



Good
Morning

AGENDA

08-09

- Scrum 102
- Software quality

09-10

- First delivery
- Next week

A photograph of a scrum in a women's rugby game. Seven players are crouched in a tight huddle on a green grassy field. The players are wearing two types of uniforms: one team is in white shirts with dark blue sleeves and dark blue shorts, while the other team is in yellow shirts with black sleeves and yellow and black striped shorts. They are all wearing black and yellow striped socks and black cleats. The word "SCRUM" is printed in large, bold, white capital letters in the upper right corner of the image.

SCRUM

SCRUM BACKLOGS

Product backlog:

Prioritised list of **all** product requirements

Product backlog can be continuously updated by the **Product Owner**

Sprint backlog:

List of requirements selected **for the current sprint**

Sprint backlog contains more detailed information – **tasks**

Sprint backlog is only updated by **Scrum Team**

User story #11.1: Squad car

As a police officer, I need a car to drive around in.

User story #5.1: Supermarket

As an entrepreneur I want a supermarket so I can sell food and other stuff to my customers.

Acceptance Criteria:

- The store should contain shelves and a cashier
- The store should have a parking lot for three vehicles
- The store should have a flat roof

I	Independent	User stories should not overlap and they should be formulated so they can be implemented in any order.
N	Negotiable	A user story should be an invitation for a conversation. It can be changed, augmented, and redacted; of course, always in dialog with the Product Owner!
V	Valuable	Each user story should deliver value, either to the Product Owner or to the Scrum Team.
E	Estimable	It must be possible to assign effort to each user story. A story that can not be estimated is not complete!
S	Small	A user story must be a manageable task. If its completion takes longer than 3 or 4 days, it must be broken down!
T	Testable	There must be clear, testable criteria to define when the story is done in the eyes of the Product Owner and the Scrum Team.

[Buglione & Abran, 2013]

DoD - DEFINITION OF DONE

A checklist which usefully guides discussion, estimation and design

Should be helpful and not an obstacle

Team level – PO – Other teams

Can change over time

Code – Test – Integrate – Demonstrate – Ship

CATS						
To Do		In Analysis		Ready for Development		In Progress
CATS-6 ↑ Contract Report	8	CATS-187 ↑ View signed transporter contract agreements	5			CATS-144 ↑ Standard contract.
CATS-823 ↑ Hub module receiving process and error/bug fixing	5	CATS-461 ↑ Fast on Set requests without associated plan	5			CATS-825 ↑ Populate amount of commodity to be transported
CATS-828 ↑ List of approved source and destination for generating bid	5	CATS-826 ↑ Generate requisitions for Fast on set requests	2			CATS-808 ↑ Refactor request detail page UI
CATS-832 ↑ Register GRN for GIN within a transport contract	8					CATS-820 ↑ Hub module dispatch refactoring and
CATS-393 ↑ View list of submissions with status	8					CATS-824 ↑ Define workflow for transporter payment request
CATS-833 ↑ Contract administration summary page for	5					CATS-827 ↑ Transporter model difference in Hub/CATS
CATS-834 ↑ Bid winners with status - awarded, signed, disqualified	5					CATS-830 ↑ Generate winner(s) 1st and 2nd transporters for
CATS-837 ↑ Transporter Payment Request Registration	5					
In Analysis		Ready for Development		Internal Test		PO Approved
				CATS-812 ↓ Prepare a Gift Certificate SI lookup	3	
				CATS-810 ↑ Dispatch stock status on screen report	8	
Done						
						CATS-822 ↑ Source destination for bid planning/list of FDP and
						CATS-819 ↑ Woreda supported by donors on HRD
						CATS-821 ↑ Current Bid view
						CATS-829 ↑ Generate RFQ
						CATS-394 ↑ Data entry for bid proposal submission

SOFTWARE QUALITY



9/9

1000 Andam started ✓ { 1.2700 9.037 847 025
" stopped - andam ✓ 9.037 846 995 const
13' uc (032) MP - MC 1.182477000
033 PRO 2 2.130476415
const 2.130676115
Relays 6-2 in 033 failed special speed test
tm relay " 10.000 test.
Relays changed

1100 Started Cosine Tape (Sine check)

1525 Started Multi Adder Test.

1545 Relay #70 Panel F
(moth) in relay.

1550 Andam started.

First actual case of bug being found.

ISO/IEC 25010 Software Quality

Functional suitability

Compatibility

Performance efficiency

Usability

Reliability

Security

Maintainability

Portability

Software Requirement

ISO/IEC/IEEE 24765:2017(E)

3.3431

requirement

1. statement that translates or expresses a need and its associated constraints and conditions [ISO/IEC TS 24748-1:2016 *Systems and software engineering — Life cycle management — Part 1: Guide for life cycle management*, 2.41; ISO/IEC/IEEE 29148:2011 *Systems and software engineering — Life cycle processes — Requirements engineering*, 4.1.19]
2. condition or capability that must be met or possessed by a system, system component, product, or service to satisfy an agreement, standard, specification, or other formally imposed documents [IEEE 730-2014 *IEEE Standard for Software Quality Assurance Processes*, 3.2]
3. provision that contains criteria to be fulfilled [ISO/IEC 14143-2:2011 *Information technology — Software measurement — Functional size measurement — Part 2: Conformity evaluation of software size measurement methods to ISO/IEC 14143-1*, 3.10]
4. a condition or capability that must be present in a product, service, or result to satisfy a contract or other formally imposed specification [*A Guide to the Project Management Body of Knowledge (PMBOK® Guide) — Fifth Edition*]



Defect

ISO/IEC 9126

Defect: The nonfulfilment of intended usage requirements

Nonconformity: The nonfulfilment of specified requirements

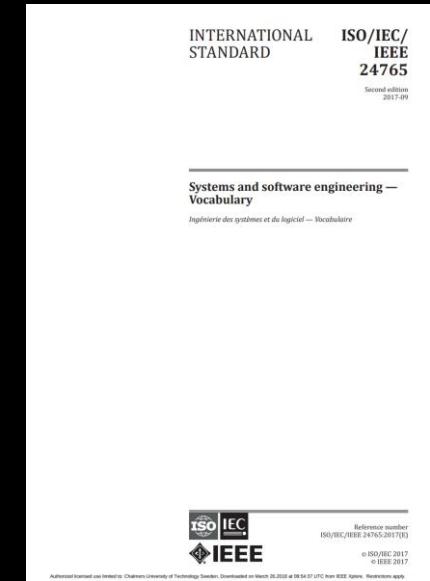
ISO/IEC/IEEE 24765:2010(E)

3.764

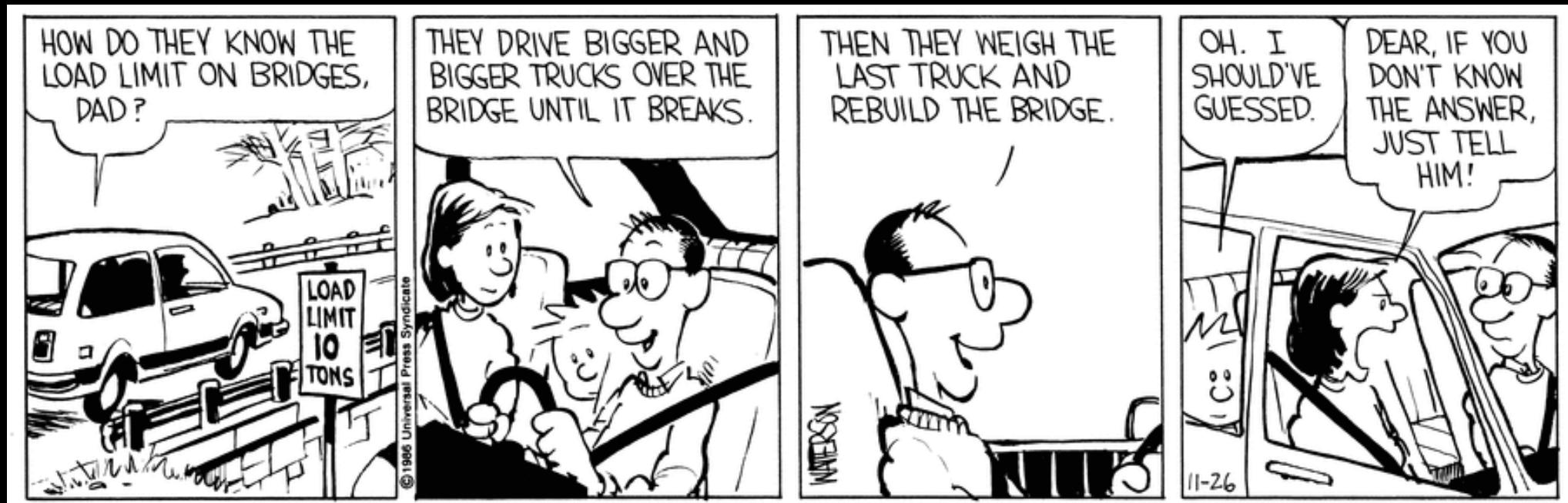
defect 1. a problem which, if not corrected, could cause an application to either fail or to produce incorrect results. *ISO/IEC 20926:2003, Software engineering — IFPUG 4.1 Unadjusted functional size measurement method — Counting practices manual*

2. an imperfection or deficiency in a project component where that component does not meet its requirements or specifications and needs to be either repaired or replaced. A *Guide to the Project Management Body of Knowledge (PMBOK® Guide) — Fourth Edition.*

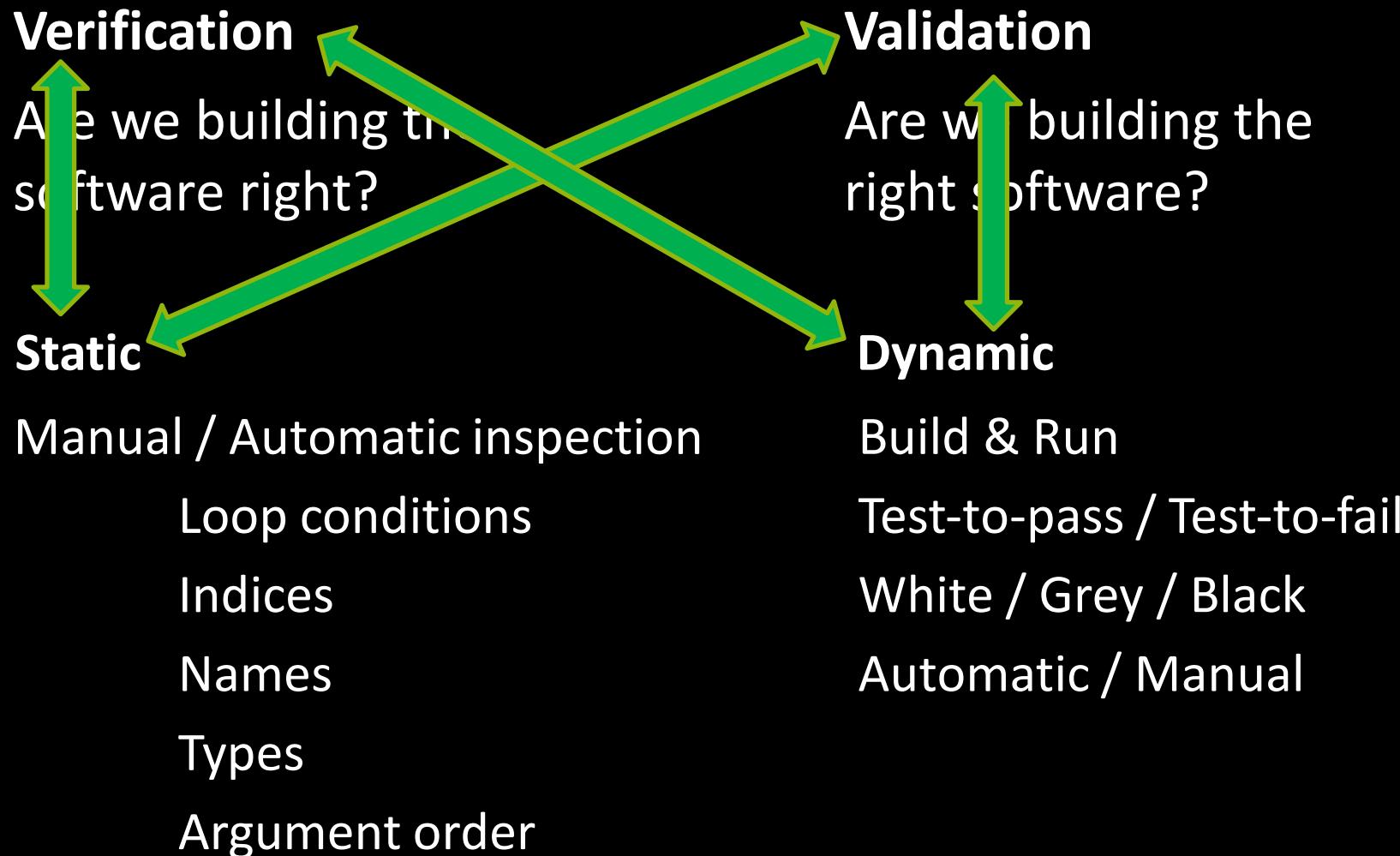
3. a generic term that can refer to either a fault (cause) or a failure (effect). *IEEE Std 982.1-2005 IEEE Standard Dictionary of Measures of the Software Aspects of Dependability*



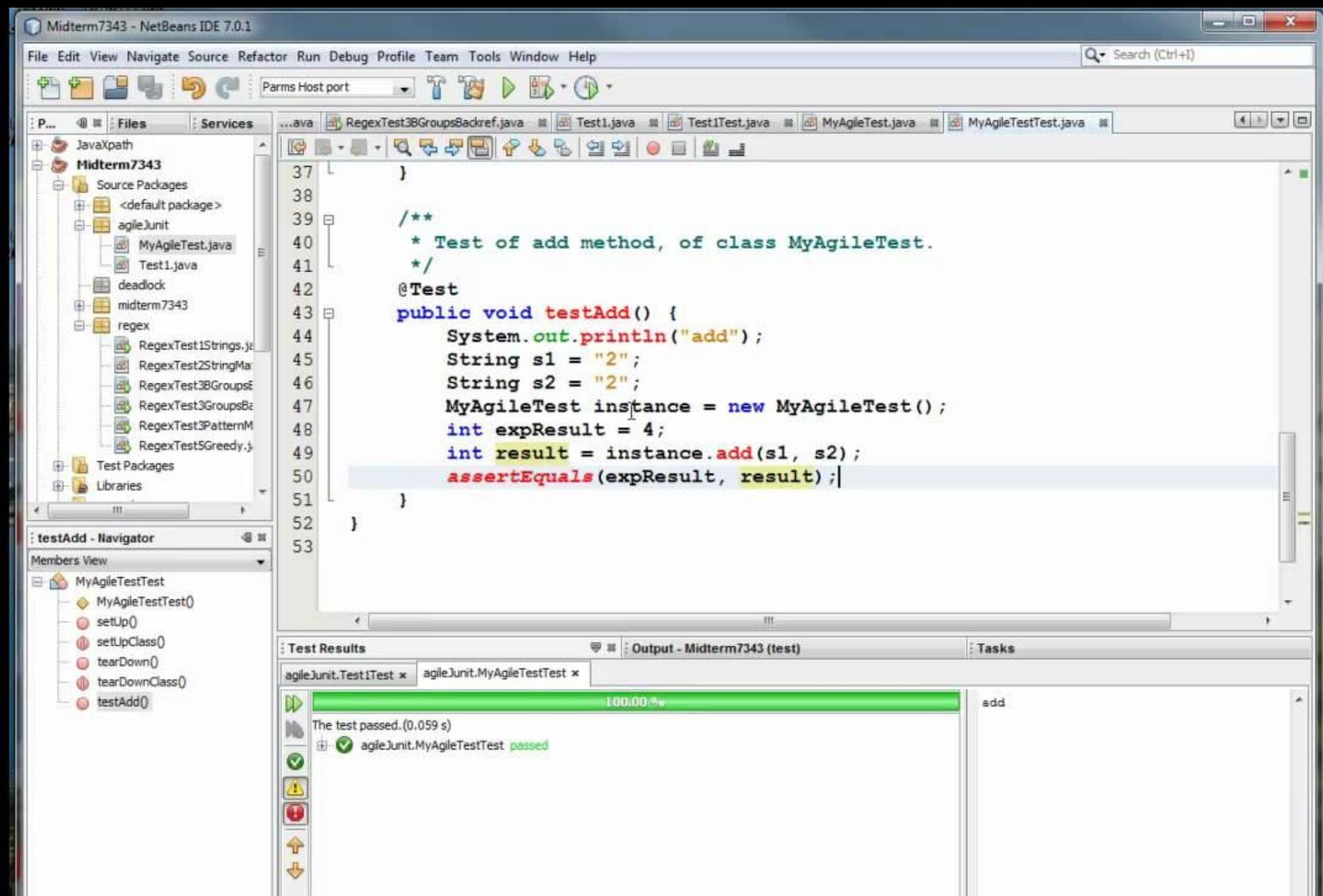
TESTING



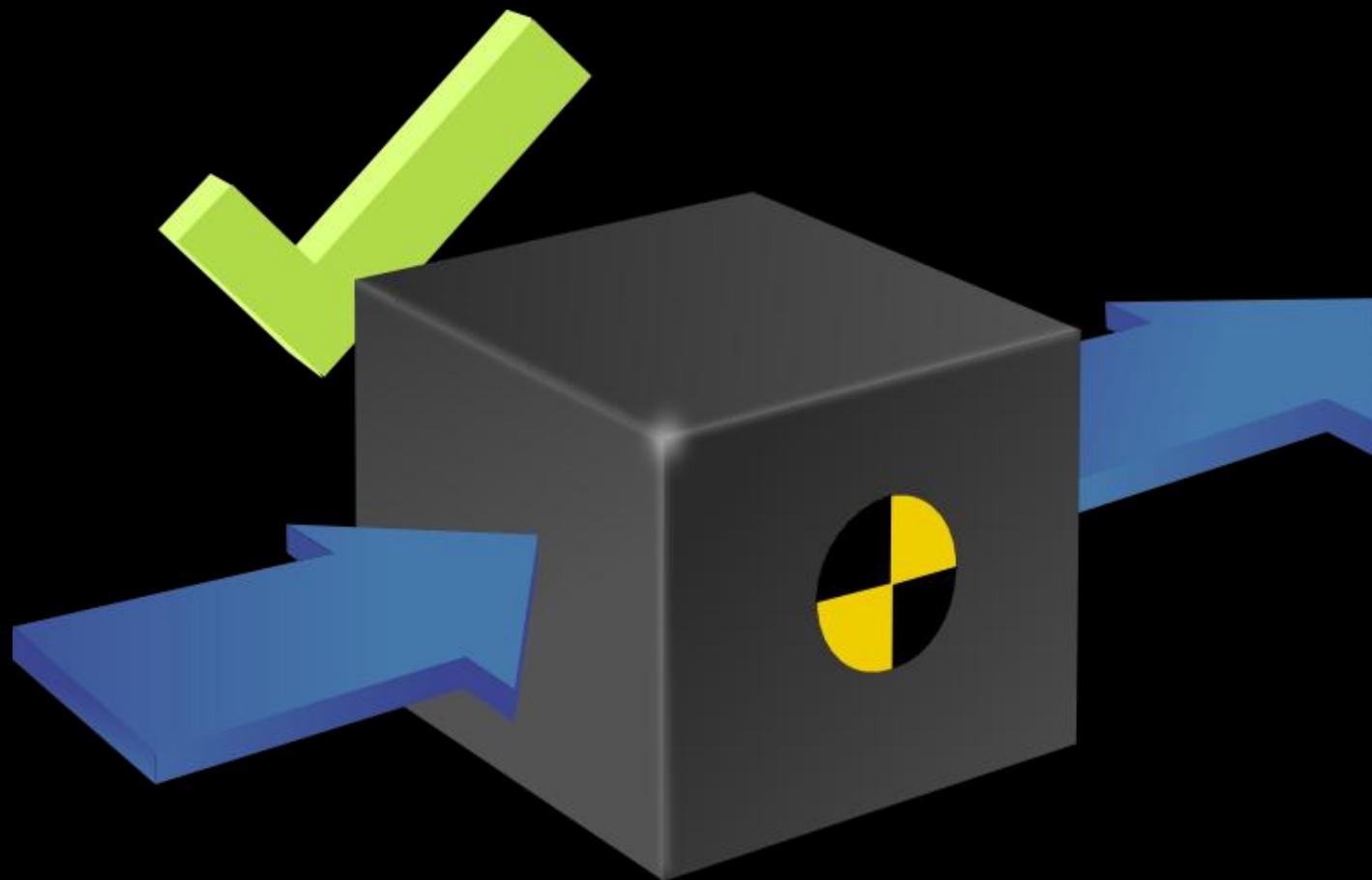
TESTING



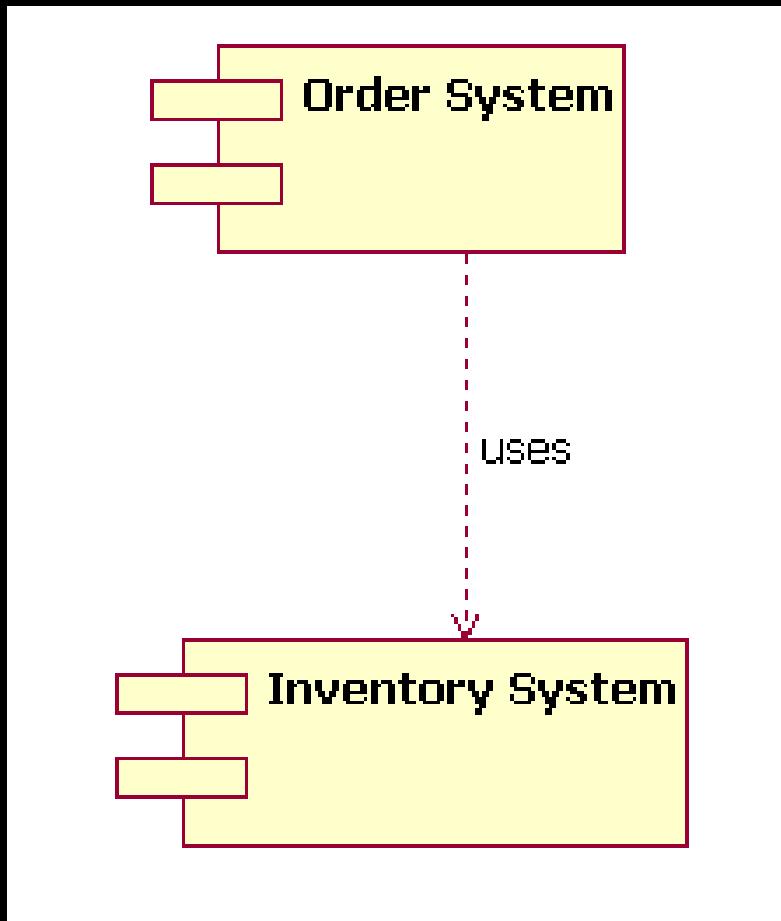
UNIT TESTING



System testing

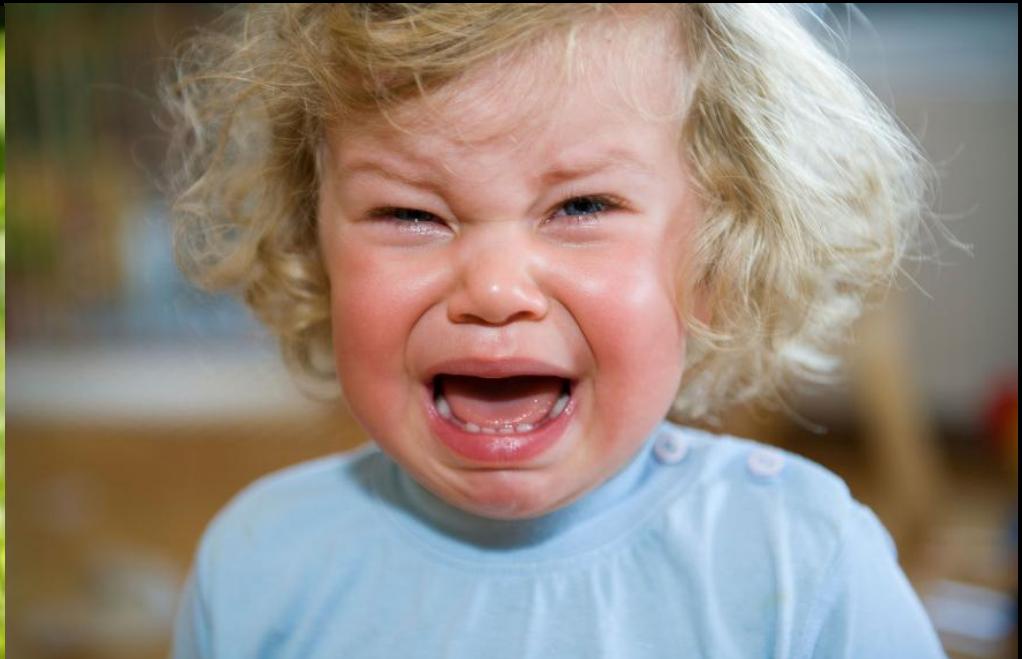


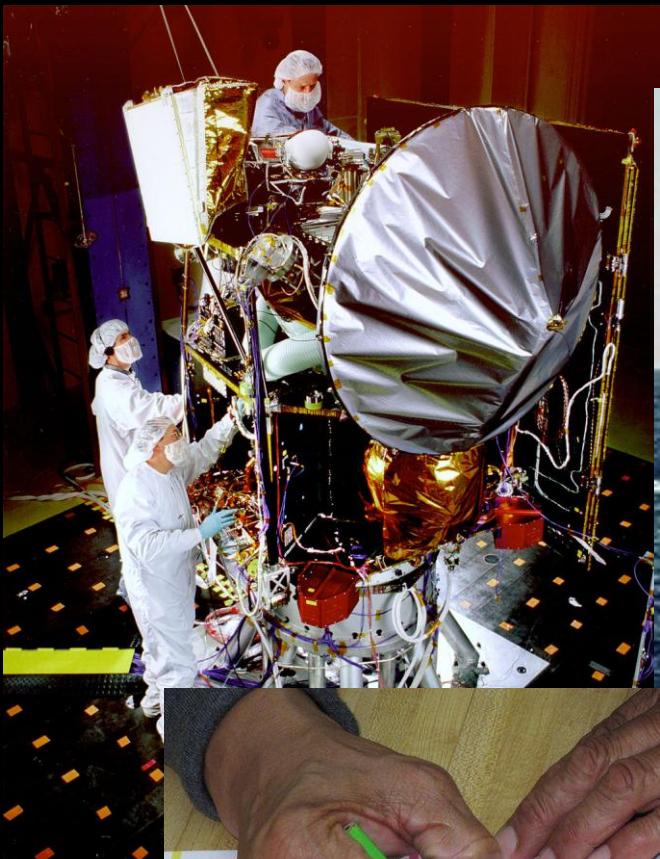
Integration testing



Will Order System and
Inventory System behave
in an erroneous or
unexpected way when
working together?

ACCEPTANCE TESTING





The Making of a Fly: The Genetics of Animal Design (Paperback)
by Peter A. Lawrence

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New 1-2 of 2 offers

Price + Shipping	Condition	Seller Information
\$1,730,045.91 + \$3.99 shipping	New	Seller: profnath Seller Rating: 93% positive over the past 12 months (8,193 total ratings) In Stock. Ships from NJ, United States. Domestic shipping rates and return policy . Brand new, Perfect condition, Satisfaction Guaranteed.
\$2,198,177.95 + \$3.99 shipping	New	Seller: bordeebook Seller Rating: 93% positive over the past 12 months (125,891 total ratings) In Stock. Ships from United States. Domestic shipping rates and return policy . New item in excellent condition. Not used. May be a publisher's overstock or have slight shelf wear. Satisfaction guaranteed.

A photograph of a white cup filled with dark coffee on a matching saucer, and a round cinnamon roll with a swirl pattern on a white plate. Both items are placed on a dark wooden tray. The background shows a window with a view of greenery.

FIKA: THE SWEDISH COFFEE BREAK

A photograph of a person from behind, sitting on the edge of a boat's deck. They are wearing a dark jacket and a grey beanie. The boat is positioned on a calm lake, with a range of mountains visible across the water under a dramatic sky filled with orange and blue clouds. The overall atmosphere is peaceful and contemplative.

TIME TO
REFLECT

Customer Value and Scope

The chosen scope of the application under development including priority of features and for whom you are creating value



Application of Scrum

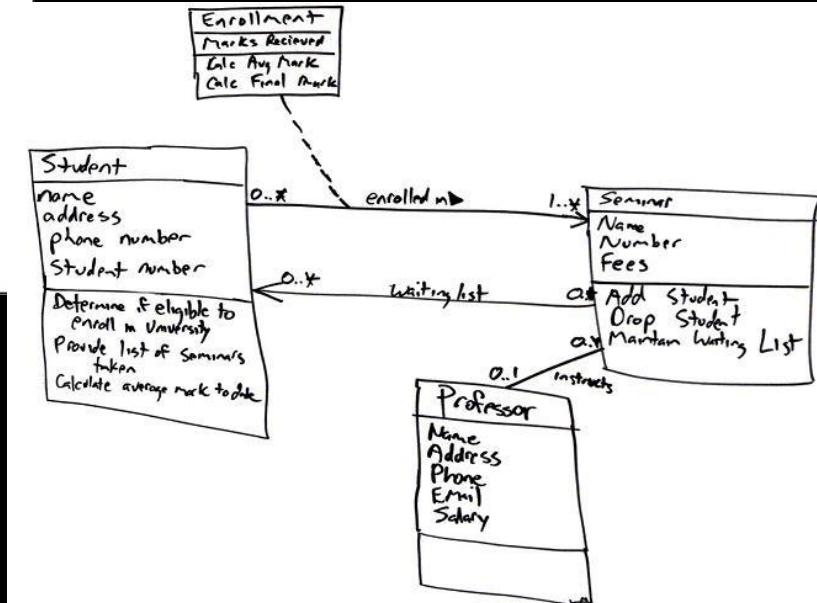
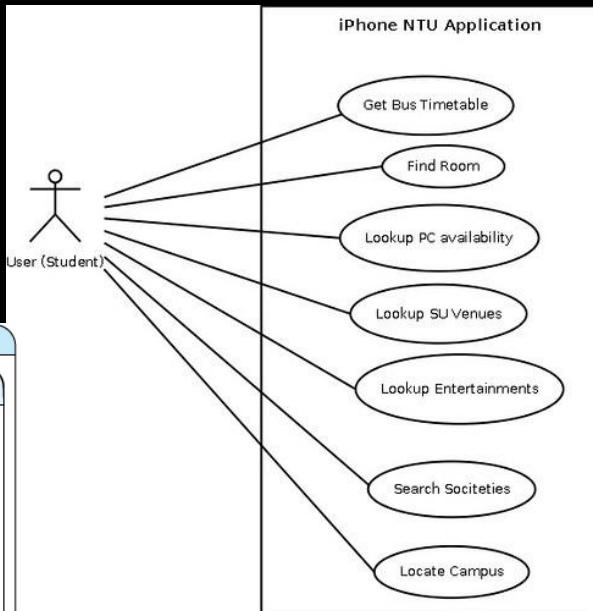
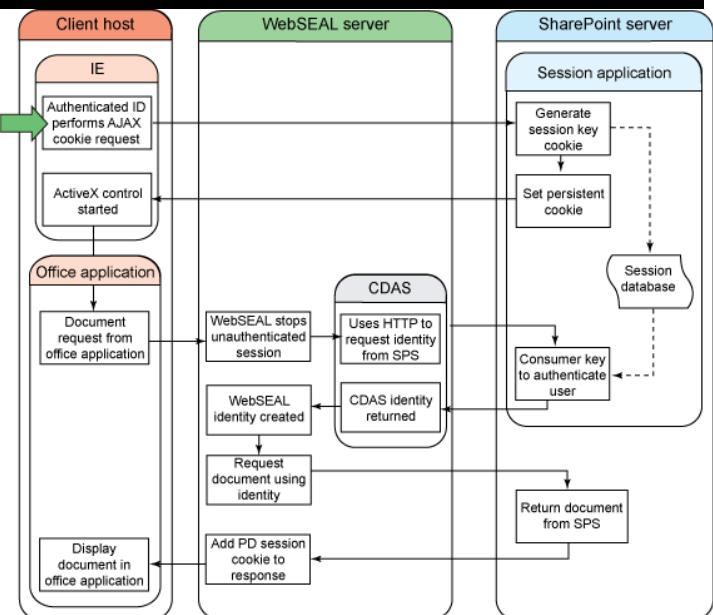
Scrum Roles: A different way of thinking, a better way to drive success

Scrum roles differ from traditional project roles.
By collaborating, a Scrum team delivers more business value, faster.



User stories
XFT Cross-functional Teams
Stand-up meetings
Short iterations
Continuous testing
Coding standards
Sustainable pace
Pair programming

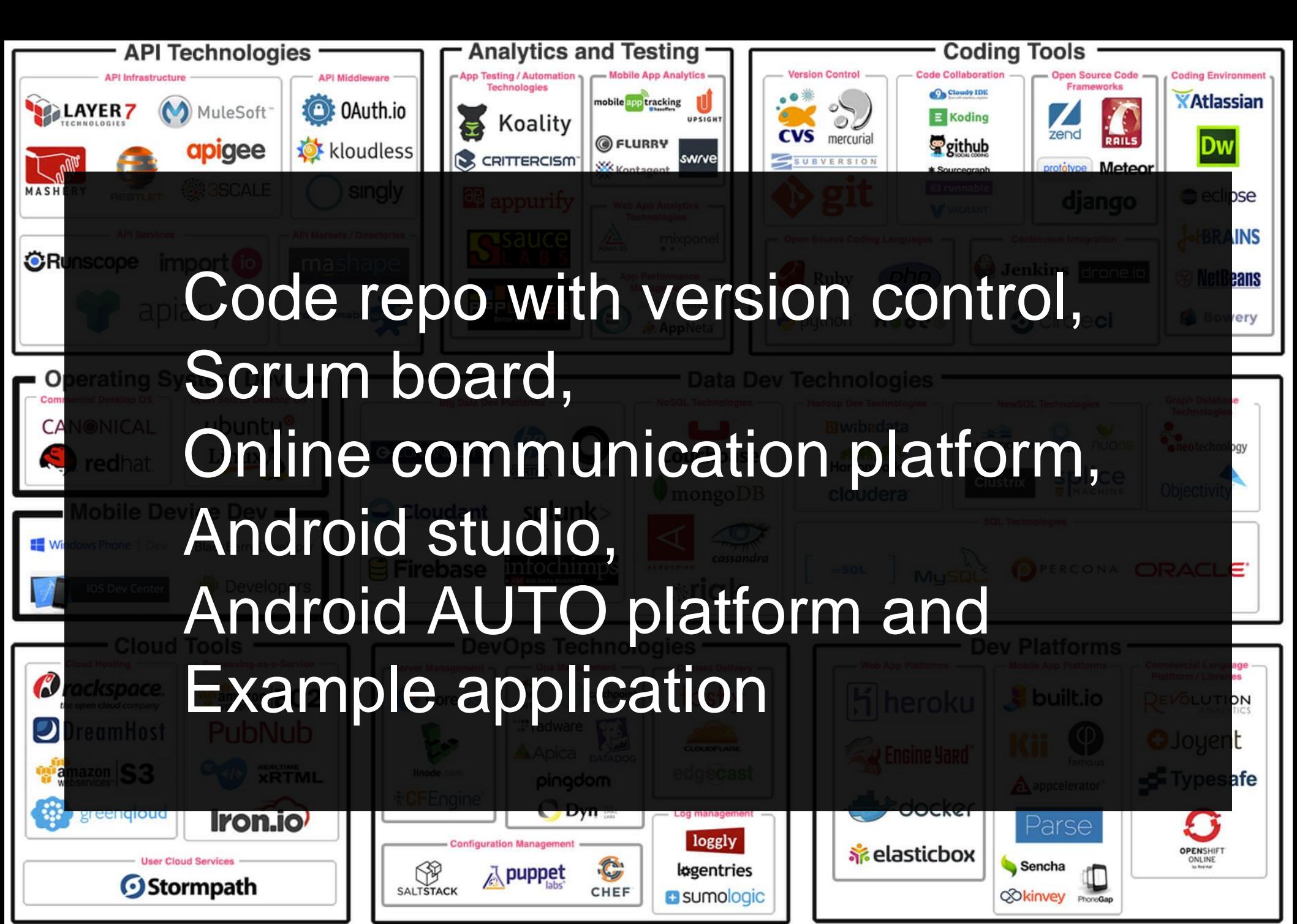
EXAMPLES OF DESIGN DOCUMENTS



REALITY CHECK

What was the purpose of the lecture?
Which learning objectives were covered?
How?
What was the relationship to the course
assessment?

Code repo with version control,
Scrum board,
Online communication platform,
Android studio,
Android AUTO platform and
Example application



NEXT WEEK

Monday Volvo Cars at 10:00 in Svea226

Tuesday: Semcon toolchain at 10:00 in Svea219

Wednesday: Exercise at 10:00 in Gamma

<https://github.com/hburden/DAT256>



DON'T PANIC