



Agile Test Evolution: *Changing Test Strategy over time*

DSM Agile, Sept 9, 2016



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Agile Software Development: A Manifesto

We Follow These 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 a customer's competitive advantage

Deliver working software frequently, from a couple of weeks to a few months, with a preference to the shorter timescale.

Business people and developers must work together daily through the project.

Build projects around motivated individuals. Give them an 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.



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Scrum

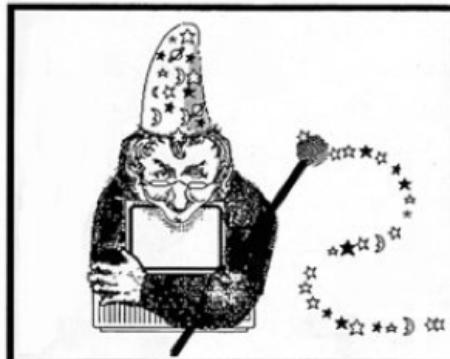
Agile Software
Development
with Scrum

red
yellow
green
blue
red
blue
yellow
green
blue

Color Test

Ken Schwaber ■■■ Mike Beedle

**Wicked Problems,
Righteous Solutions**



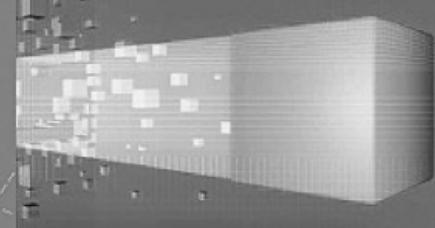
**A Catalogue of Modern
Software Engineering
Paradigms**

**Peter DeGrace
Leslie Hulet Stahl**

YOUNG UNPRESS COMPUTING SERIES

BEST PRACTICES

**AGILE PROJECT
MANAGEMENT
WITH SCRUM**



Ken Schwaber

Microsoft



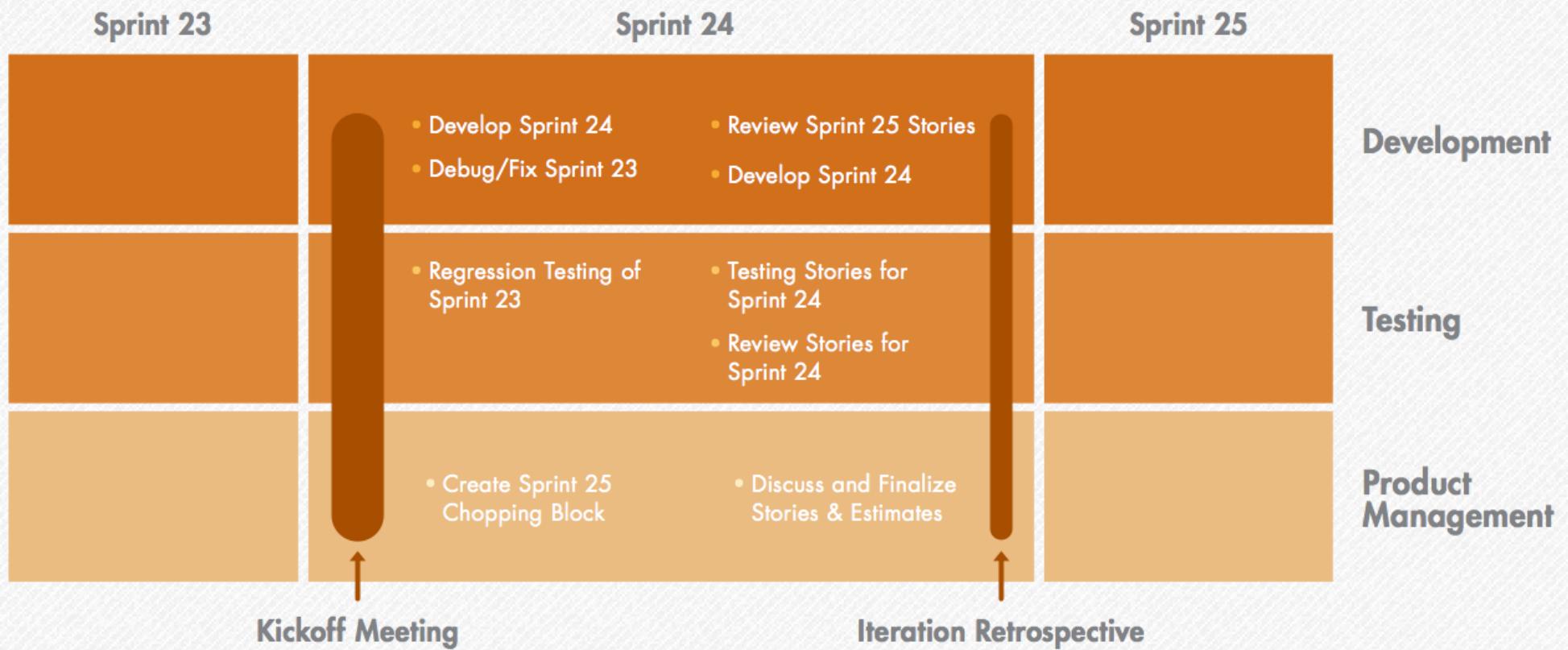
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The Flow Problem



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Scrum in Practice



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The Accordion Effect



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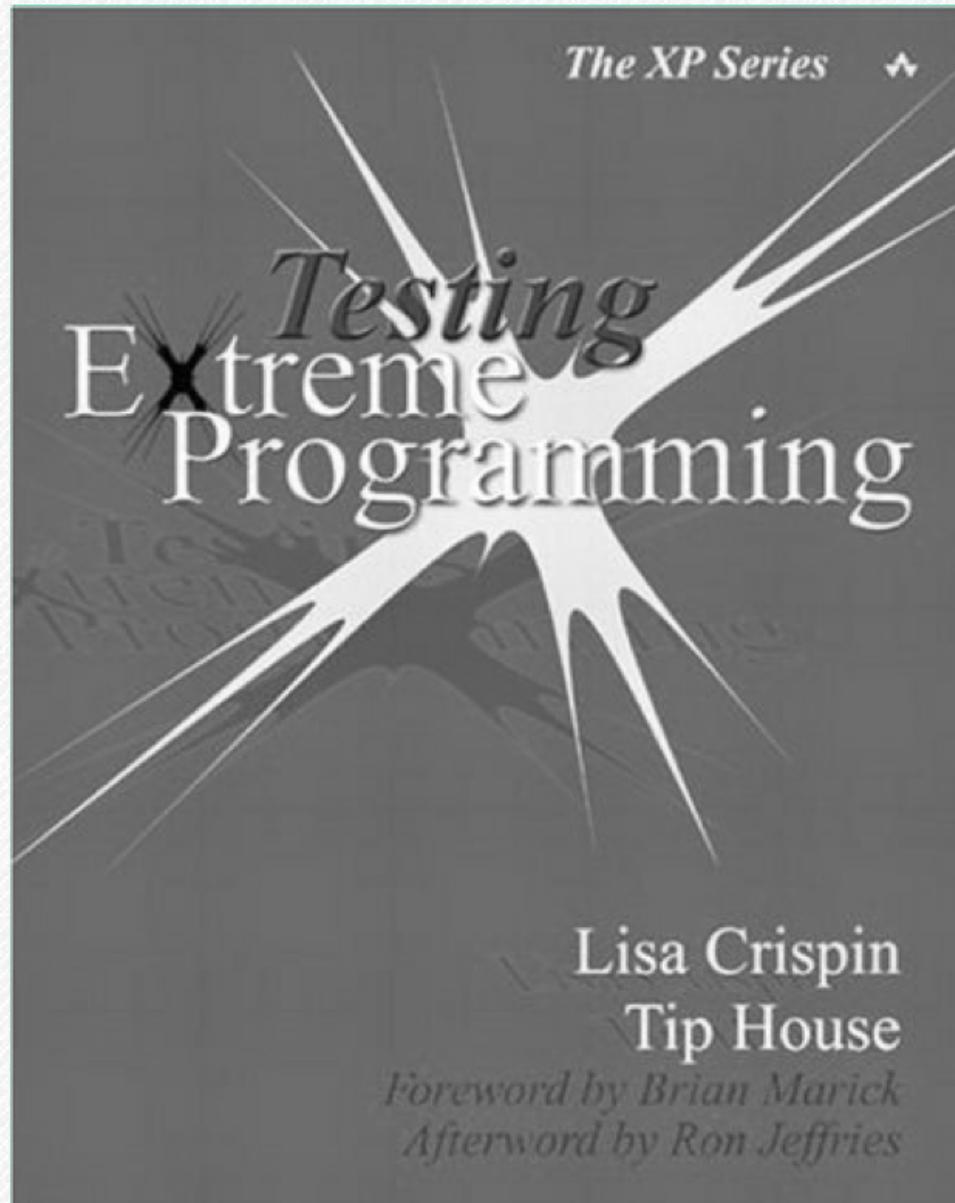
Failure Demand



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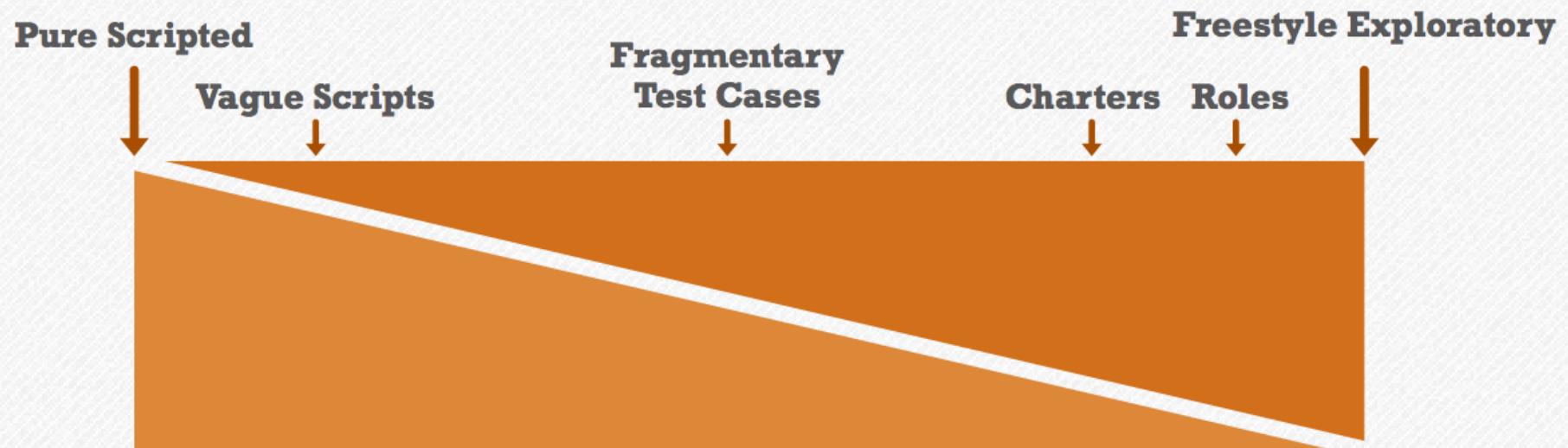


The First Set of Advice



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Heavy-Weight Scripts



Source: Jon Bach, "The Case Against Test Cases"



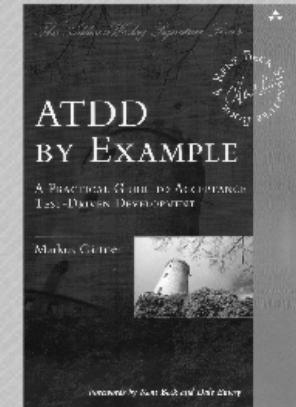
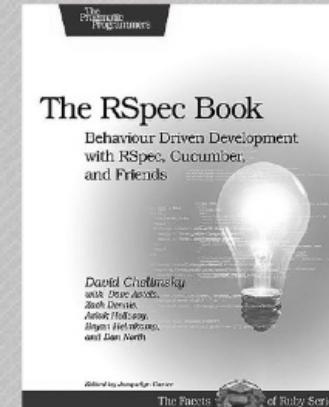
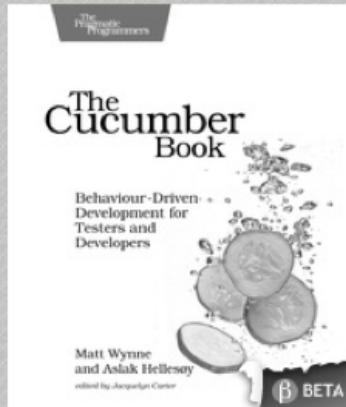
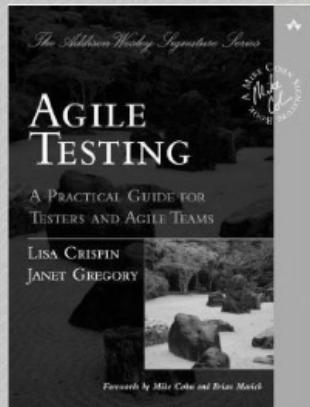
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ATDD, BDD, & The 3 Amigos



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Regression Test Strategy:

Check the API, Poke the GUI

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Regression Test Strategy:

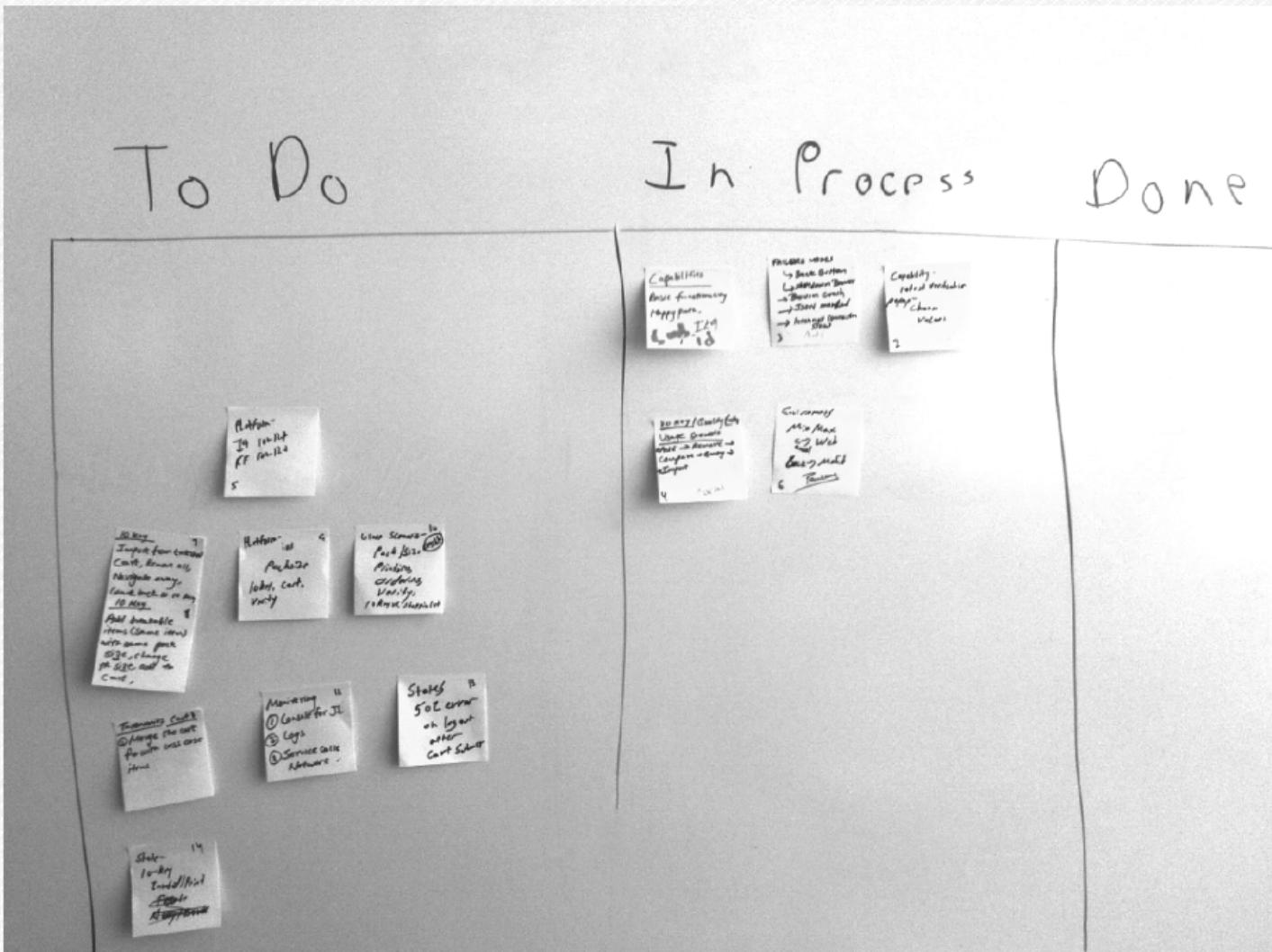
Low Tech Testing Dashboard

Features	IE 9	Webkit	iOS	Android
Order History Details	Q:7 C: 9(matt)	Q:6 C: 8 (Sreejit)	Q:7 C: 5 (Paurang)	Q:7 C: 5 (Paurang)
Order Summary	Q:9 C: 3 (matt)	Q:7 C: 5 (Sreejit)	Q:7 C: 7 Sandhya	Q:6 C: 6 (Paurang)
Order History Details	Q:6 C: 8 (Sreejit)	Q:6 C: 7 Arun	Q:7 C: 6 (Paurang)	Q:7 C: 6 (Paurang)
Delivery Status	Q:9 C: 6 (matt)	Q:8 C: 7 Arun	Q:7 C: 7 (Paurang)	Q:7 C: 7 (Paurang)
Cart Summary	Q:7 C: 5 (Sreejit)	Q:7 C: 7 Arun	Q:8 C: 7 (Paurang)	Q:8 C: 7 (Paurang)
Product Details	Q:6 C: 6 (subid)	Q:6 C: 6 (subid)	Q:8 C: 7 (Subid)	Q:8 C: 6(subid)
Home/Multilevel Address				
Delivery Address	Q:7 C: 5 (Sreejit)	Q:7 C: 5 (Sreejit)	Q:7 C: 5 (Paurang)	Q:5 C: 7 (Paurang)
Product To Purchase	Q:6 C: 8 (Sreejit)	Q:6 C: 7 Arun	Q:3 C: 7 (Paurang)	Q:3 C: 7 (Paurang)
Item Validation	Q:6 C: 6 (subid)	Q:6 C: 6 (subid)	Q:6 C: 6(subid)	Q:6 C: 6(Subid)
Pricing	Q:7 C: 8 Beth	Q:7 C: 8 Beth	Q:5 C: 7 (Paurang)	Q:5 C: 7 (Paurang)
Category	Q:8 C: 7Sandhya	Q:8 C: 7Sandhya	Q:7 C: 7 Sandhya	Q:8 C: 6(subid)
Product Details	Q:7 C: 5 (Sreejit)	Q:7 C: 5 Arun	Q:8 C: 8 (Paurang)	Q:8 C: 8 (Paurang)
Onsite Submitter Approver	Q:7 C: 1 (Subid)	Q:7 C: 1 (Subid)	Q:6 C: 6 (Paurang)	Q:6 C: 6 (Paurang)
User/Account Preferences	Q:3 C: 5(Sreejti)	Q:3 C: 5Arun	Q:2 C: 10 (Sandhya) Account Preference	Q:2 C: 10 (Paurang) Account Preference
Offline Mode	NA	NA	Q:9 C: 4 (Paurang)	Q:9 C: 4 (Paurang)



Regression Test Strategy:

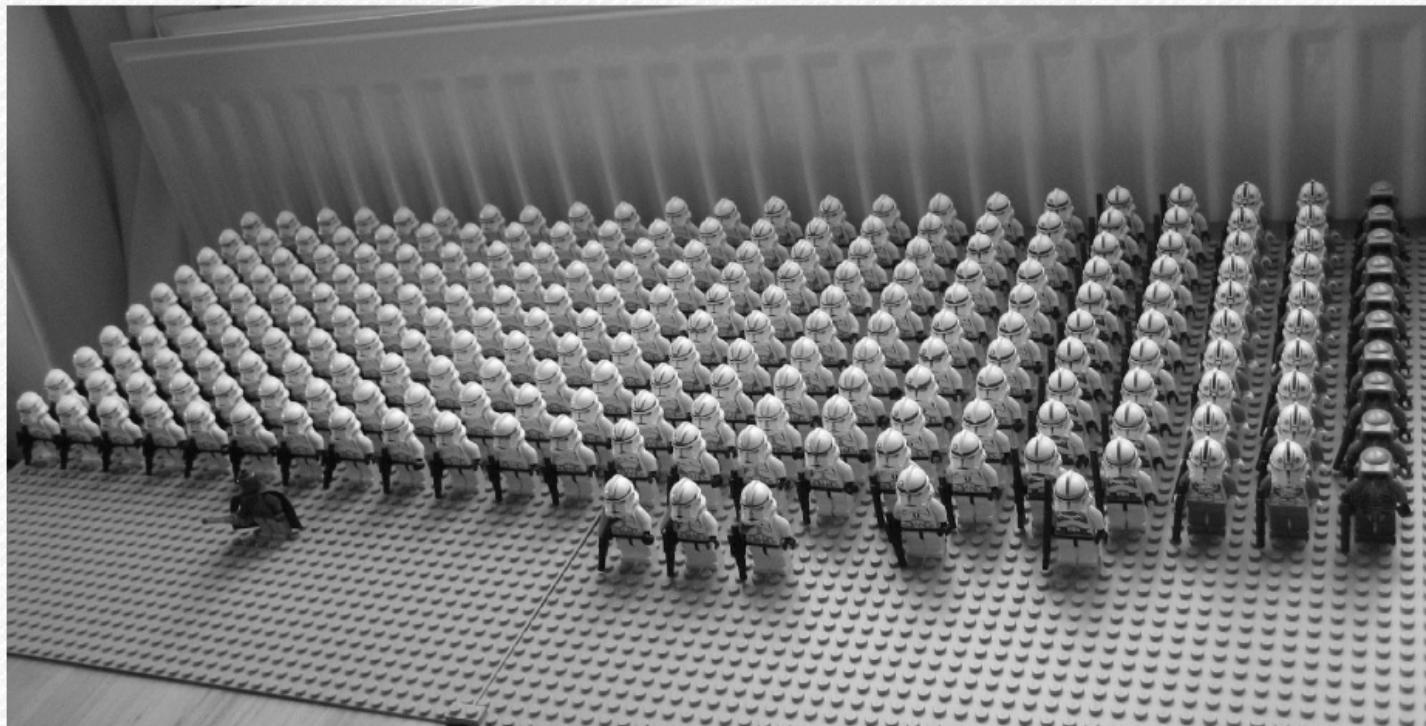
Customize Test Ideas for This Release



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Regression Test Strategy:

Massive Simultaneous Exploration



UTest



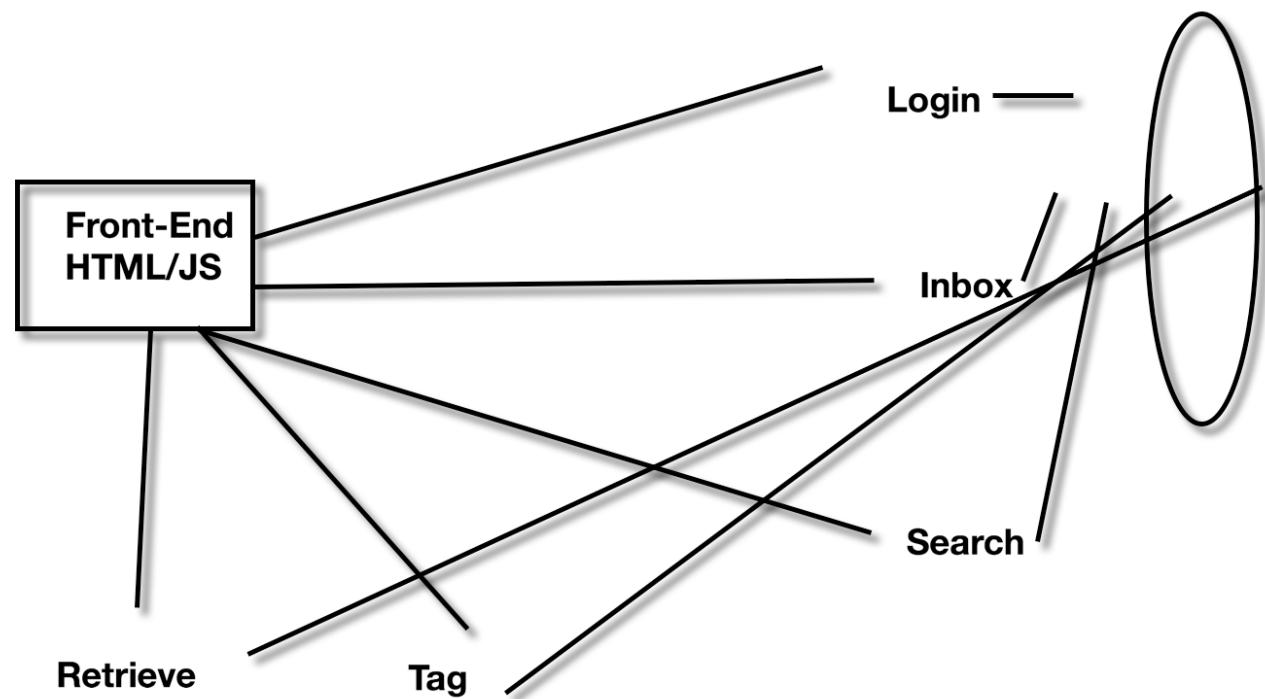
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Reduce Work In Progress



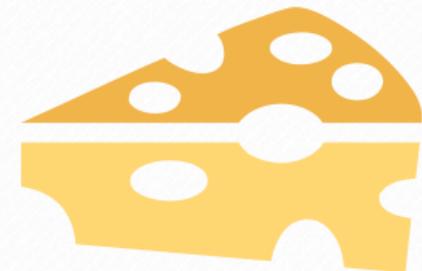
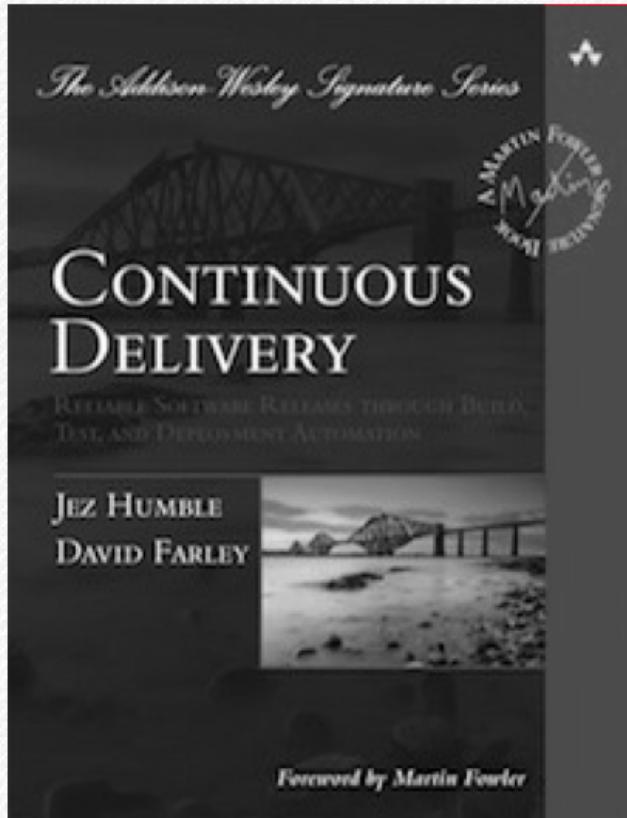
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Isolated Components



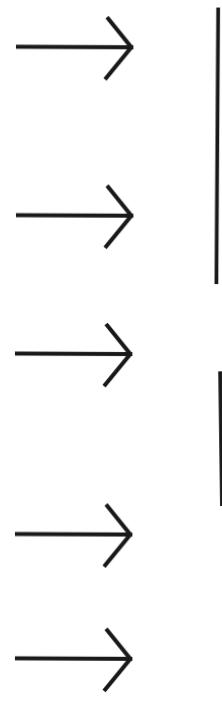
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Continuous Delivery



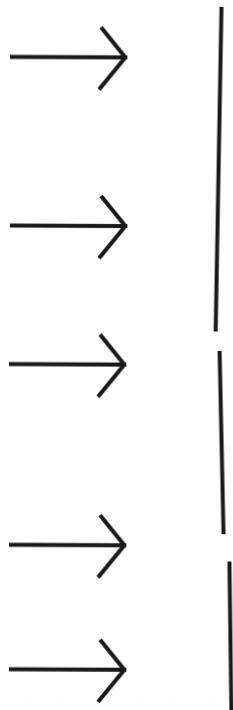
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The Swiss Cheese Model



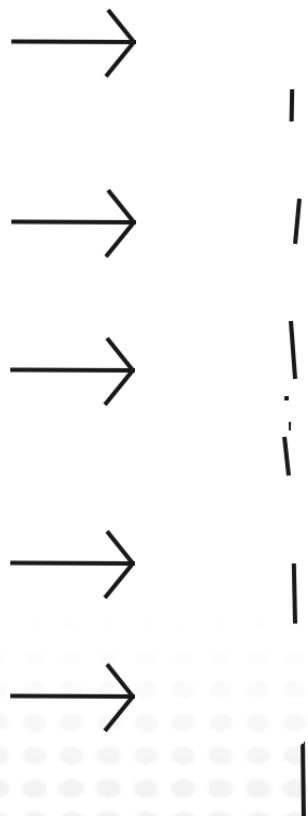
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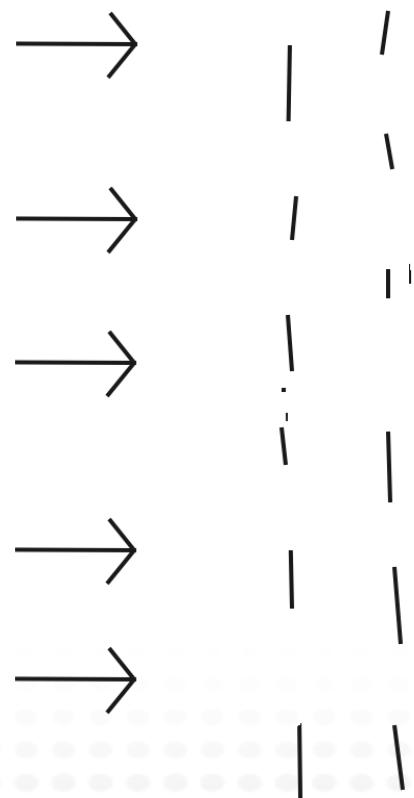
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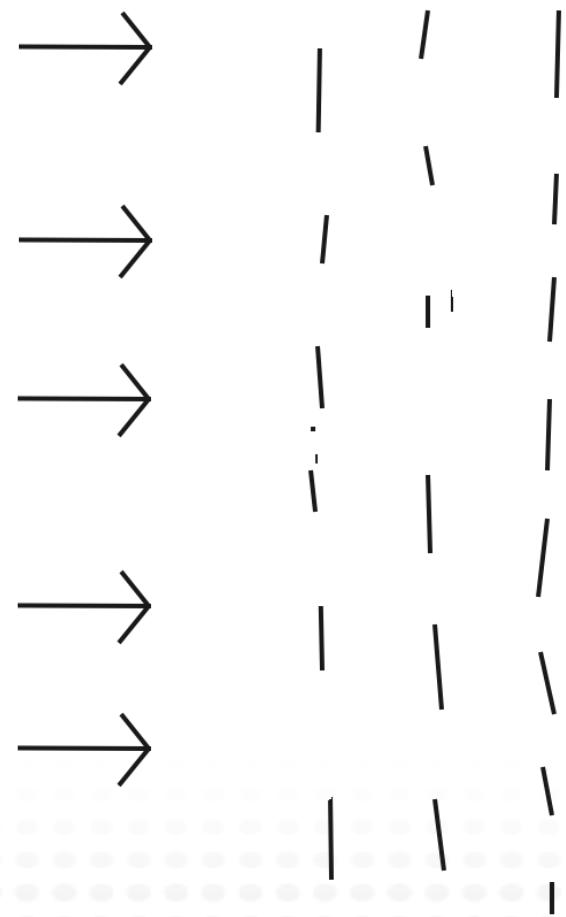
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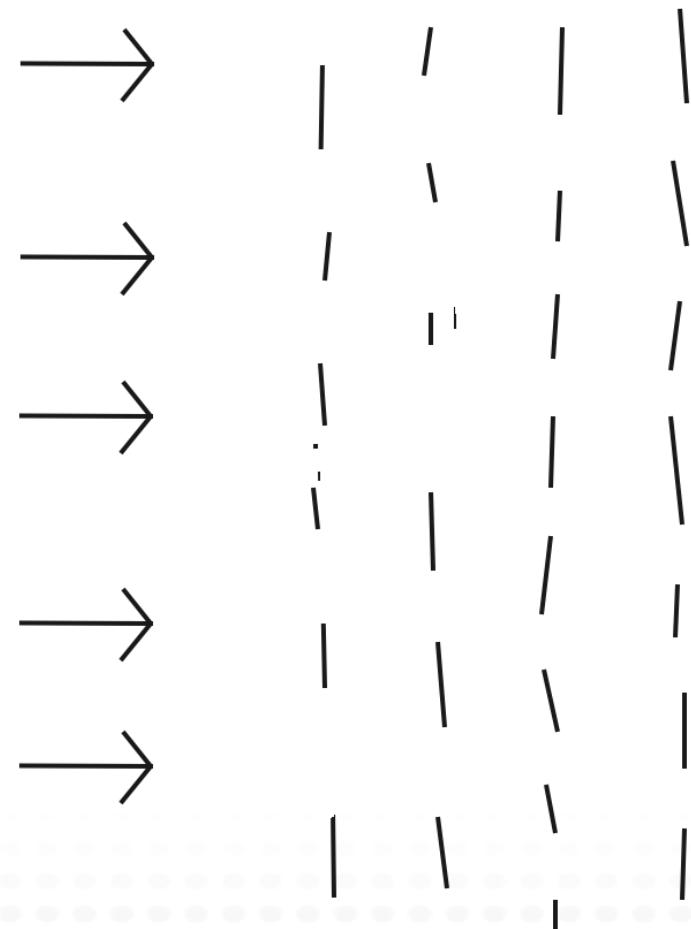
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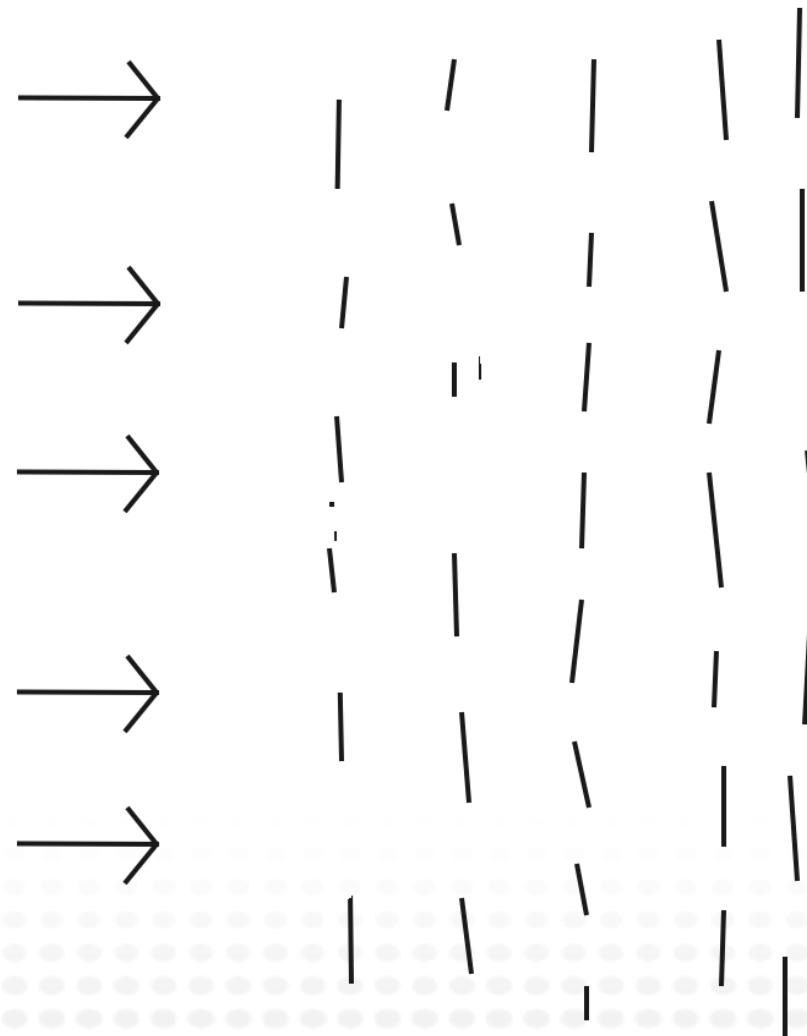
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The Swiss Cheese Model



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What Are Your Questions?



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Tomorrow



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Bonus Section



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