

# The 'Agile Movement'

An introduction to  
agile software development





# The 'Agile Movement'

*An introduction to agile software development*

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# Agenda

Who are we?

Waterfall vs Agile  
The Agile lifecycle

The Agile team  
Agile meetings & events

Become more Agile today!



# Who are we?

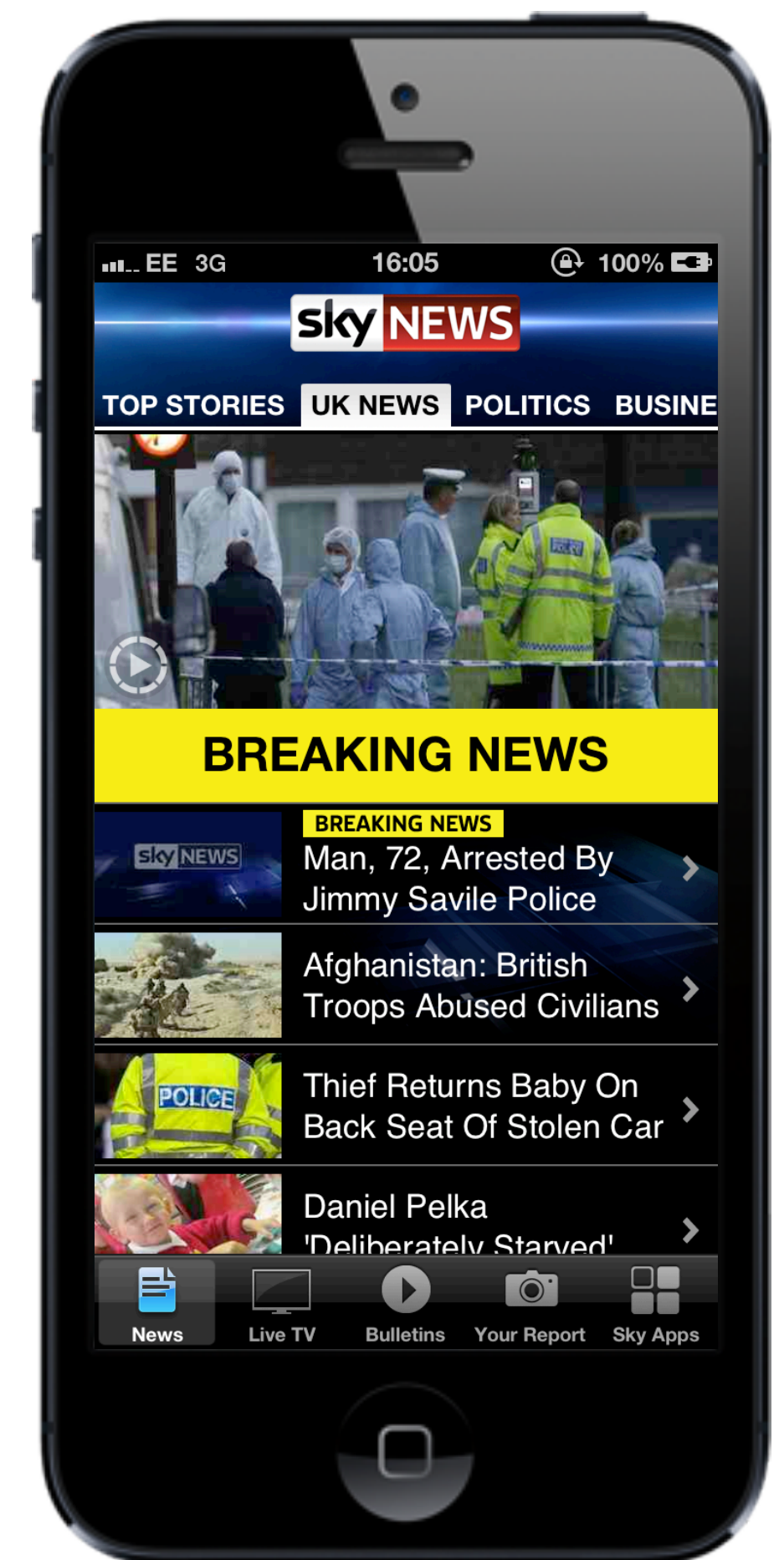


# British Sky Broadcasting

Who are we?  
BSkyB

1

- Provide TV, Phone, Broadband, Mobile Apps and IPTV
- Over 11 million customers
- Agile development using Java, PHP, Ruby, Objective C & Python





# Product and Offer Management

Who are we?  
POM

2

Product catalogue service within Sky's Sales platform

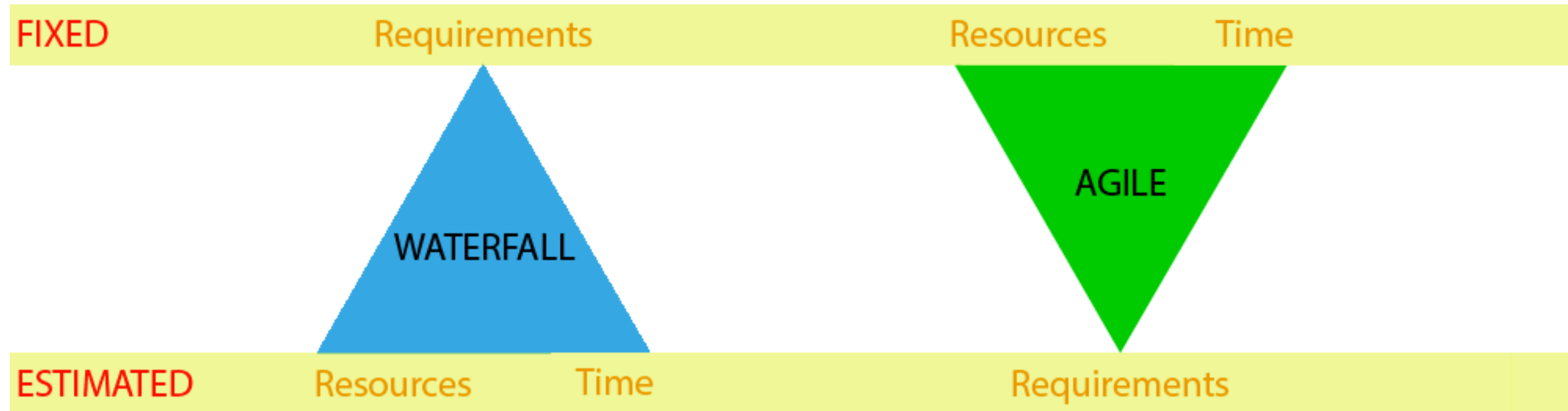
- Rest API using **Flask**
- Testing with **Nose**, **Freshen**, **Coverage** & **Pylint**
- **Paver** for build, test and deployment scripting





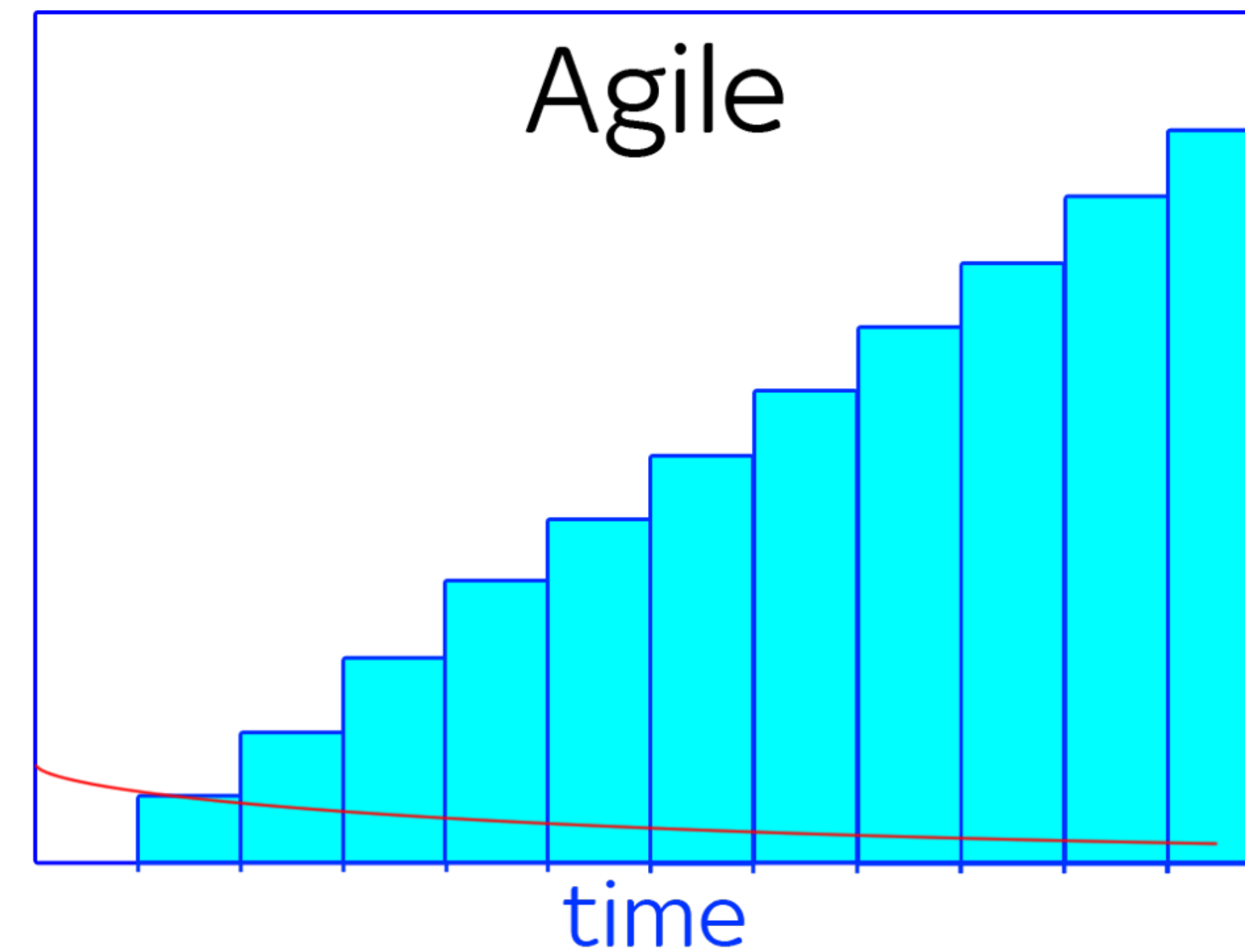
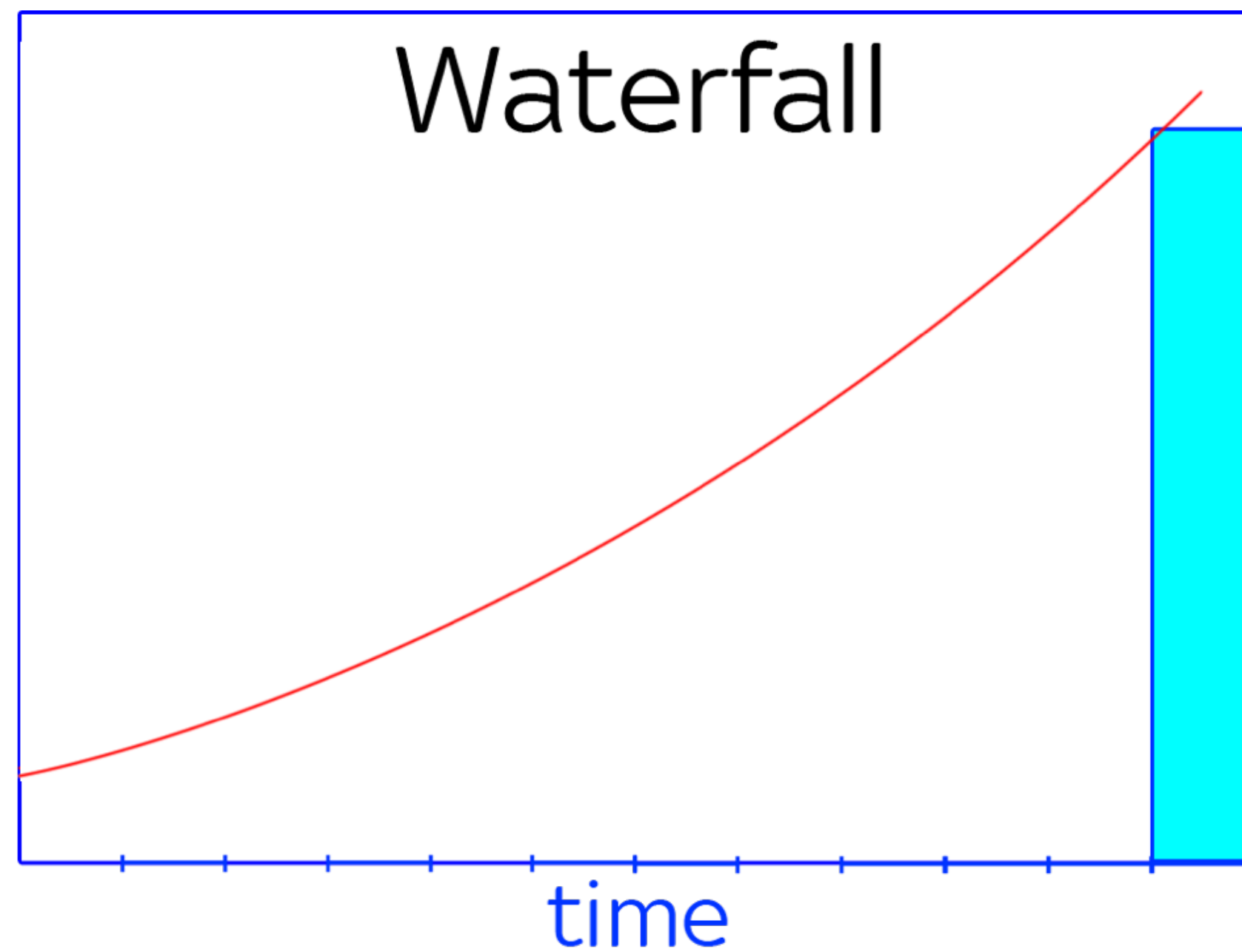
# Waterfall vs Agile

# Waterfall vs Agile





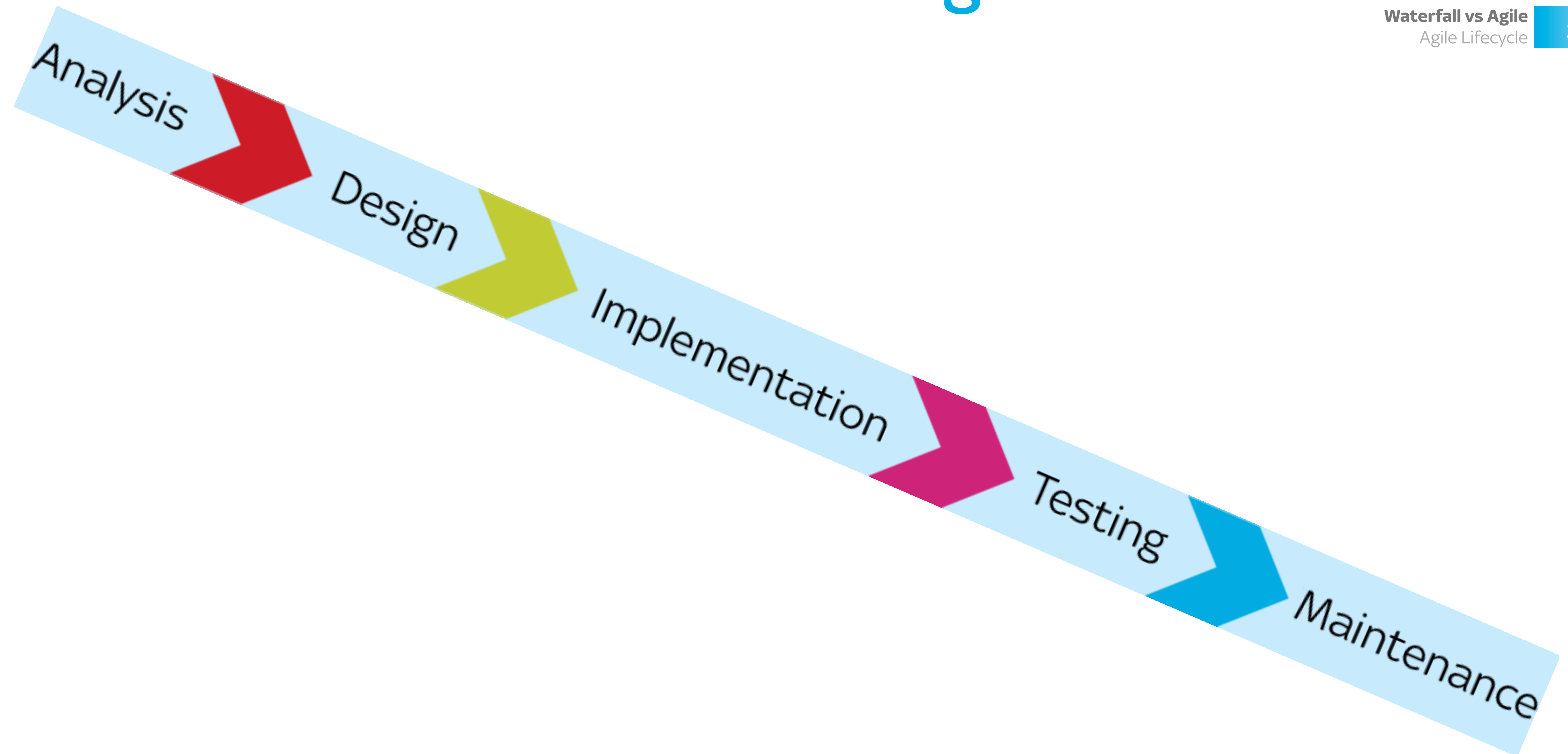
# Waterfall vs Agile



- Features delivered
- Risk of failure



# Waterfall vs Agile

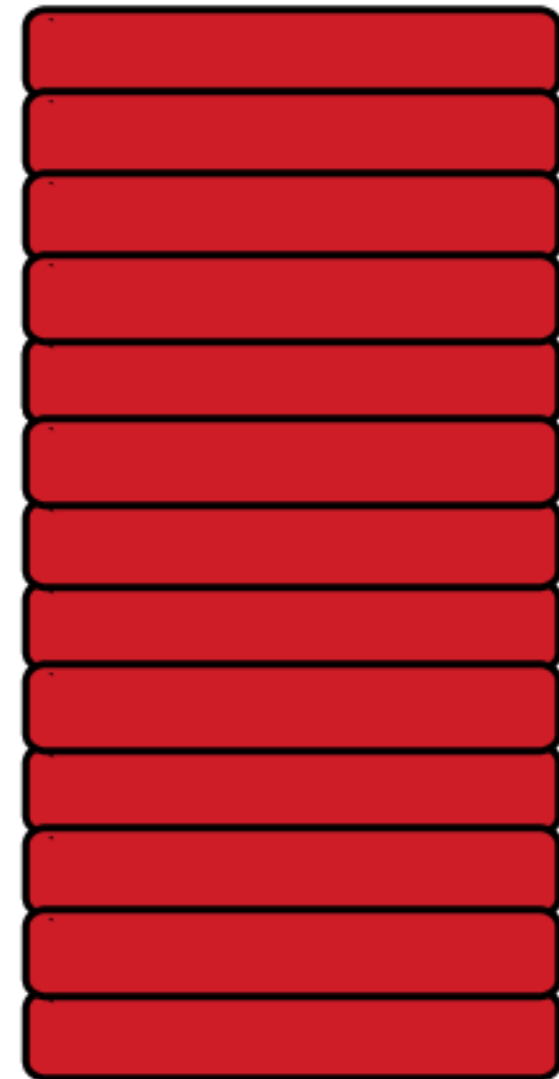




# The Agile Lifecycle

## Sprint

Entire project  
broken down  
in to tasks, known  
as 'story cards'

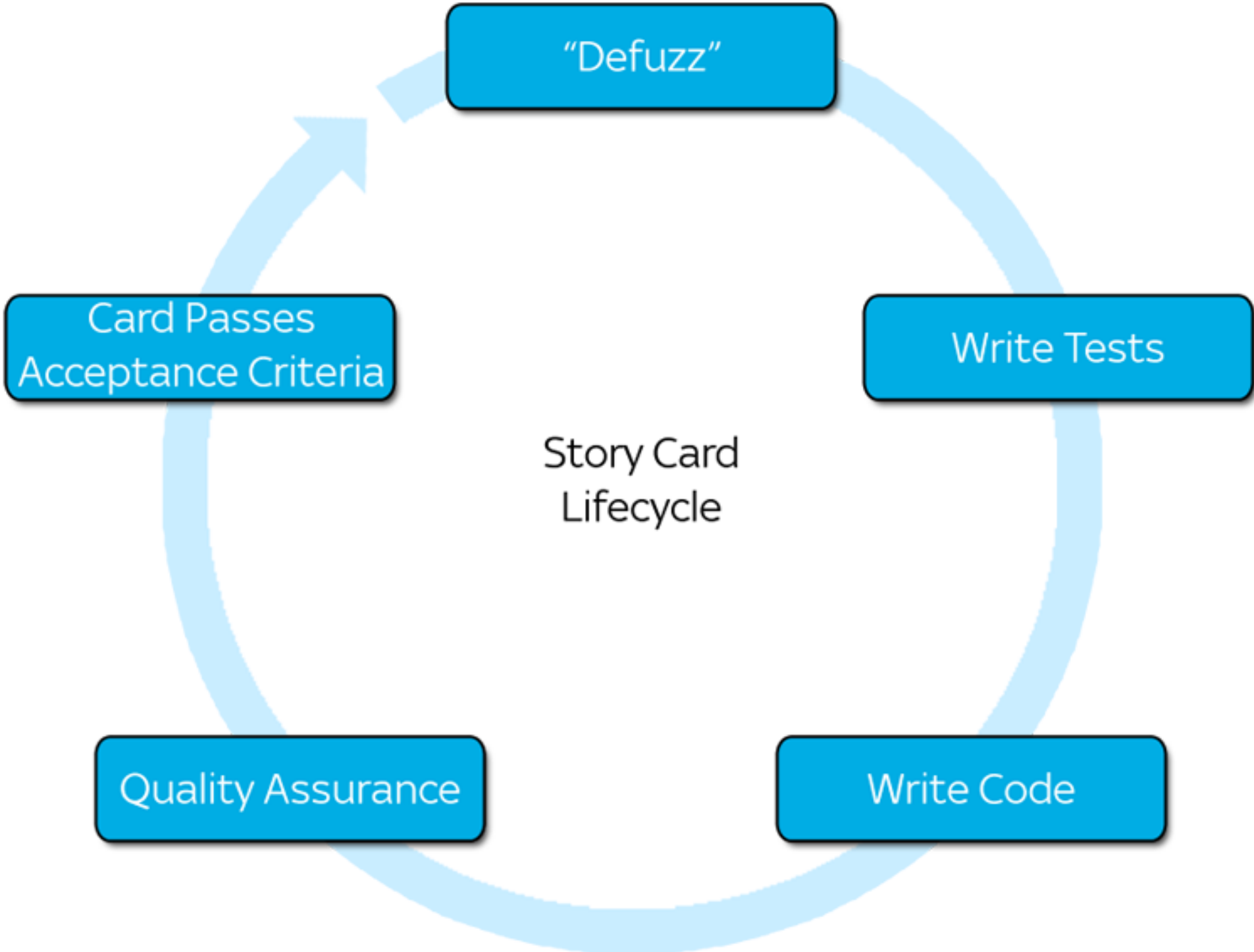


Product  
Backlog

Plan which  
story cards  
can be delivered  
this sprint



Sprint  
Backlog



ITERATIVE - QUALITY



# Agile comes in many flavours

Dynamic Systems Development Method (DSDM)  
Scrumban  
Agile Modelling  
Scrum/XP Hybrid  
Kanban Lean  
Scrum  
Custom Hybrid Agile Unified Process  
Feature Driven Development  
Extreme Programming (XP)





# The Agile Manifesto

“We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

**Individuals and interactions** over processes and tools  
**Working software** over comprehensive documentation  
**Customer collaboration** over contract negotiation  
**Responding to change** over following a plan

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

- 2001 Agile Manifesto



# Our Agile Team



# Our Agile Team



Scrum Master



Analyst



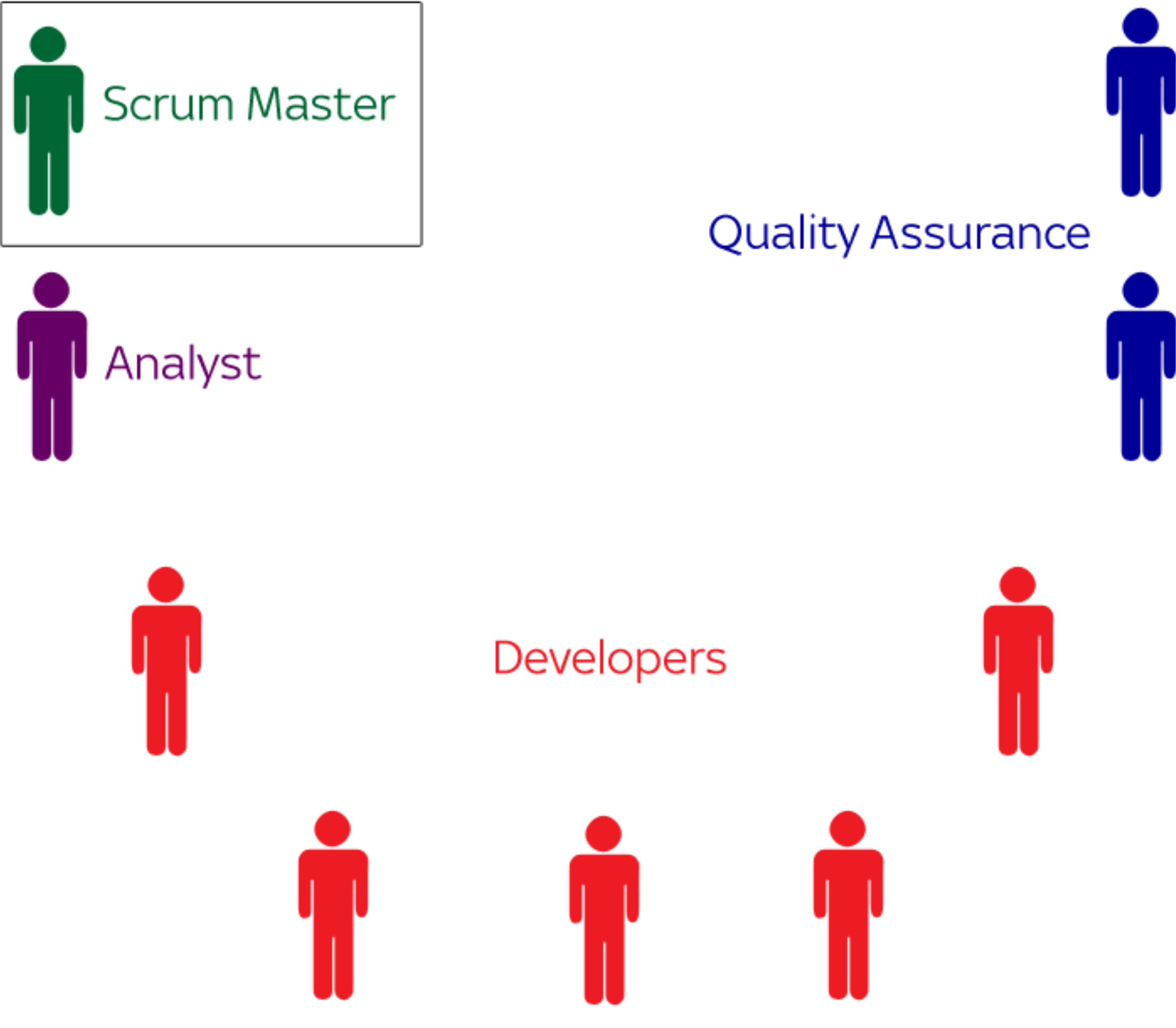
Quality Assurance



Developers



# Scrum Master



# Analyst



Scrum Master



Analyst

Quality Assurance



Developers





# Quality Assurance

Our Agile Team  
QA

12



Scrum Master



Analyst

Quality Assurance



Developers



# The Agile Lifecycle

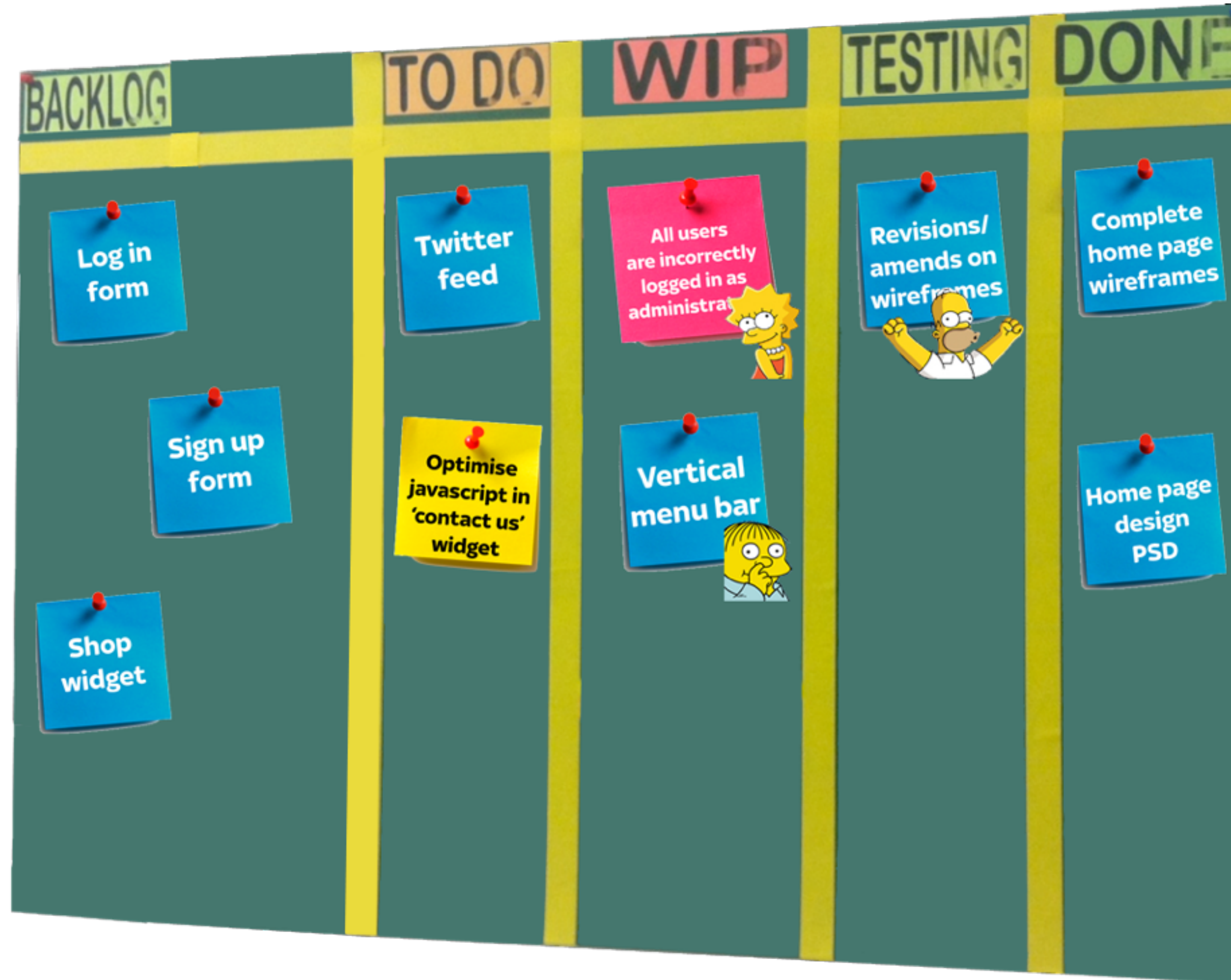


# The Scrum Board

STORY  
CARD

TECHNICAL  
DEBT

DEFECT



COMMUNICATION - COLLABORATION





# The Scrum Board

The screenshot shows a Trello board titled "EuroPython 2013 Example" with a sub-header "First Impressions" and a toggle for "Org Visible". The board is organized into five columns:

- Product Backlog:** Contains two cards. The top card is a "Sign up form" with a checklist of form fields (Email, Password, Confirm Password, etc.) and a "1" icon. The bottom card is a "Log in form" with fields for Email and Password, a "Remember Me" checkbox, and a "Log In" button, with a "1" icon.
- Sprint Backlog:** Contains one card, "Shop widget", which features a shopping basket icon and a "2" icon.
- In Progress:** Contains two cards. The top card is "Vertical menu bar" with a navigation menu (Home, Register, Browse Artists) and a "4" icon. The bottom card is "Twitter feed" with a Twitter logo and a "1" icon.
- QA:** Contains one card, "Revisions and amends on wireframes", which shows a table of revisions with columns for status, priority, and assignee, and a "1" icon.
- Done:** Contains two cards. The top card is "Home page design PSD" with a large "Ps" logo and a "1" icon. The bottom card is "Complete home page wireframes" with a wireframe diagram and a "1" icon.

Each column has an "Add a card..." button at the bottom.

<http://www.trello.com>





# Daily Standup



**DAILY FEEDBACK - COLLABORATIVE**







# An Agile Month

August 2013

Agile Lifecycle  
An Agile Month

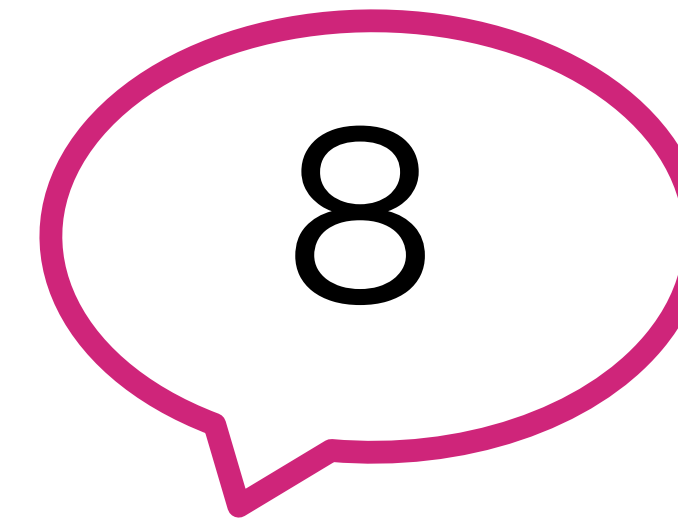
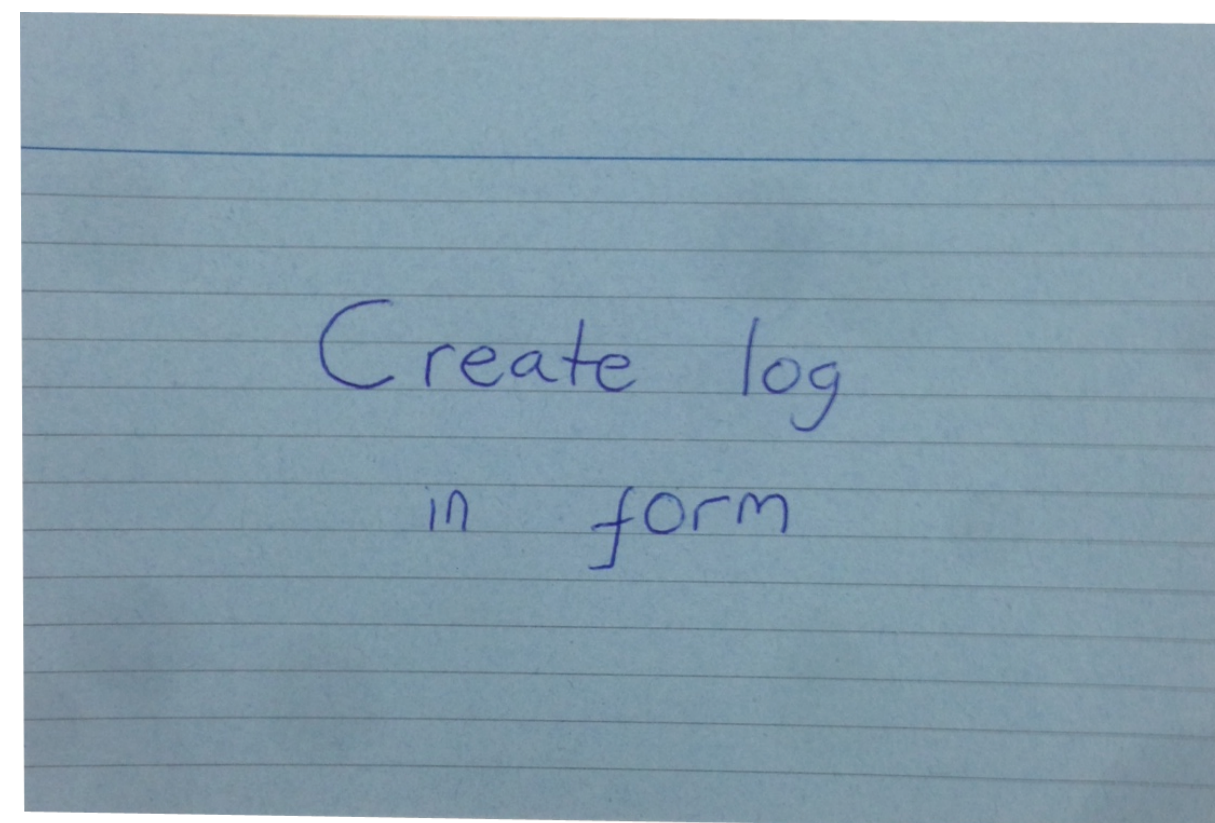
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		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1	2	3
Sprint 1		4	5	6	7	8	9	10
			 Planning Game					
		11	12	13	14	15	16	17
					Showcase	 Release	Retrospective	
Sprint 2		18	19	20	21	22	23	24
			 Planning Game					
		25	26	27	28	29	30	31
					Showcase	 Release	Retrospective	
				Notes:				





# Planning Games



*Argument ensues...*

## ACCURATE EFFORT APPROXIMATION









# Developing within an Agile team

- Development starts with a 'Defuzz'
- Test Driven Development
- Pair Programming (XP)



# Testing within an agile team

## Test driven development

### **Nose** and **unittest**

Nose extends unittest : a unit testing framework in the Python standard library

## Behaviour driven development

### **Freshen**

Cucumber clone for Python

Also see our EuroPython 2012 presentation “*BDD testing in Agile Development at BSkyB*”

## Deployment scripting

### **Paver**

Build & deployment scripting tool

RELIABILITY - QUALITY - AUTOMATION





# Showcases





# Retrospectives



WHAT  
WENT  
WRONG

WHAT  
WENT  
RIGHT

WHAT WE  
COULD  
IMPROVE

REVIEW - IMPROVE





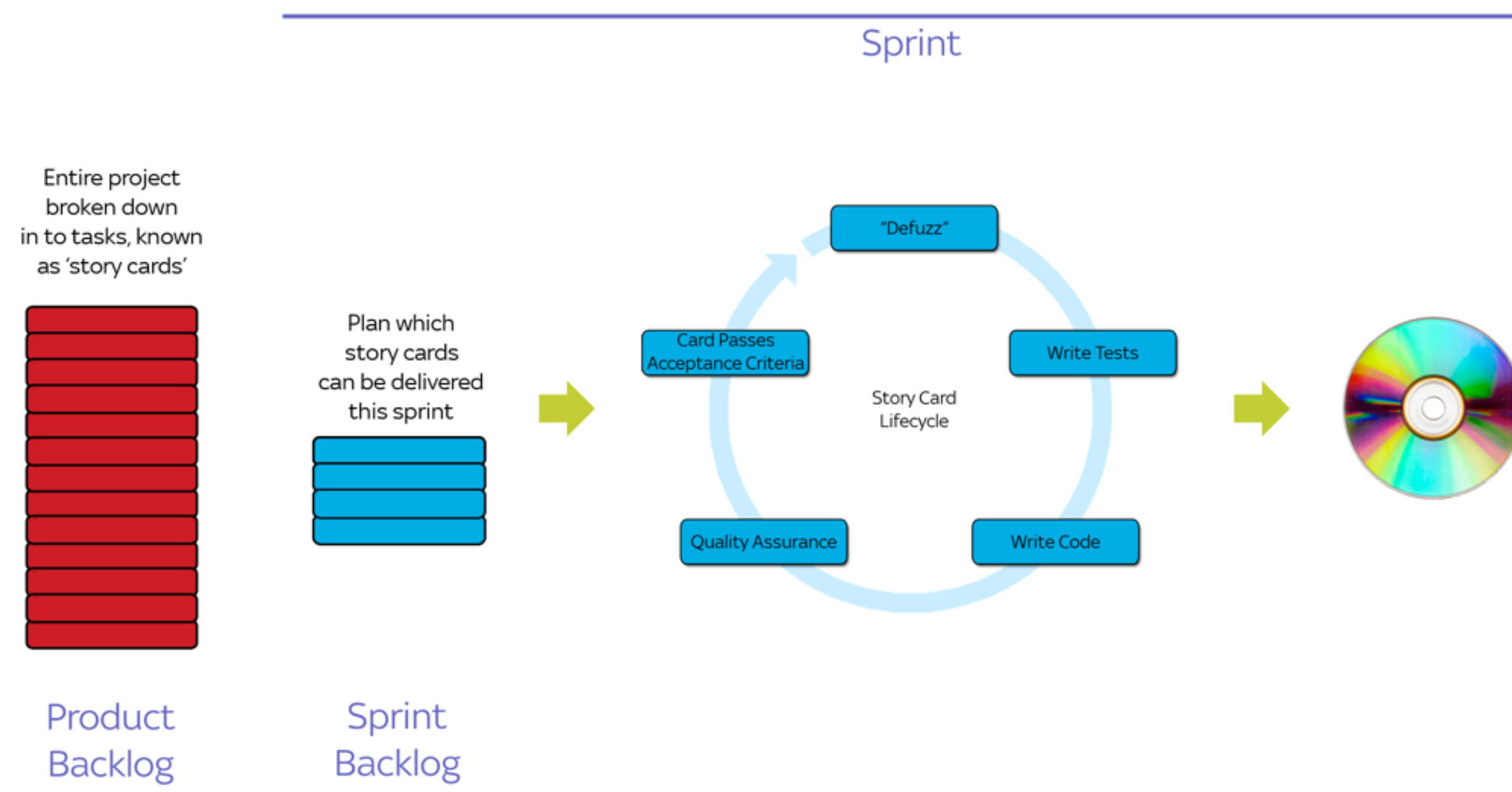
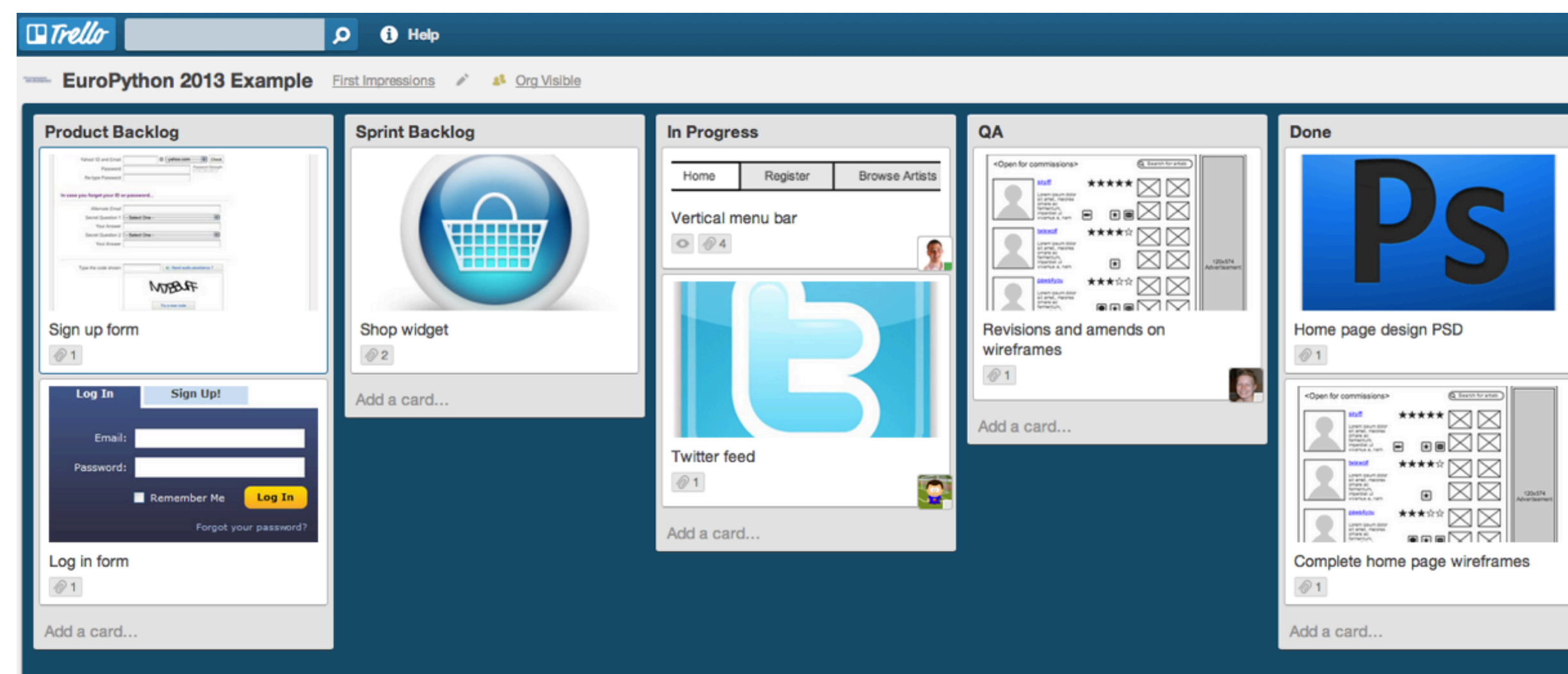
# DEMO



# DEMO

Become more *Agile* today!

# Set up an online scrum board







Break down your workload in to tasks





And adopt an Agile Lifecycle...

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2	3
Sprint 1	4	5  Planning Game	6	7	8	9	10
	11	12	13	14	15	16	17
				Showcase	 Release	Retrospective	
Sprint 2	18	19  Planning Game	20	21	22	23	24
	25	26	27	28	29	30	31
				Showcase	 Release	Retrospective	
			Notes:				

**Release** often

**Receive** frequent feedback

**React** to feedback quickly and efficiently

... Leading to **quality software**, **happier clients** and a **happier development team**!



# Q & A

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