Eligibility Criteria

- Team Lead must be a female serving as a key participating member of the tech team
- Surescripts employees are not eligible
- Ability for the Team Lead to present at a one-day session in Washington DC on February 18, 2015

# Agenda

- **Natalie's Background**
- **Agile Manifesto**
- **Agile Principles**
- **Agile vs. Scrum**
- **Scrum Process Overview**
- **Roles**
- **Ceremonies**
- **Artifacts**
- **Questions**

# Introduction



## ■ Work history:

- Surescripts: February 2014
- Thomson Reuters – ScrumMaster
- Travelers Insurance – Web developer, Project Manager, ScrumMaster

## ■ Education

- M.A. Organizational Leadership – St. Catherine University
- B.B.A. Information Systems – University of Wisconsin – Eau Claire

## ■ Other Scrumness:

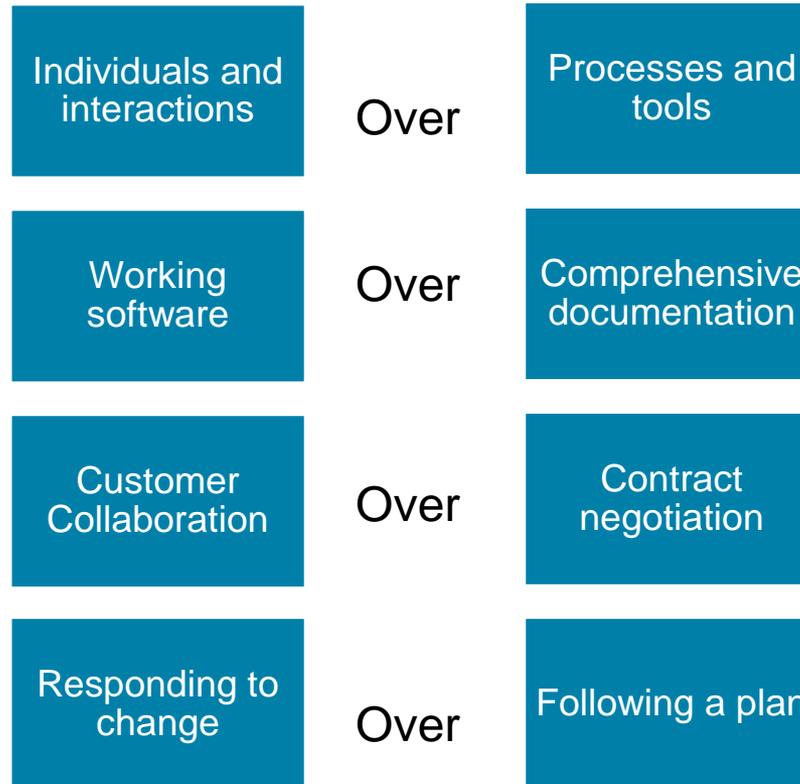
- Scrum Gathering Las Vegas 2013, AgileDC 2013, Scrum Gathering New Orleans 2014, Agile2014 Orlando, Women Techmakers, Girls in Tech...
- [info@nataliewarnert.com](mailto:info@nataliewarnert.com)
- [www.nataliewarnert.com](http://www.nataliewarnert.com)
- Twitter: @nataliewarnert

# Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it.

<http://agilemanifesto.org/>

Through this work we have come to value:



That is, while there is value in the items on the right, we value the items on the left more.

# Agile Principles

- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
- Business people and developers must work together daily throughout the project.
- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

# Agile Principles Contd

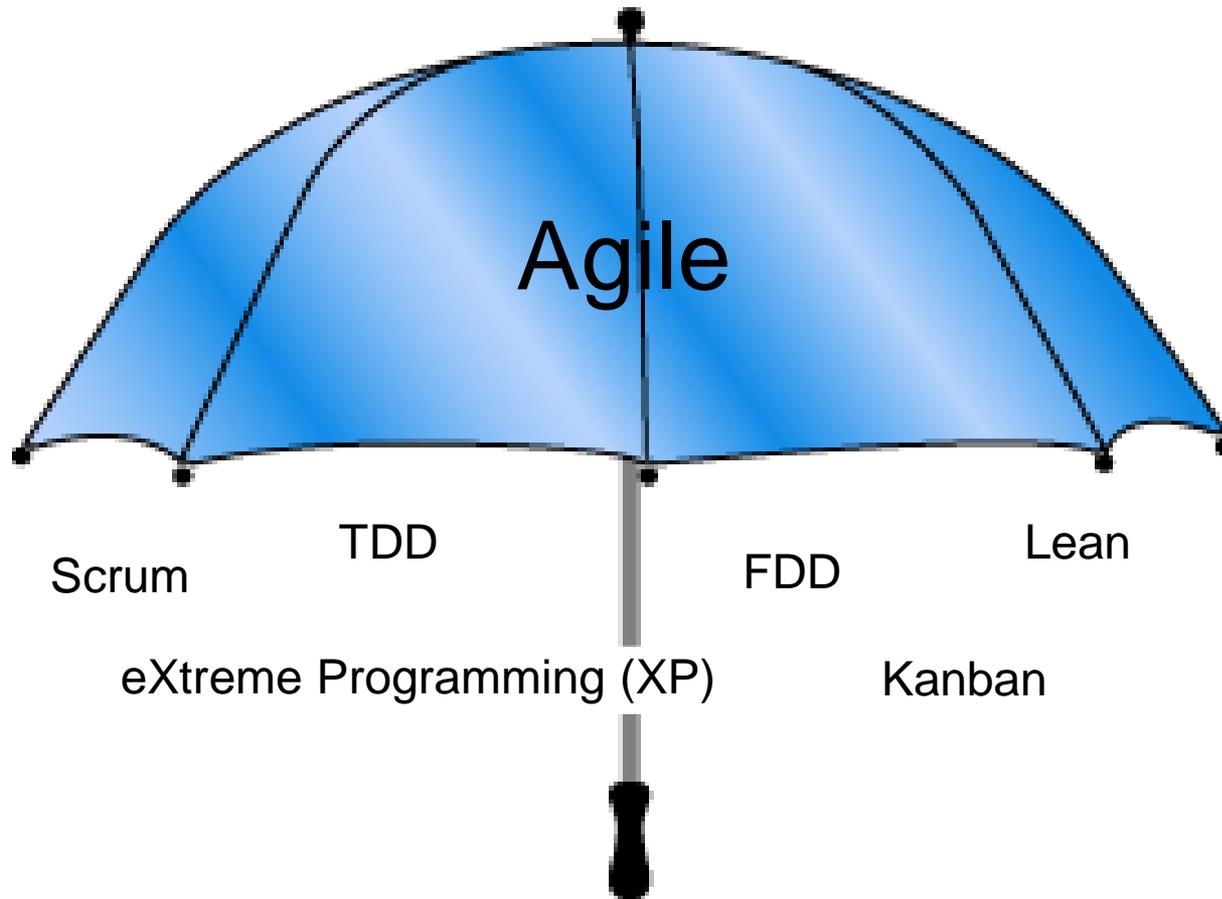
- Working software is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.
- Simplicity--the art of maximizing the amount of work not done--is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

# Is this really Agile?

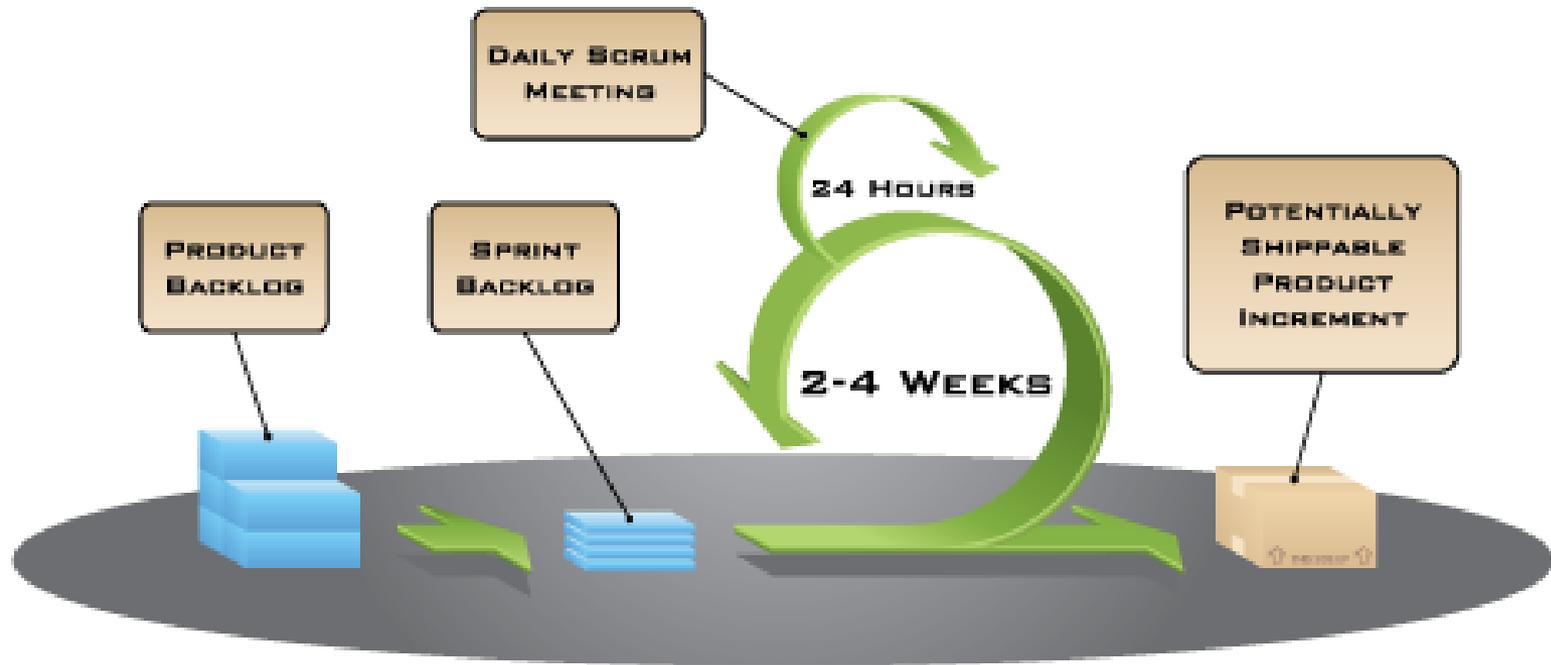


© Scott Adams, Inc./Dist. by UFS, Inc.

# Agile <> Scrum, but Scrum = Agile



# Scrum Overview



COPYRIGHT © 2005, MOUNTAIN GOAT SOFTWARE

# Scrum Attributes

- Self-organizing, cross-functional teams
- Work is structured into 2 – 4 week long timeboxes
- Requirements are described as individual work items in a product backlog
- Team determines how to code the work items to meet the requirement specifications – no specific practices are prescribed
- Teams collaborate to solve problems transparently and everyone is involved in all steps of the process

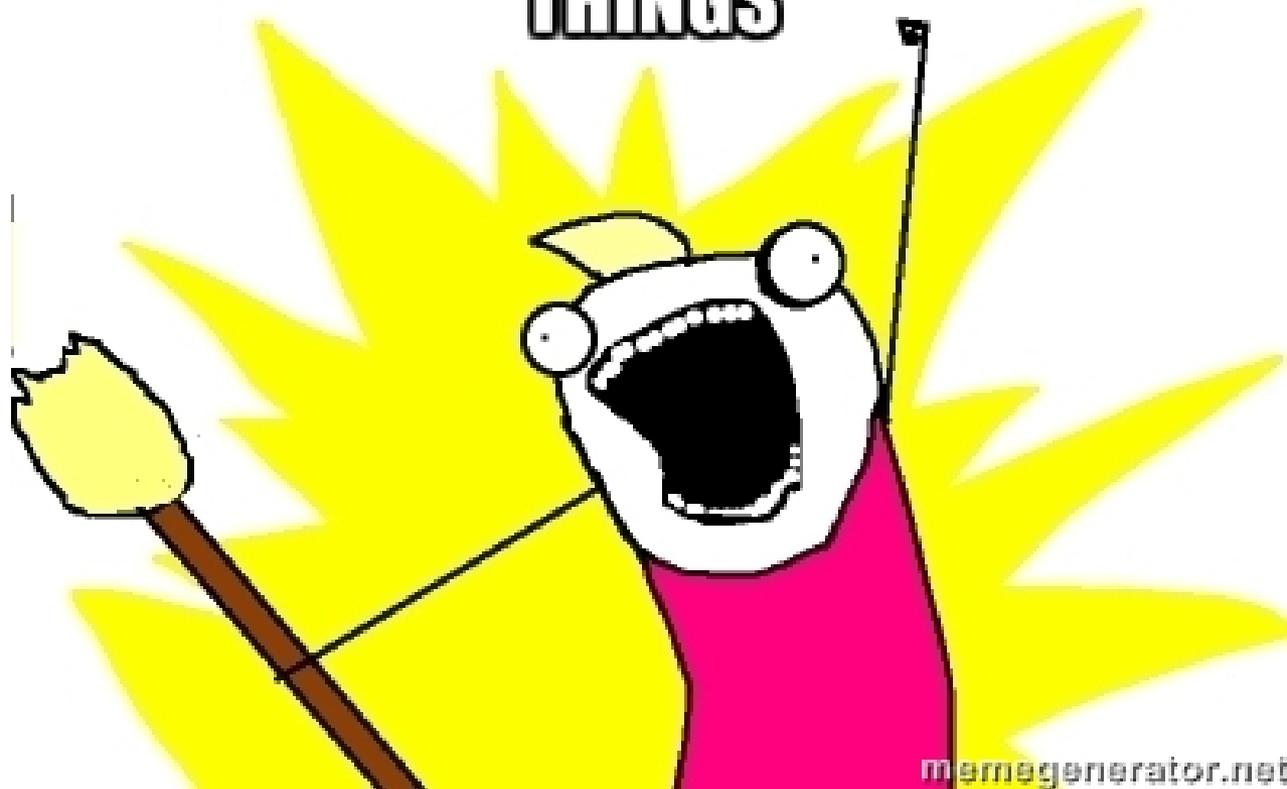


# Sprints

- Scrum projects progress in a series of “sprints”
- Typical cadence is 2–4 weeks
- A constant cadence leads to predictability
- Work items are designed, coded, and tested during the sprint
- Team “commits” to the work they will complete during the sprint timebox
- The goal of this is no carry-over work to the following sprint and working tested work items that are production-ready and shippable

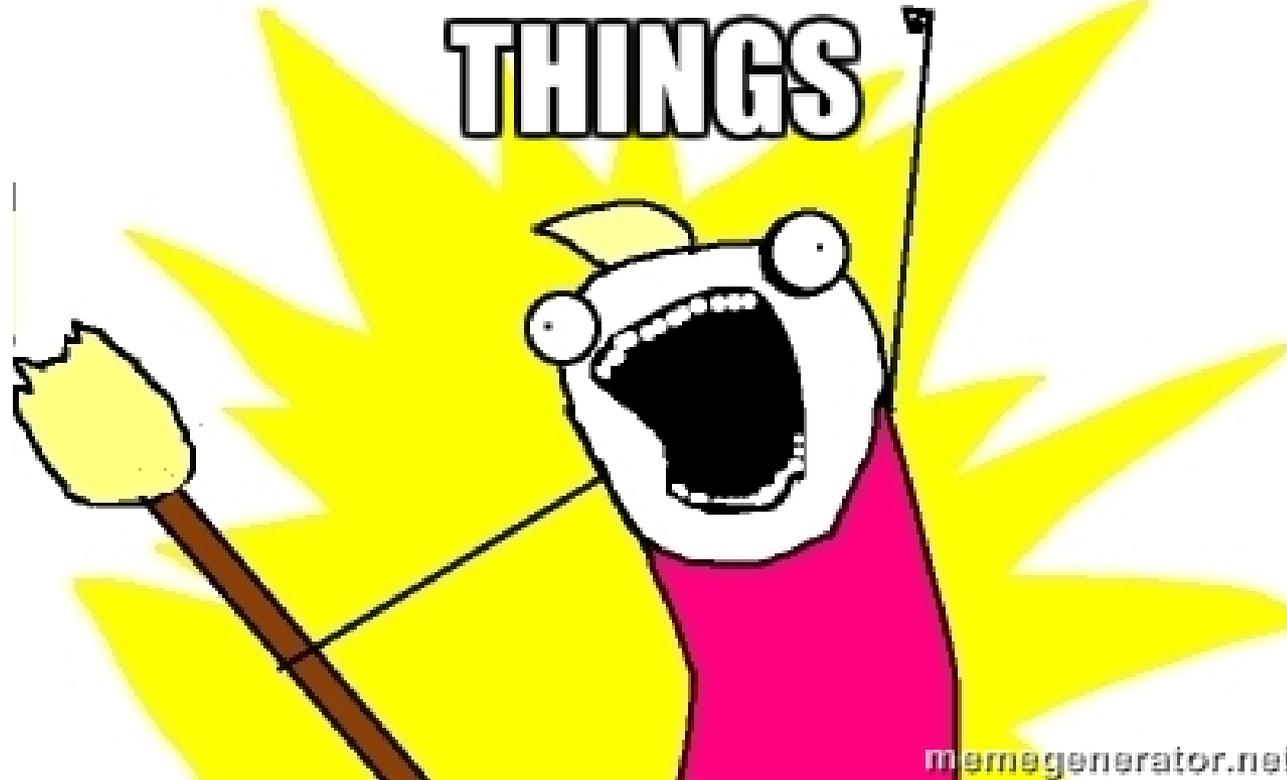
# Waterfall Process

**GATHER REQUIREMENTS FOR ALL THE THINGS**



# Waterfall Process

**DESIGN ALL THE THINGS**



# Waterfall Process

**CODE ALL THE THINGS**



# Waterfall Process

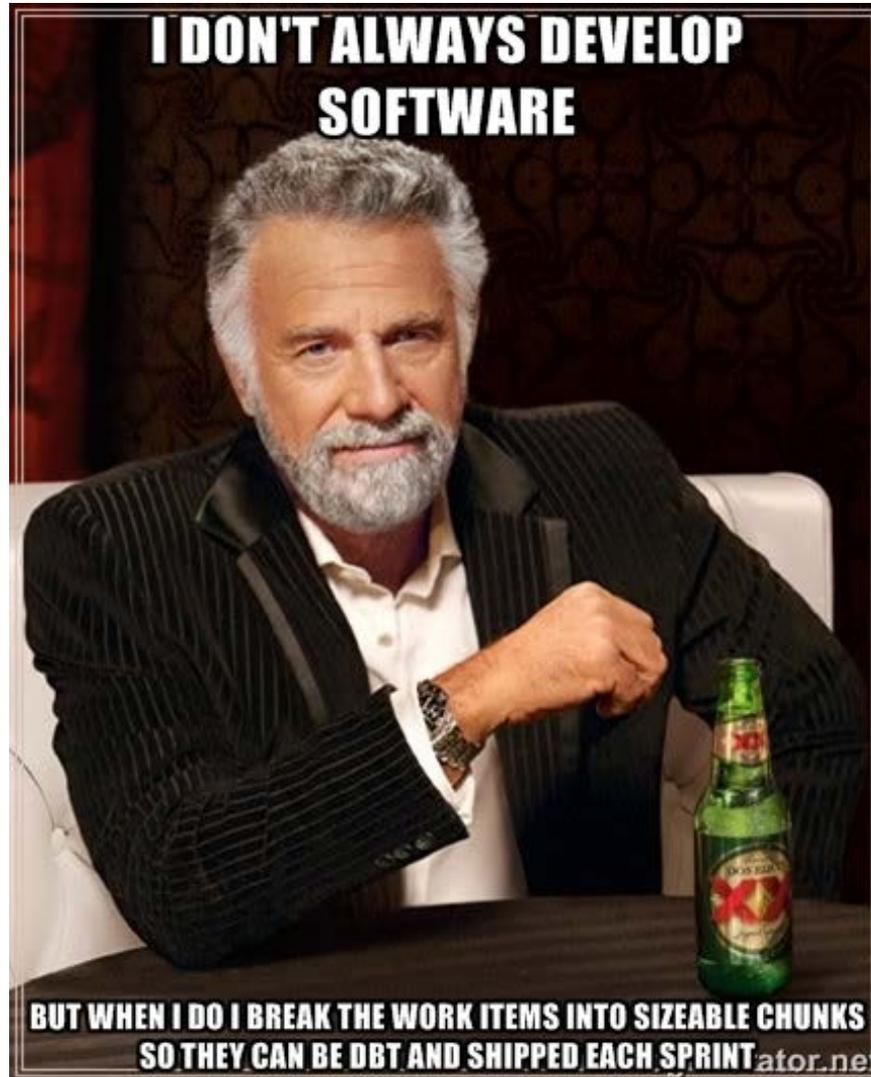
**TEST ALL THE THINGS?**



**P.S. THERE'S A SCOPE CHANGE...**

memegenerator.net

# Scrum Development



# To change or not to change scope during a sprint

When to add items to a sprint:

- A) Never
- B) When scope changes
- C) When vital production issues come up
- D) When the team runs out of things to do

When to remove items from a sprint:

- A) When we estimated incorrectly
- B) When scope changes
- C) When an item is not going to be finished
- D) Never

# Scrum framework

## Roles

- Product Owner
- ScrumMaster
- Team

## Ceremonies

- Sprint planning
- Backlog grooming/refinement
- Sprint review
- Sprint retrospective
- Daily scrum

## Artifacts

- Product backlog
- Sprint backlog
- Metrics

# Scrum framework

## Roles

- Product Owner
- ScrumMaster
- Team

## Ceremonies

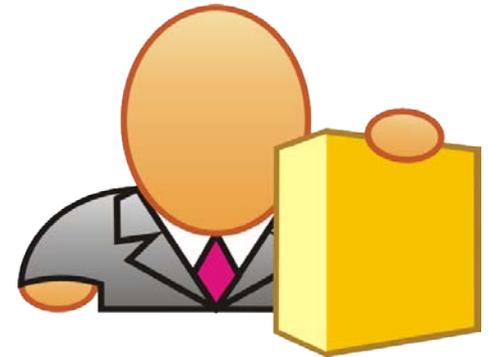
- Sprint planning
- Backlog grooming/refinement
- Sprint review
- Sprint retrospective
- Daily scrum

## Artifacts

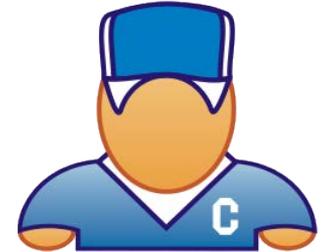
- Product backlog
- Sprint backlog
- Metrics

# Product owner

- Define the features of the product
- Decide on release date and content
- Be responsible for the profitability of the product (ROI)
- Prioritize features according to market value and risk
- Adjust features and priority every sprint, as needed
- Accept or reject work item results



# The ScrumMaster



- Represents coaching to the project (not a manager)
- Responsible for enacting, enabling, and reinforcing Scrum values and practices
- Removes impediments/blockers for the team
- Ensure that the team is fully functional and productive
- Enable close cooperation across all roles, functions, and other teams
- Protect the team from external interferences
- Servant leader

# The team

- Typically 5-9 people
- Teams are self-organizing
  - Ideally, no titles but rarely a possibility
- Cross-functional:
  - Programmers, testers, user experience designers, etc.
- Members should be full-time on each team
  - May be exceptions (e.g., database administrator)
- Membership should change only between sprints
- Each team is unique, teams should not be compared



# Scrum framework

## Roles

- Product Owner
- ScrumMaster
- Team

## Ceremonies

- Sprint planning
- Backlog grooming/refinement
- Sprint review
- Sprint retrospective
- Daily scrum

## Artifacts

- Product backlog
- Sprint backlog
- Metrics

# Sprint planning meeting

- Set sprint goals and determine how to achieve
- Break work items into sizable tasks (hours) that can be completed quickly in a sprint (1-3 days) from product backlog into sprint backlog
- Use previous velocity of team (amount of work they average completing within sprint timebox) to plan and **commit** to work
- Team volunteers for tasks – is not assigned
- This is done by the team, not the ScrumMaster

As a vacation planner,  
I want to see photos  
of the hotels.



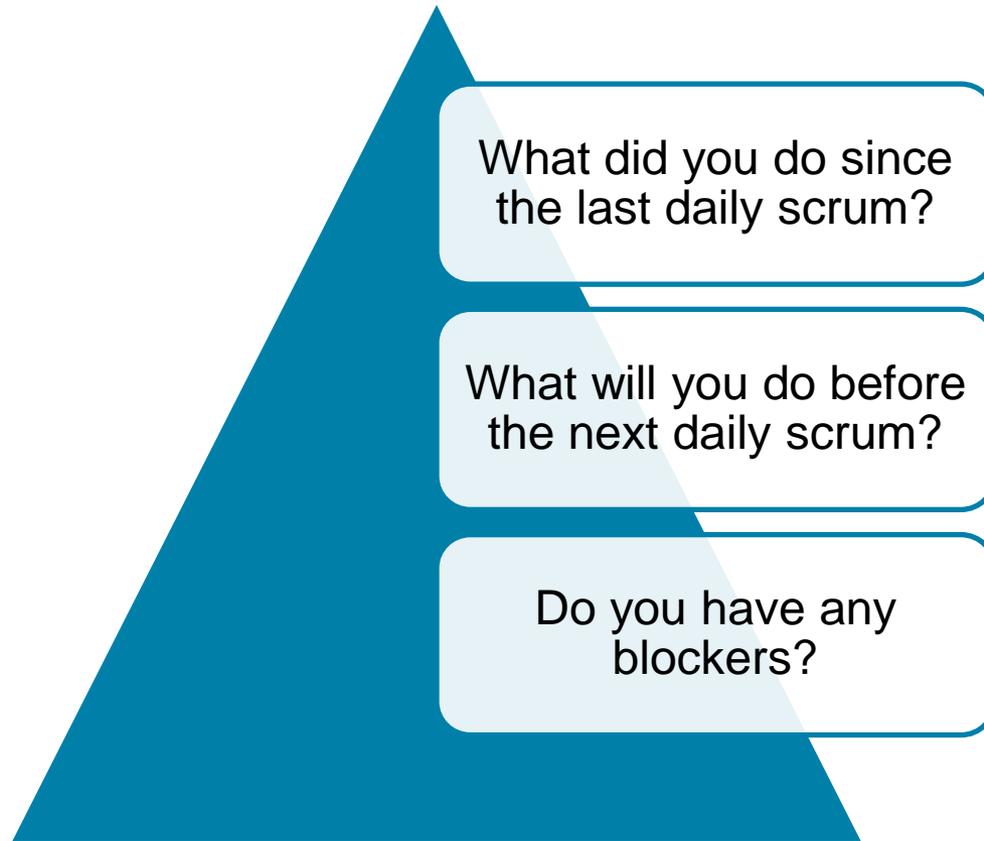
Code the middle tier (8 hours)  
Code the user interface (4)  
Write test fixtures (4)  
Code the foo class (6)  
Update performance tests (4)

# The daily scrum

- Requirements
  - Daily
  - 15 minute timebox
  - Stand-up!
- Not for problem solving
  - Whole world is invited
  - Only team members, ScrumMaster, product owner, can talk
- Helps avoid other unnecessary meetings
- 16<sup>th</sup> minute



# Everyone answers 3 questions



- These are *not* status for the ScrumMaster
  - They are daily commitments in front of team

# Backlog grooming/refinement

- The whole team or team leads, PO and SM groom the backlog as often as needed
  - 2 hours per week is recommended
- Add details to stories, make stories smaller, estimate effort (story points)
- Re-prioritize based on business value, risk, and technical factors

# The sprint review

- Team presents what it accomplished during the sprint
- Typically takes the form of a demo of new features or underlying architecture
- Informal
  - 2-hour prep time rule
  - No slides
- Whole team participates
- Invite the world

# Sprint retrospective

- Periodically take a look at what is and is not working
  - Metrics
  - Team interactions
- Typically 60 minutes
- Done after **every** sprint
- Whole team participates
  - ScrumMaster
  - Product owner
  - Team
- What did we do well?
- What should we change?
- Action items (volunteer)



# Scrum framework

## Roles

- Product Owner
- ScrumMaster
- Team

## Ceremonies

- Sprint planning
- Backlog grooming/refinement
- Sprint review
- Sprint retrospective
- Daily scrum

## Artifacts

- Product backlog
- Sprint backlog
- Metrics

# Product backlog



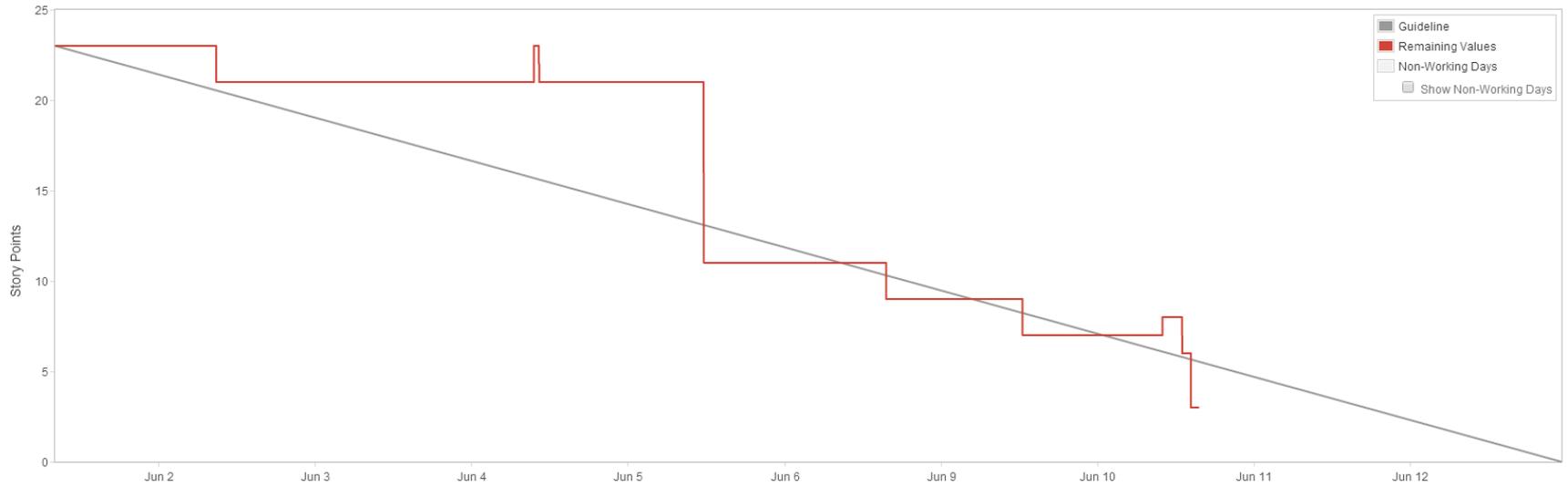
This is the  
product backlog

- The “requirements”
- A list of all desired work on the project
- Ideally expressed such that each item has value to the users or customers of the product
- Prioritized by the product owner
- Reprioritized at the start of each sprint
- Sized appropriately by the team
- Expressed so that conditions for acceptance are clear
- Refined weekly during backlog refinement/grooming



# A sprint burndown chart

Burndown Chart Team 1 14.3 Sprint 5 ▾



# Questions?

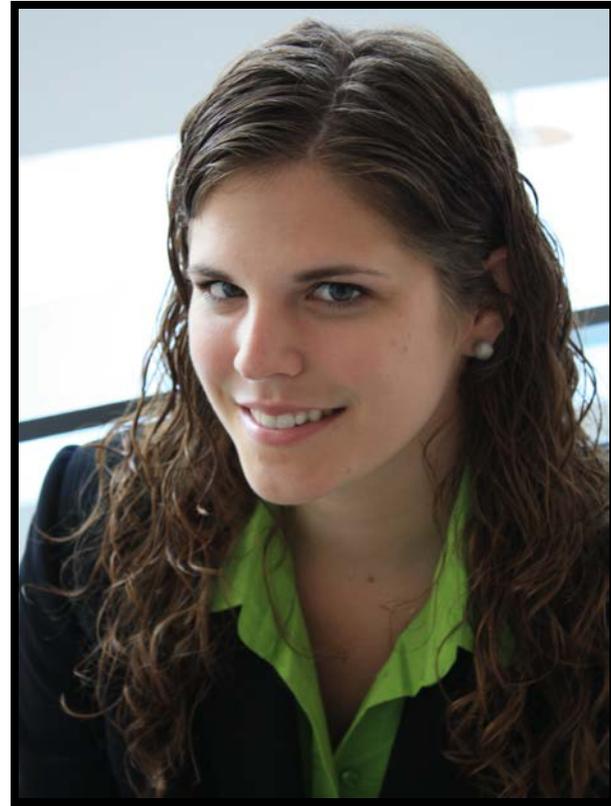


- Sources: Mountain Goat Software, Agile Manifesto

# Thank you!

## ■ Contact

- Web: [www.nataliewarnert.com](http://www.nataliewarnert.com)
- Twitter: @nataliewarnert
- Email: [info@nataliewarnert.com](mailto:info@nataliewarnert.com)
- LinkedIn
- Google+



# Agile Development Example Video

- [Nordstrom Innovation Labs](#)