Agile Security Testing

Lessons learned

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Securify

OWASP AppSecEU 15

Amsterdam, The Netherlands

Agenda

1. Introduction
2. The software security dream
3. How it's done
4. From Waterfall to Agile security

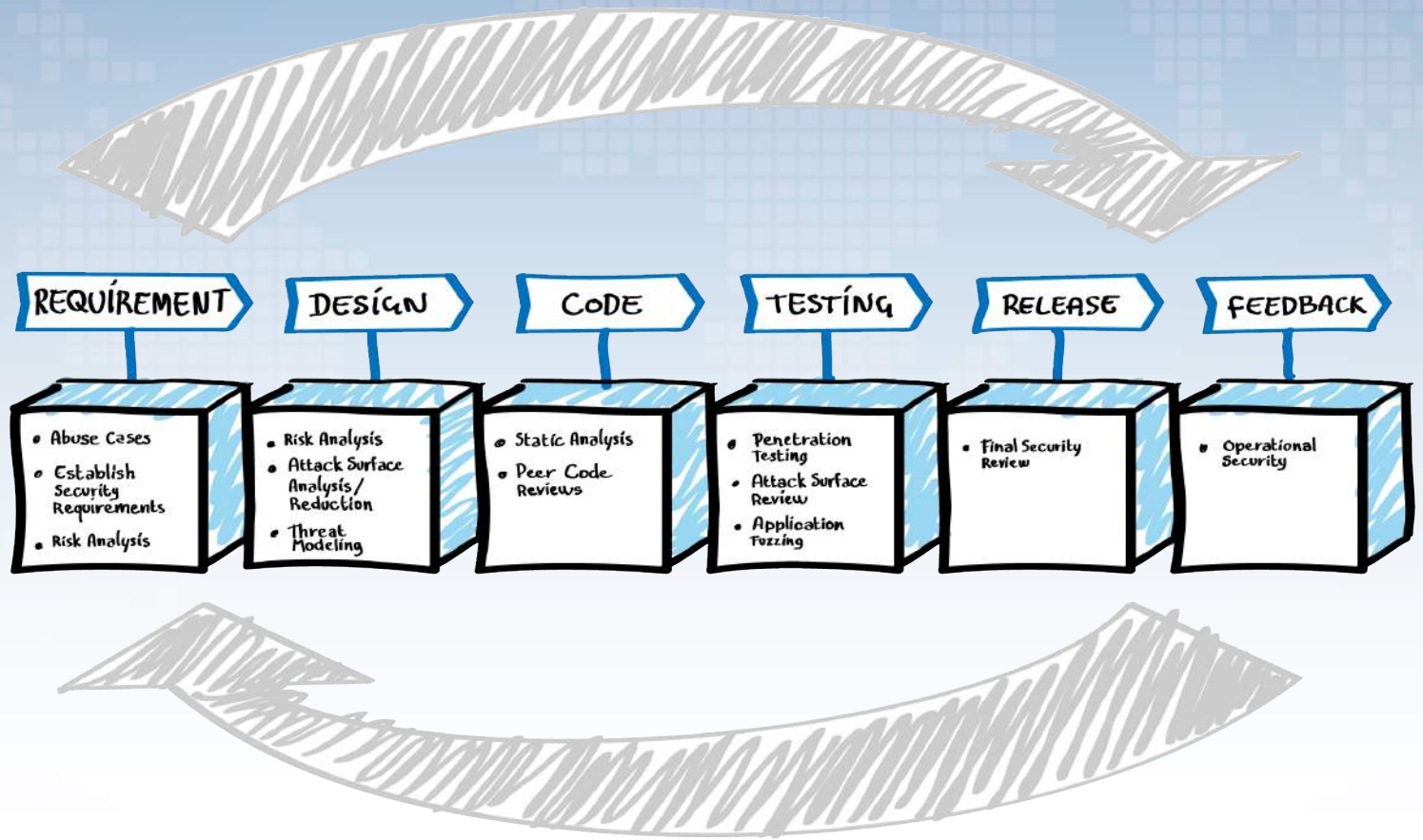
About me

- Co-founder Securify (Software Security / Build Security In)

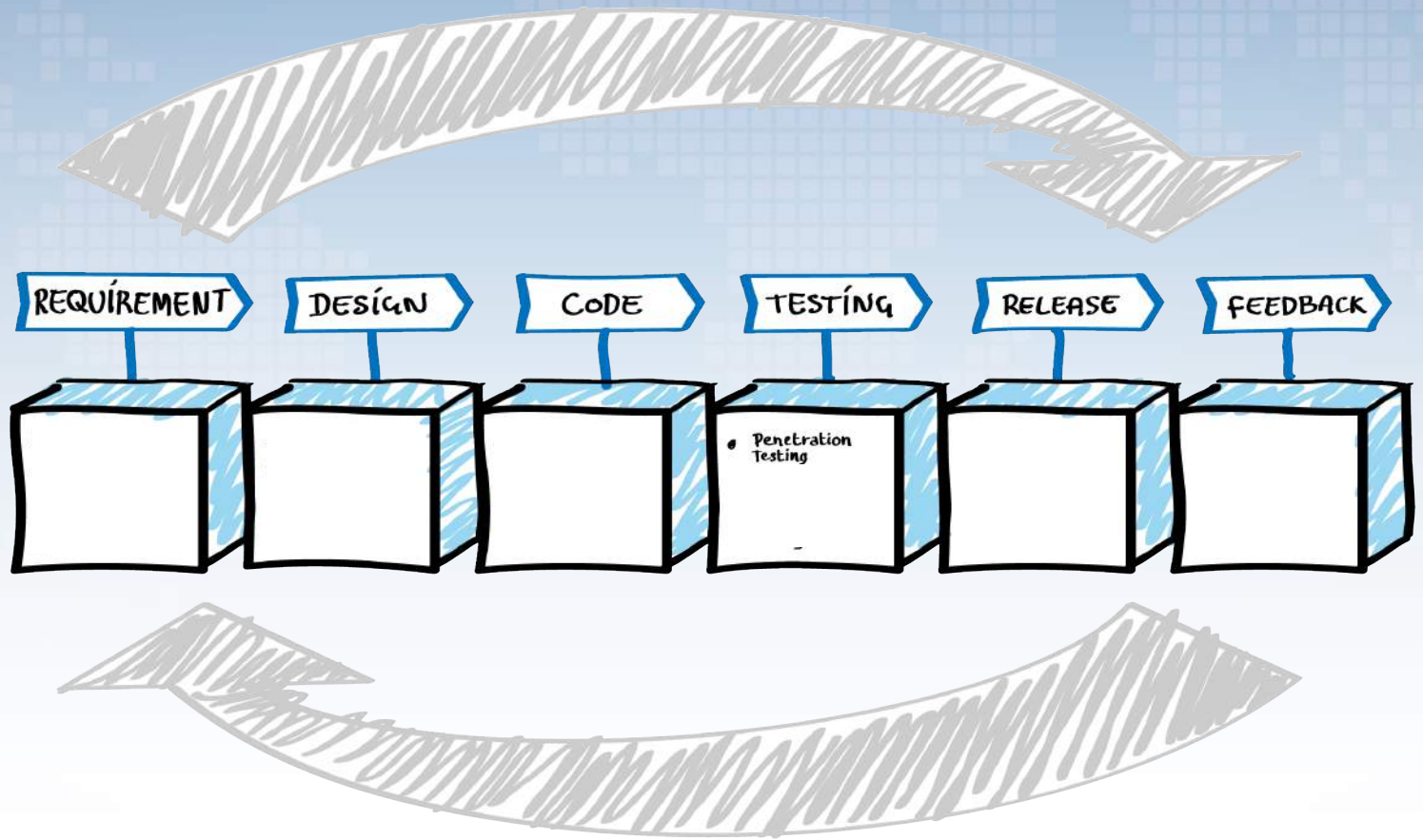
- 2 yrs software security @ Rabobank (internet banking teams)
- 8 yrs software security @ finance, insurance, gov, retail, ...

The software security dream

We know this


REQUIREMENT
Abuse Cases
Establish Security Requirements
Risk Analysis
DESIGN
Risk Analysis
Attack Surface Analysis / Reduction
Threat Modeling
CODE
Static Analysis
Peer Code Reviews
TESTING
Penetration Testing
Attack Surface Review
Application Fuzzing
RELEASE
Final Security Review
FEEDBACK
Operational Security

But still do a lot of this



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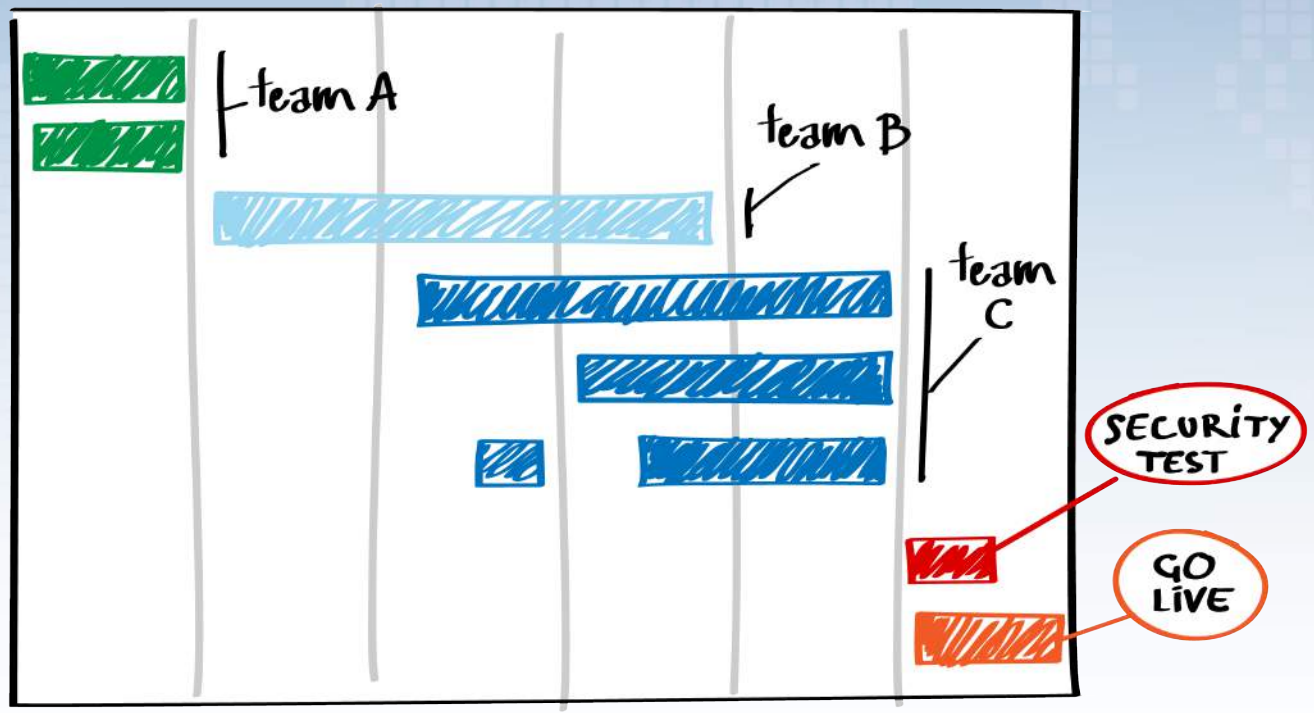
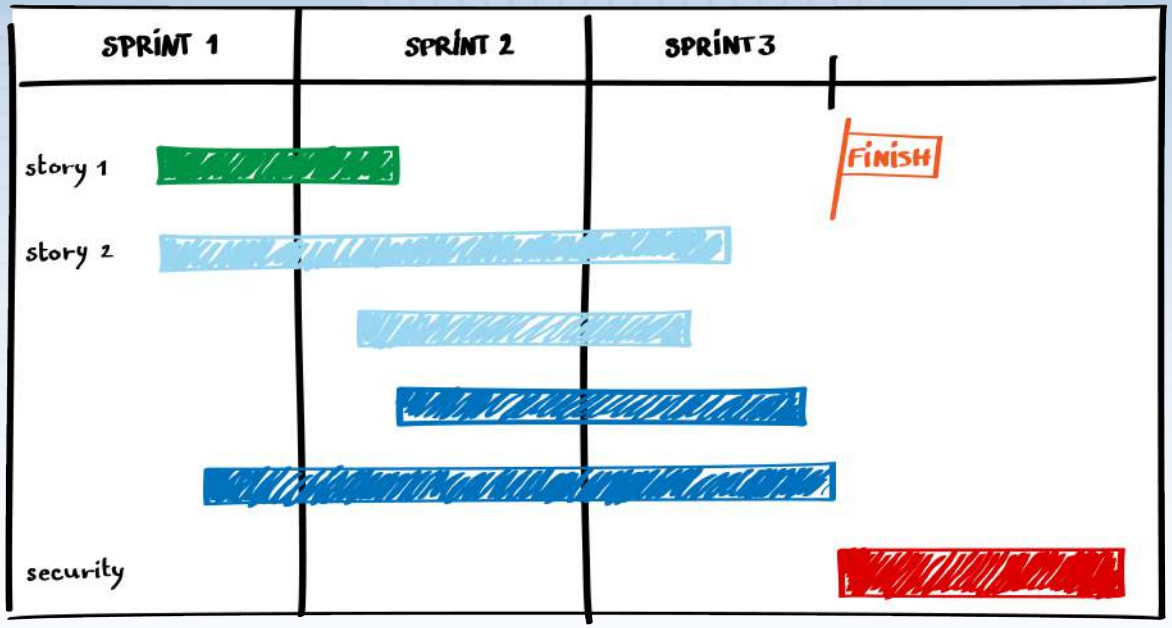


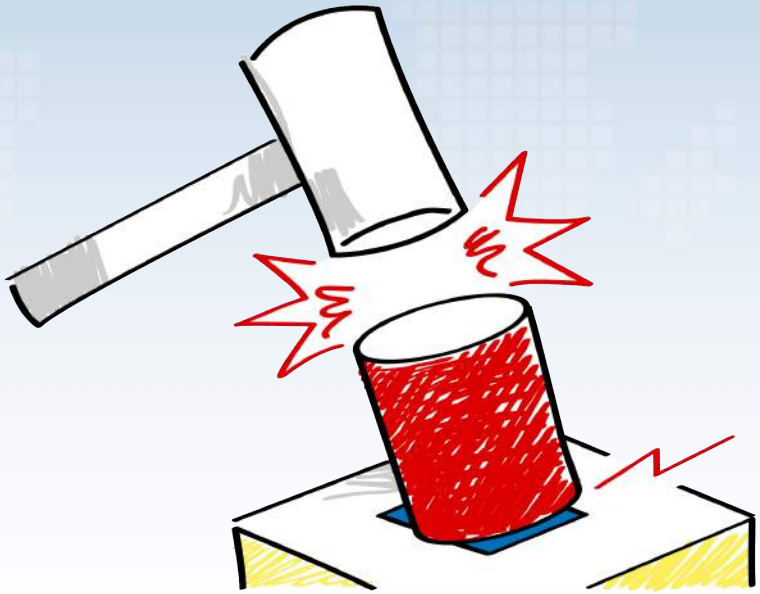
Meet the security end boss

Security sticks to waterfall



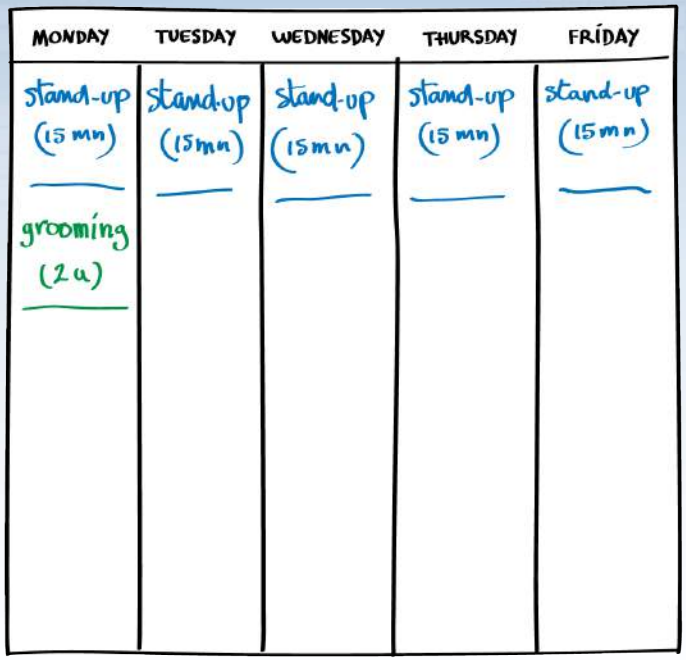
Security can’t catch up..

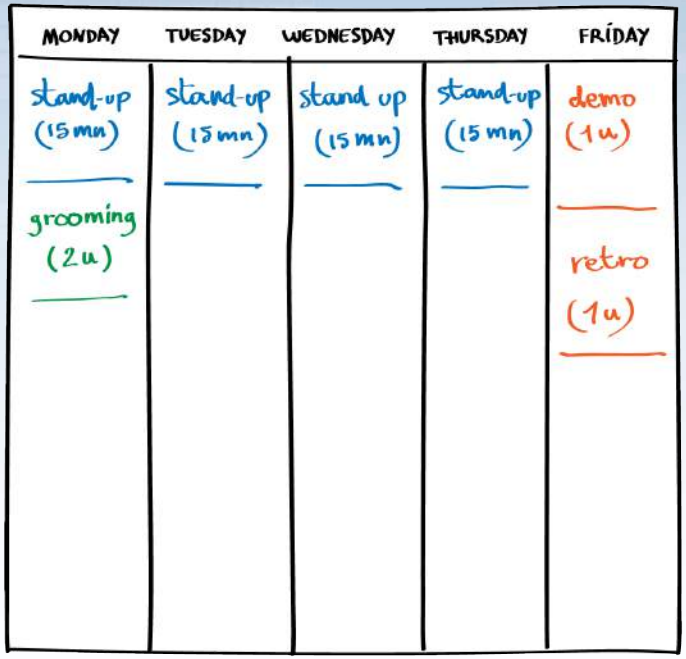
We need change



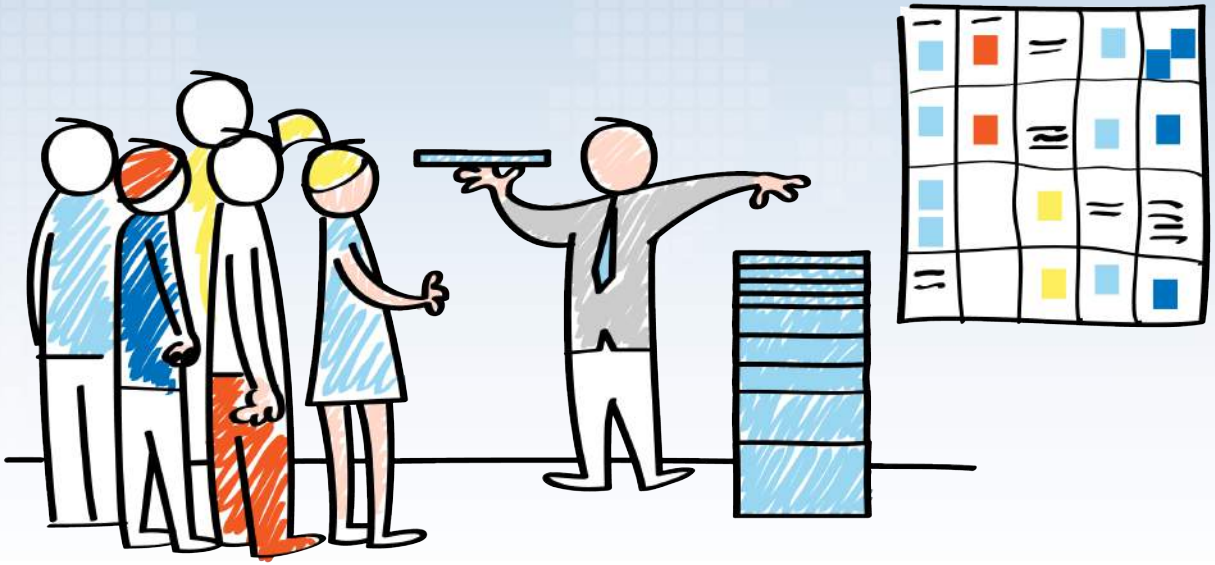
Lets fix this together - pilot

Join meetings

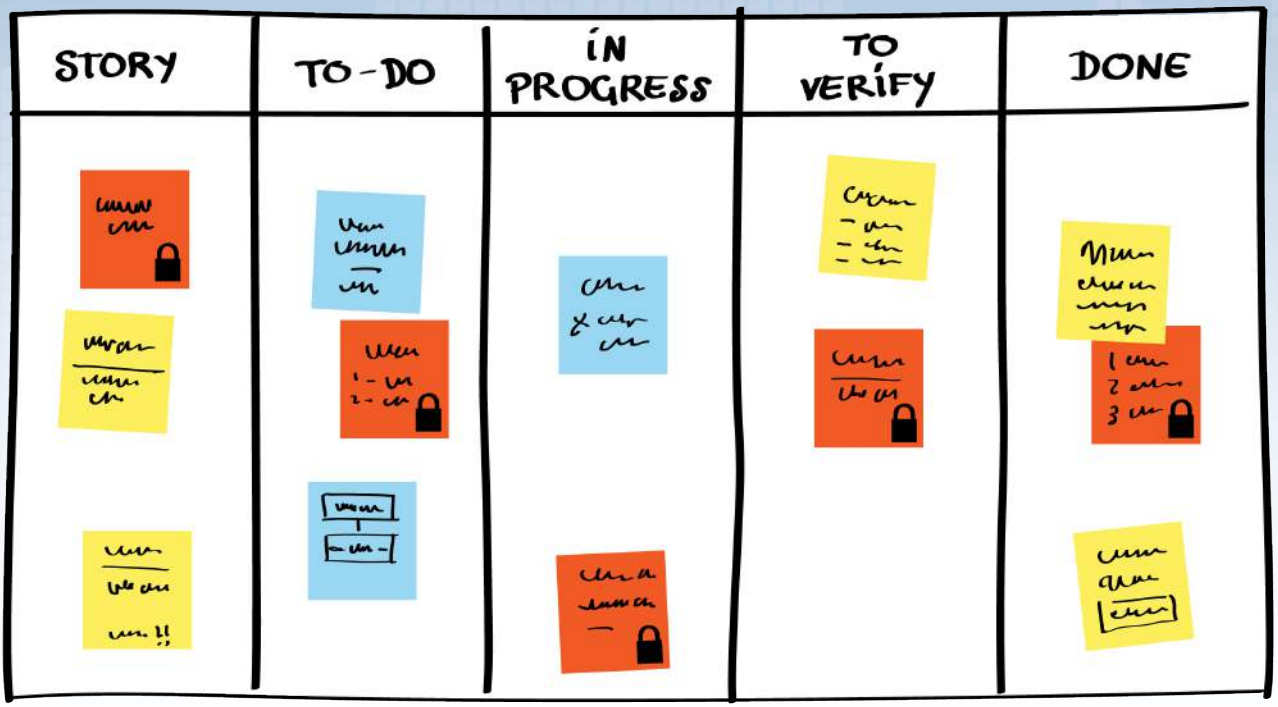




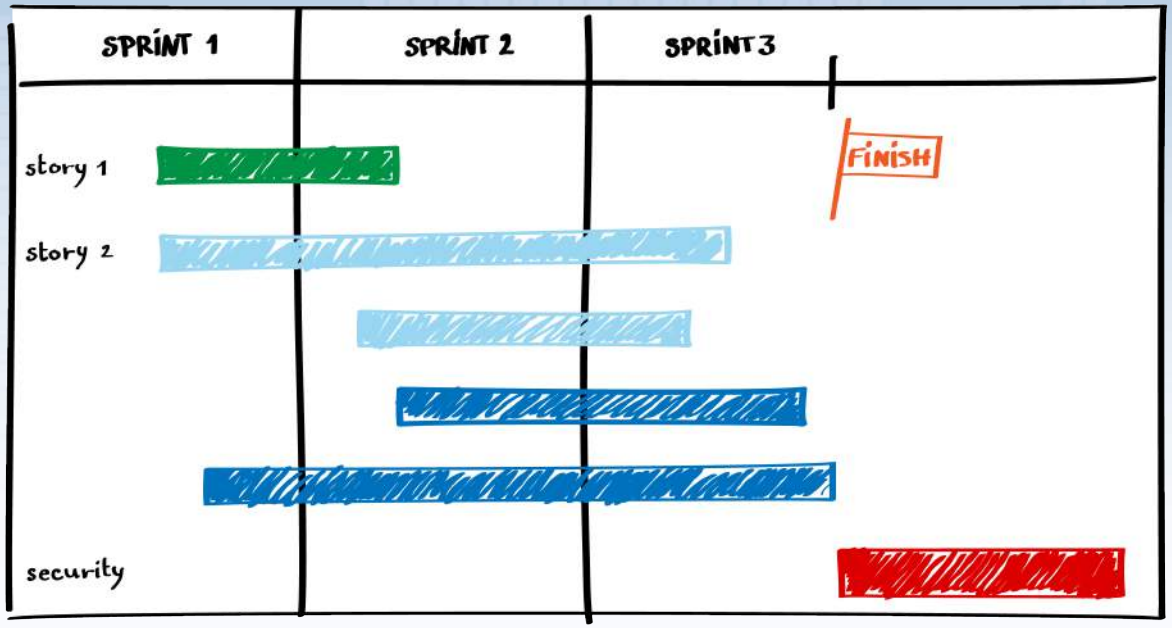
Grooming



Tag user stories / risk based

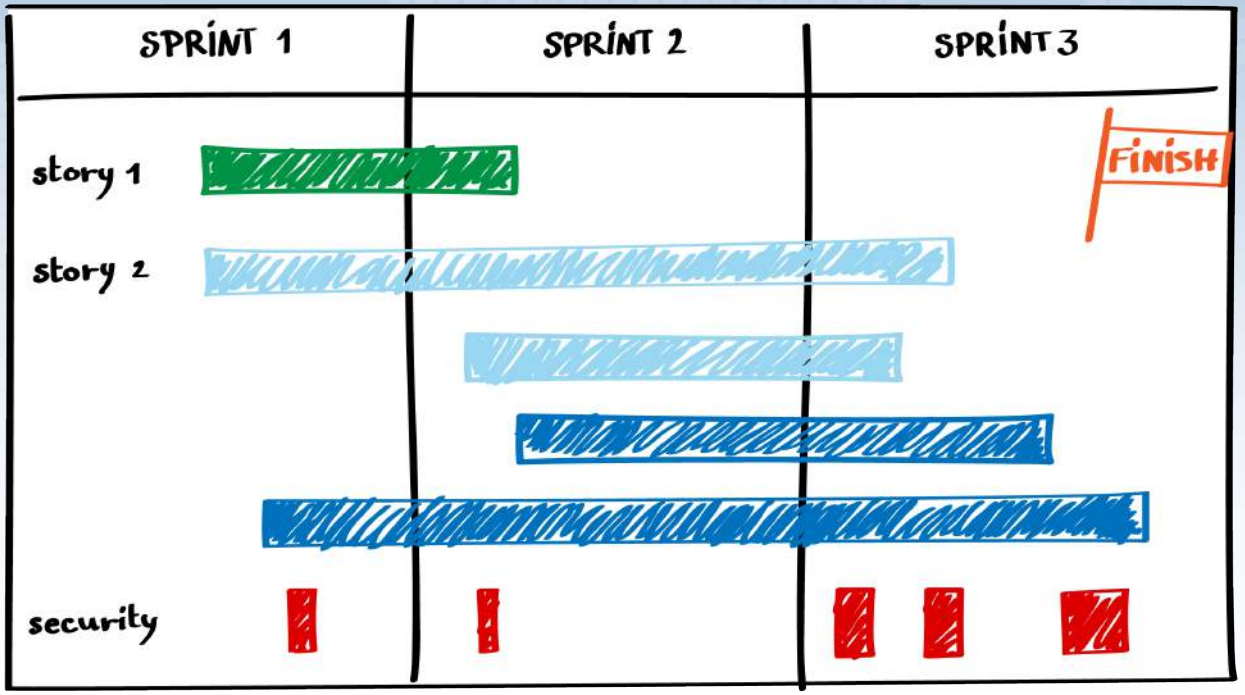


More efficient test/review



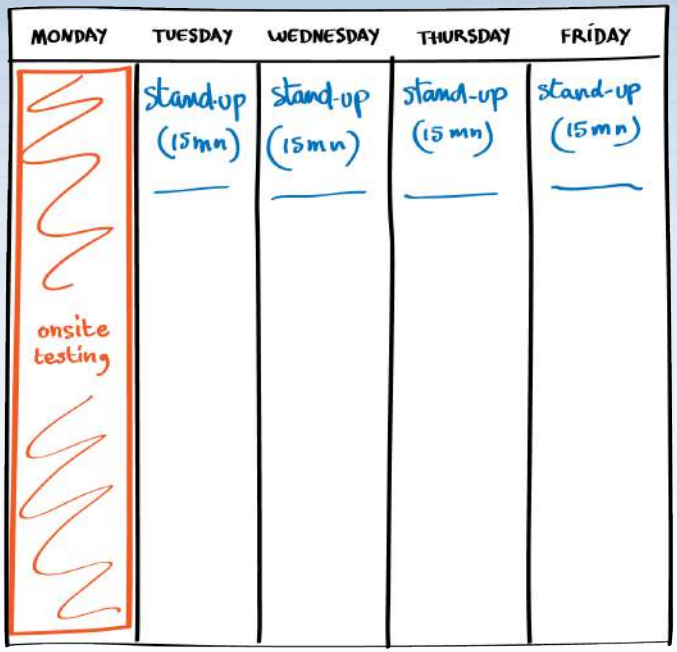
Next: early code reviews

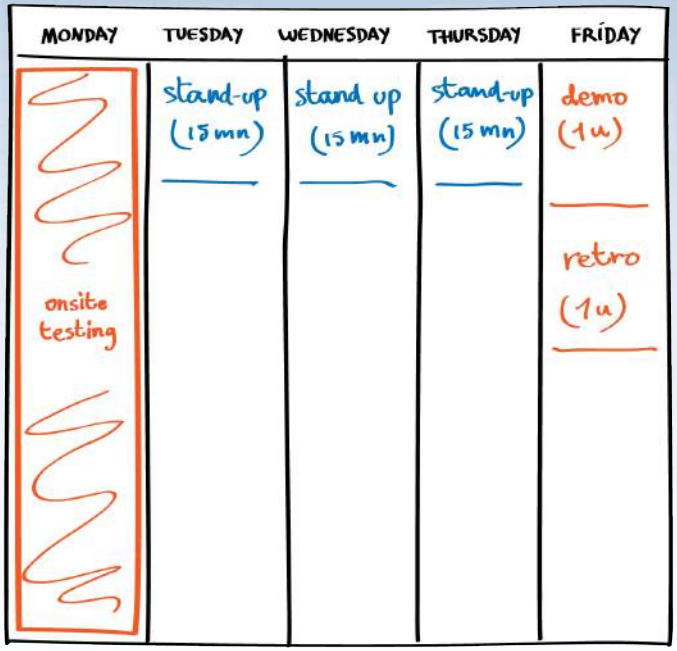
Slicing up this end boss



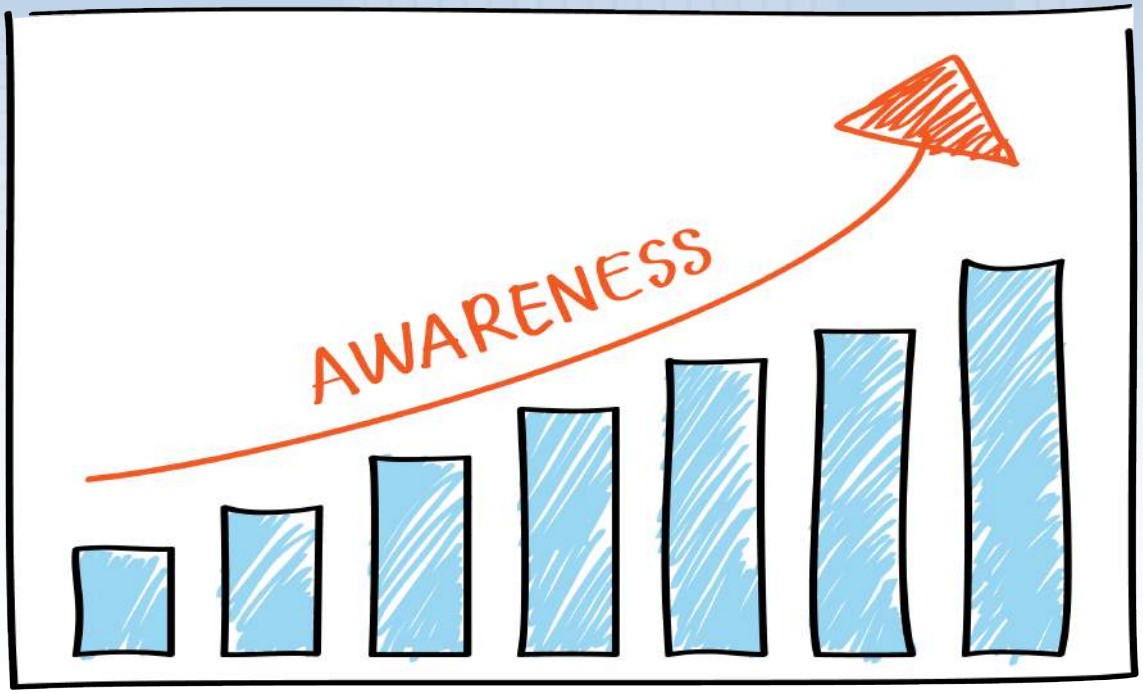
Retro

Better planning

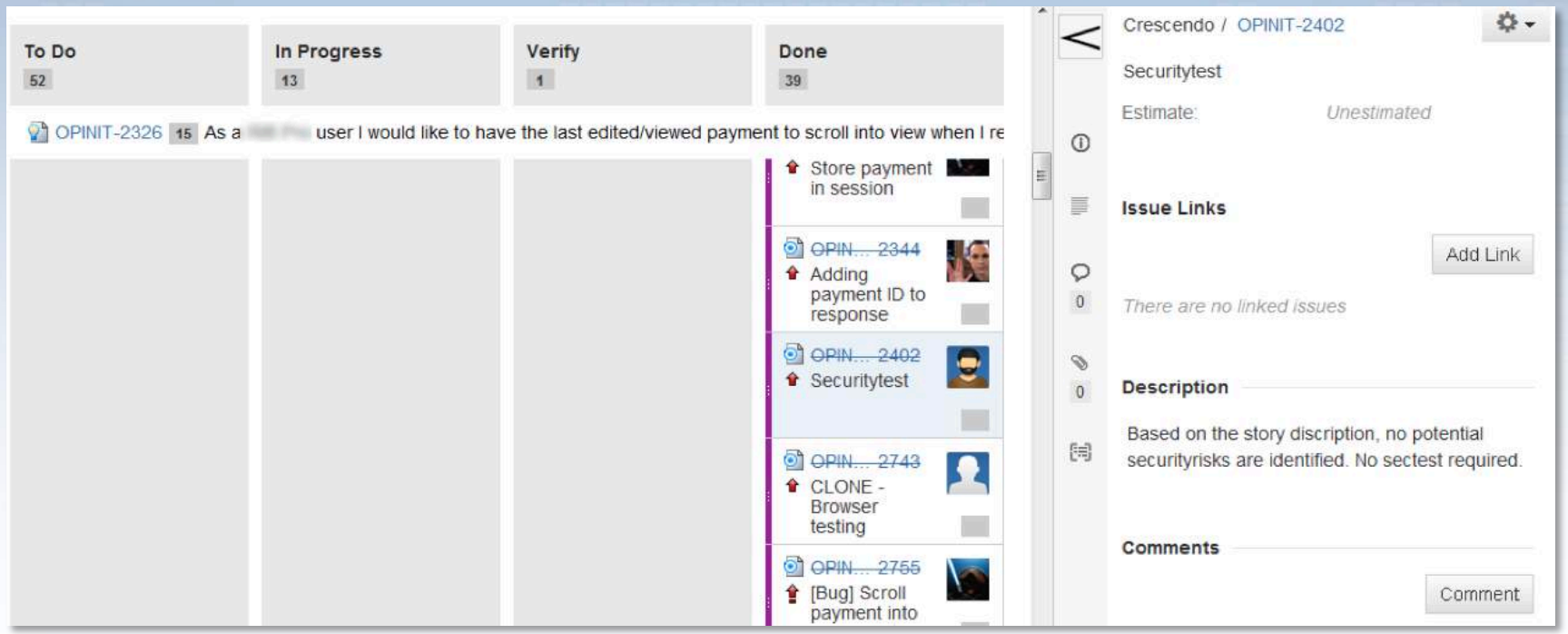




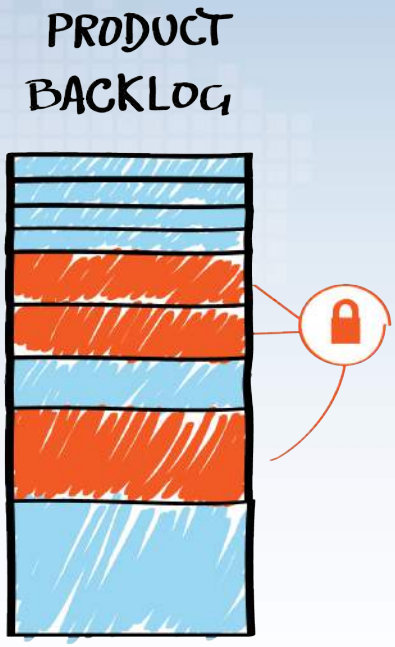
This works

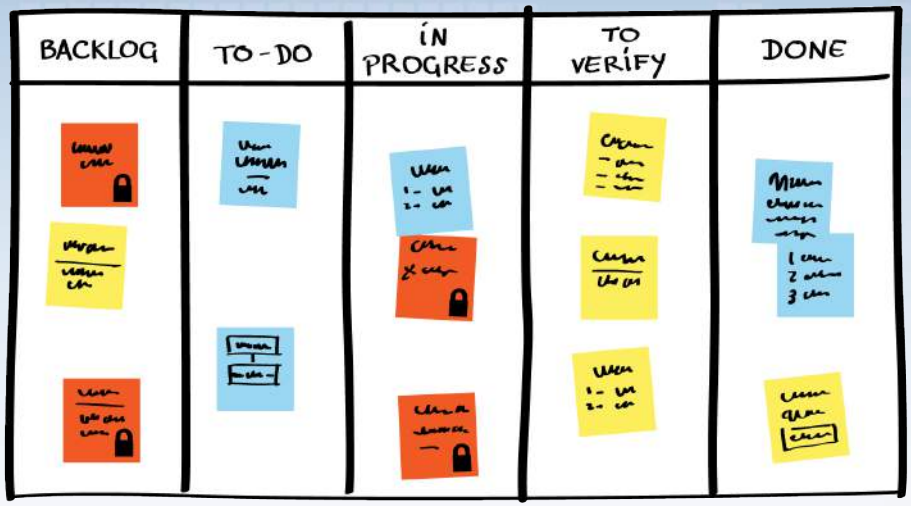


Next: be visible on the board



Next: add findings / create stories

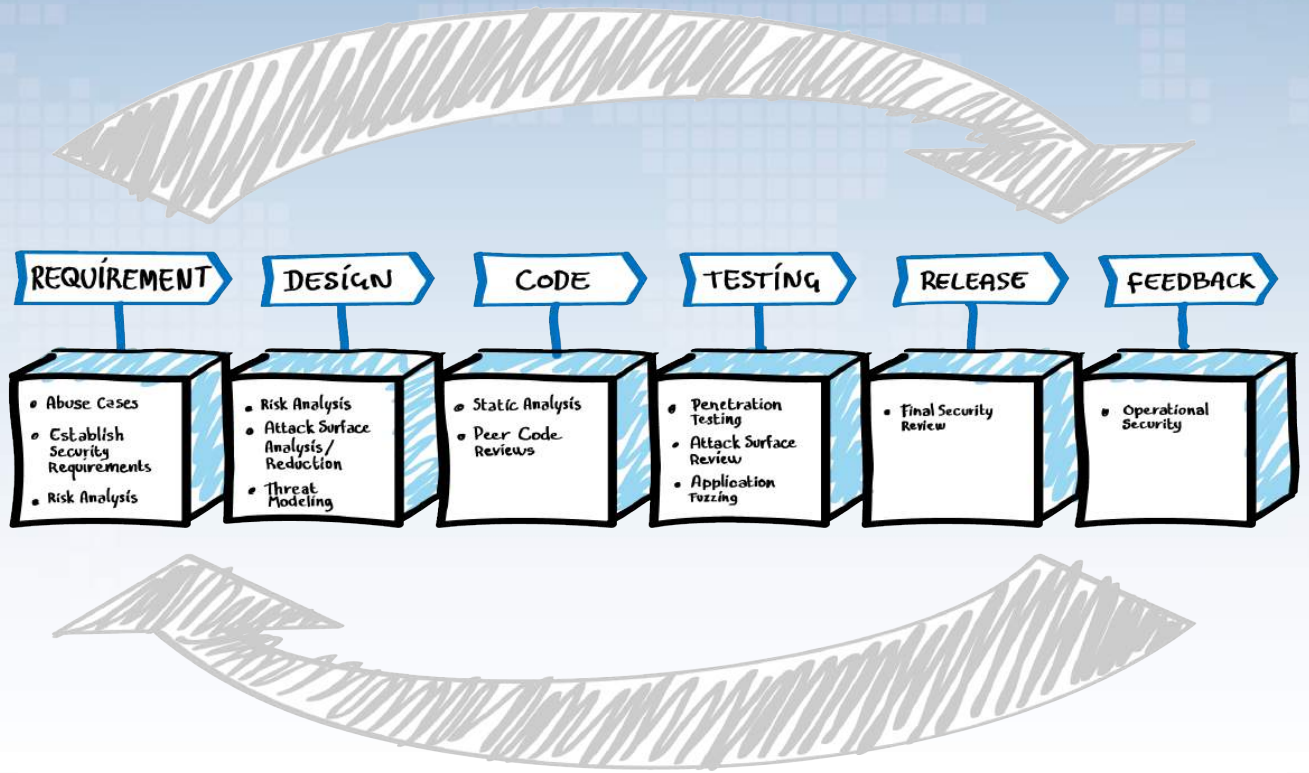




Have (simple) security sign-off

Share knowledge

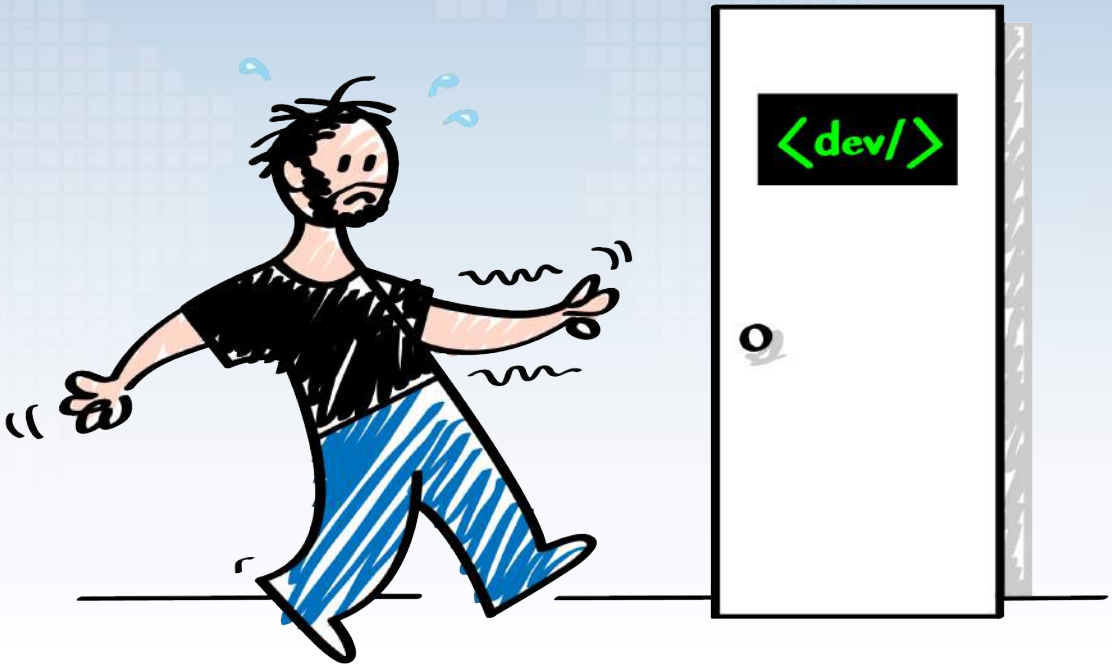
Hey, this all starts to look like..



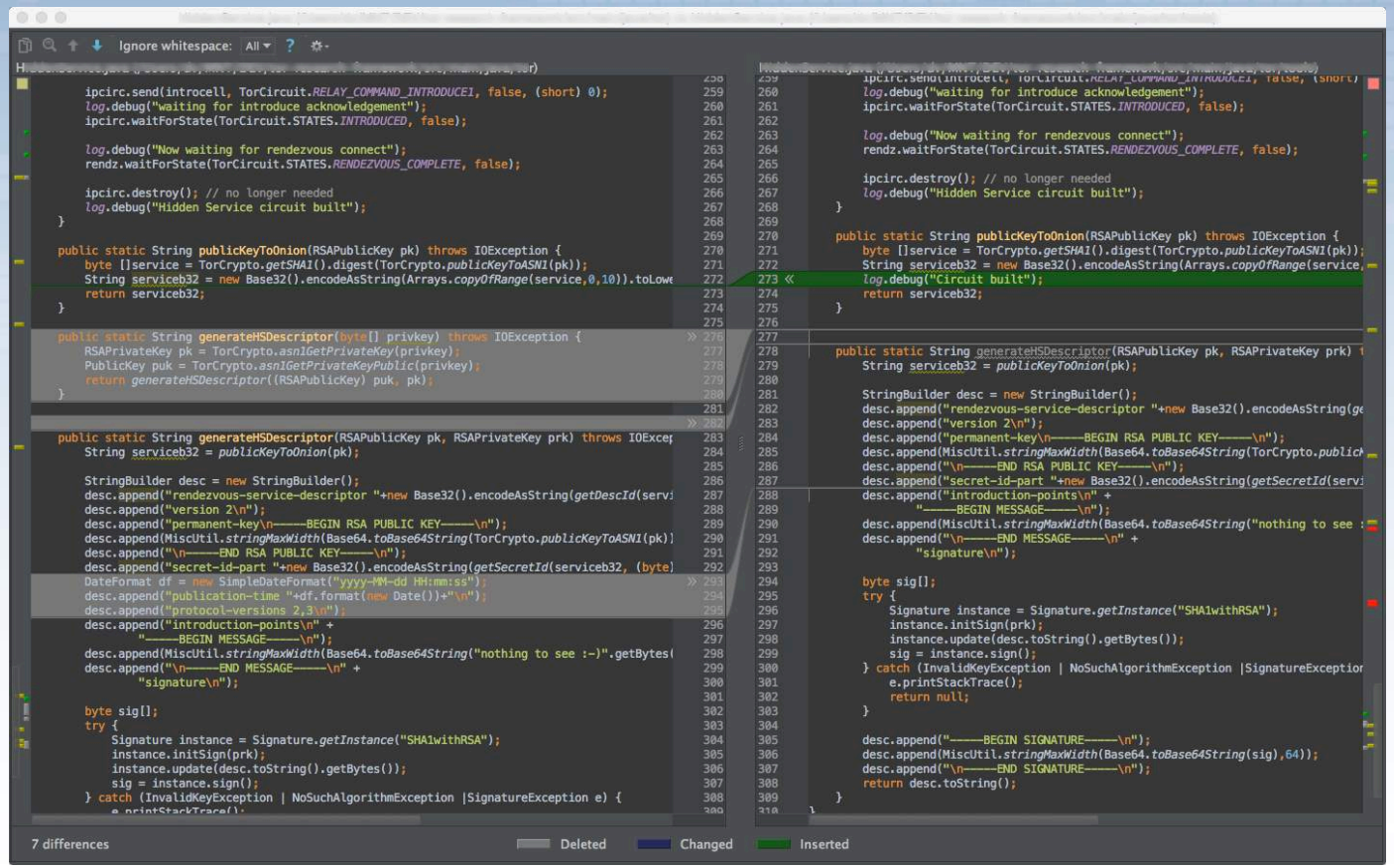
Agile, a blessing for software security?

Takeaways

Security, leave your comfort zone!



Code reviews over (pen)testing!



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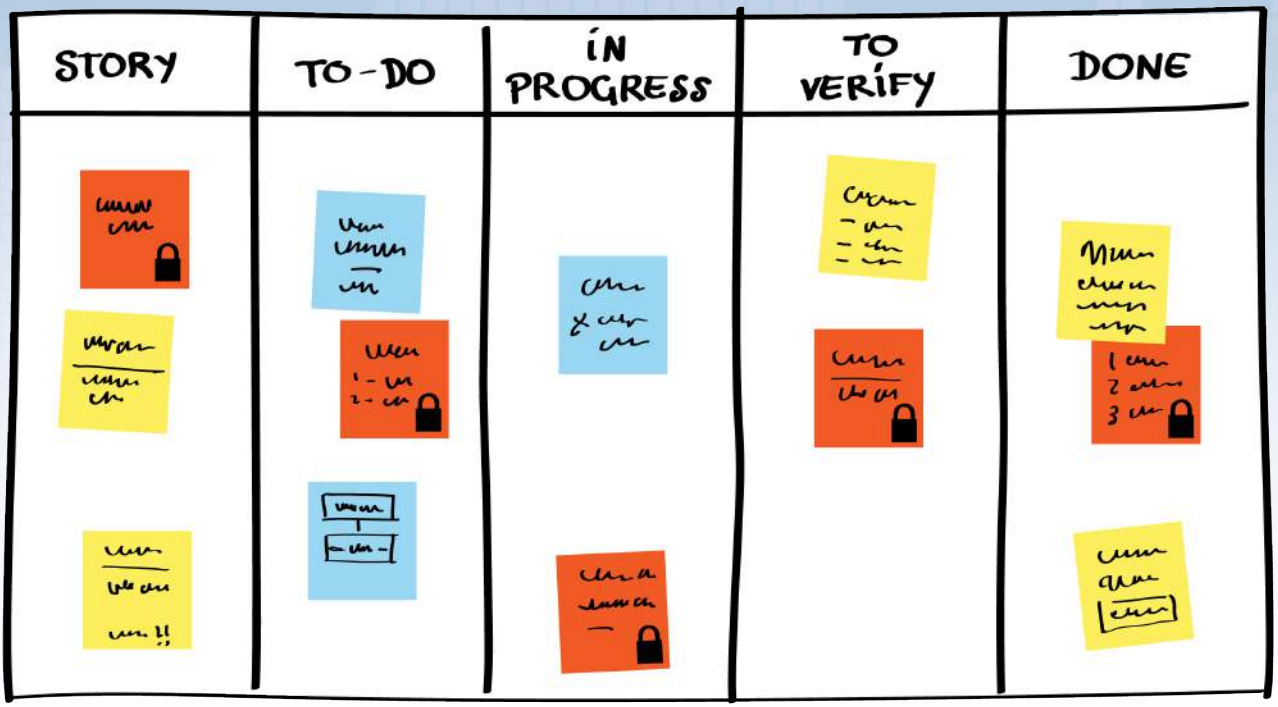
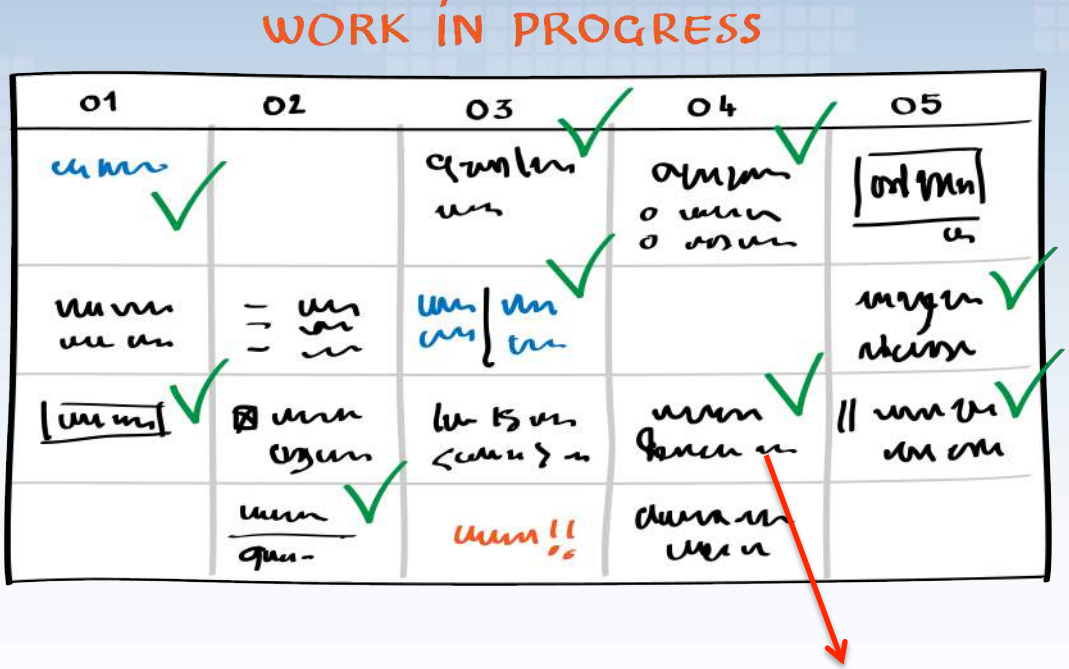
Only test when needed!

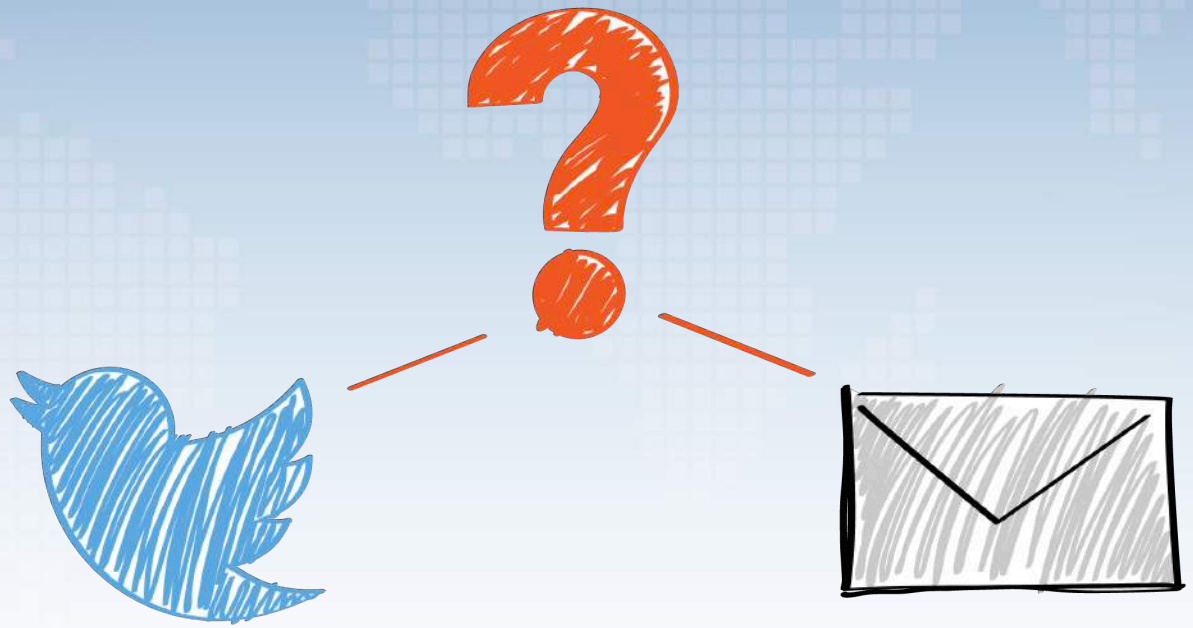


Stay Agile, keep improving!



Automation ;-)

Thanks!



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