Quality assurance in Agile

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SQA DAYS#11
Точка роста твоей карьеры

There are no “TESTERS” in Scrum/Agile

Only team members with primary skills who should become “Cross Functional”

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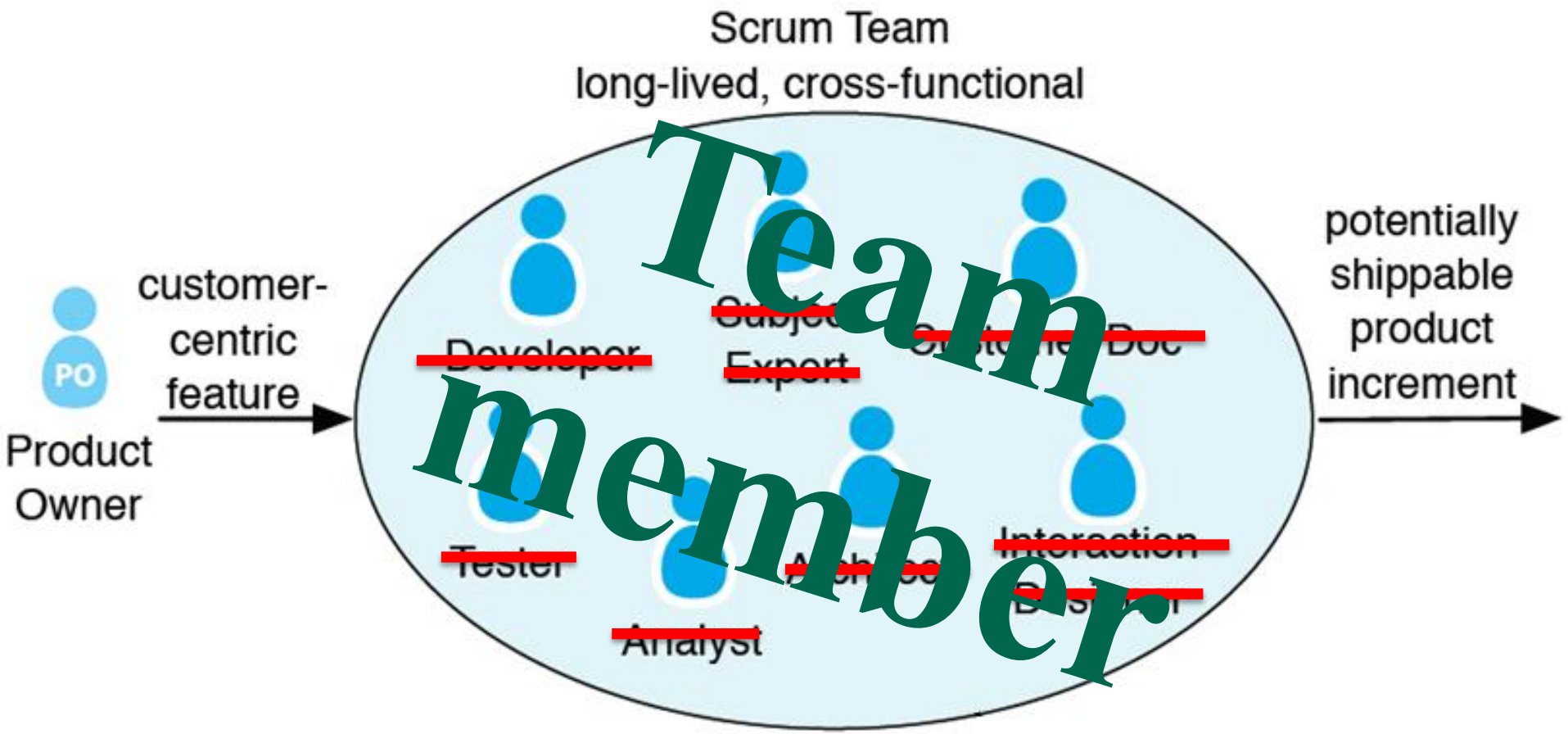
TEAM



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TEAM

- Teams ≈ “Feature Teams”
- 100% allocated to one feature (at a time)
- Cross-functional
- Cross-component
- Ideally, co-located
- Stable, long-lived (e.g., 3 years together)
- learn new-area skills from each other
- 7 +/- 2 people
- *Each teammate is responsible for QUALITY!*

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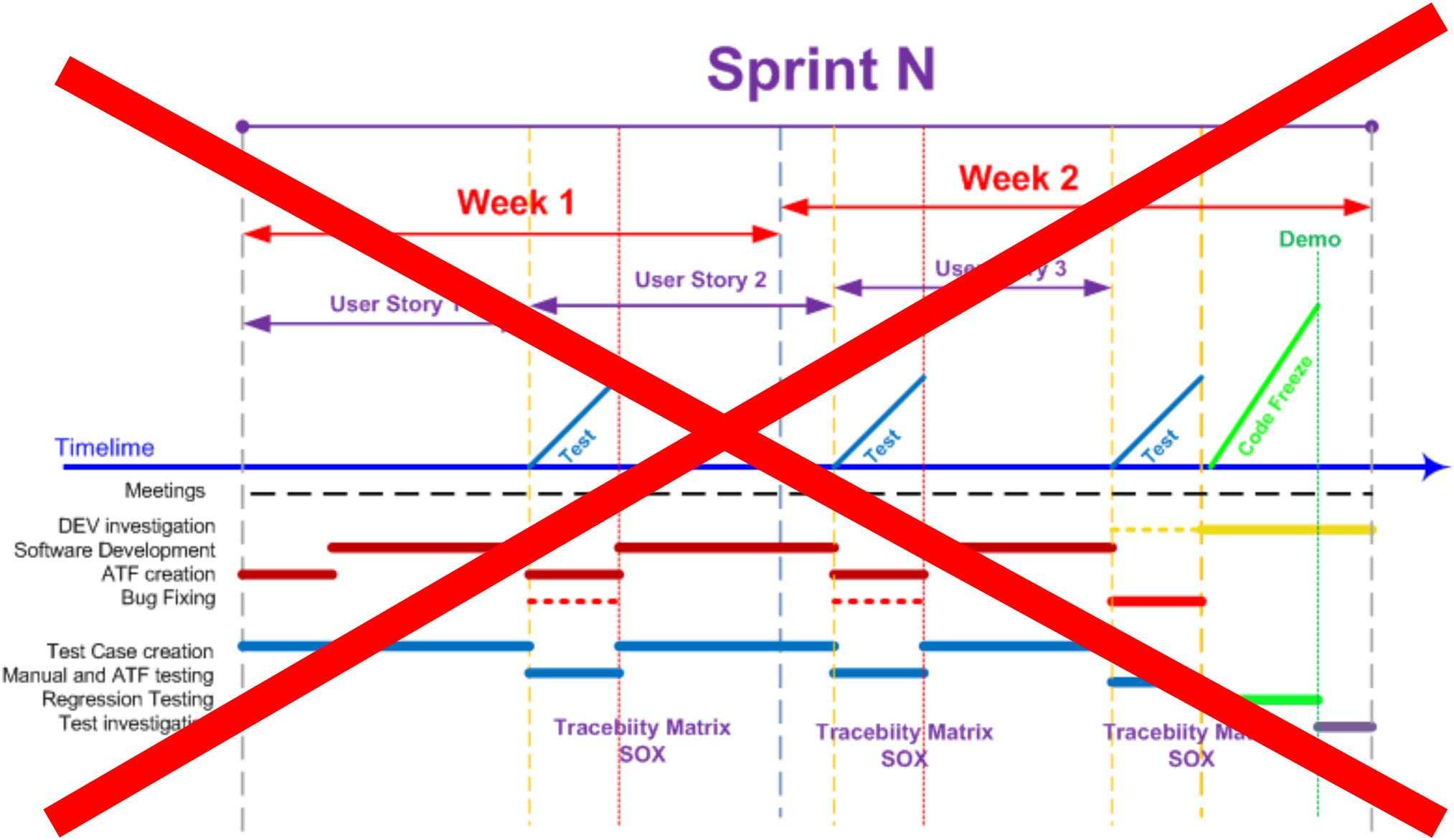
Sprint Time Line



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Meetings plan

TIME	SPRINT N									
	Week 1					Week 2				
	MON	TUE	WED	THU	FRI	MON	TUE	WED	THU	FRI
10:00	**Stand-up**									
11:00	**SP1**									
12:00	**SP2**	**Coordination**								**JD**
13:00	**SPV**									**R**
14:00										
15:00										**JLR**
16:00	TBM	**JPBR1**	**JR**	**JPBR2**	TBM	**DS1**	TBM	**PBR**	**DS2**	TBM
17:00			TBM			TBM		**PBRV**	TBM	
18:00		TBM		TBM				TBM		

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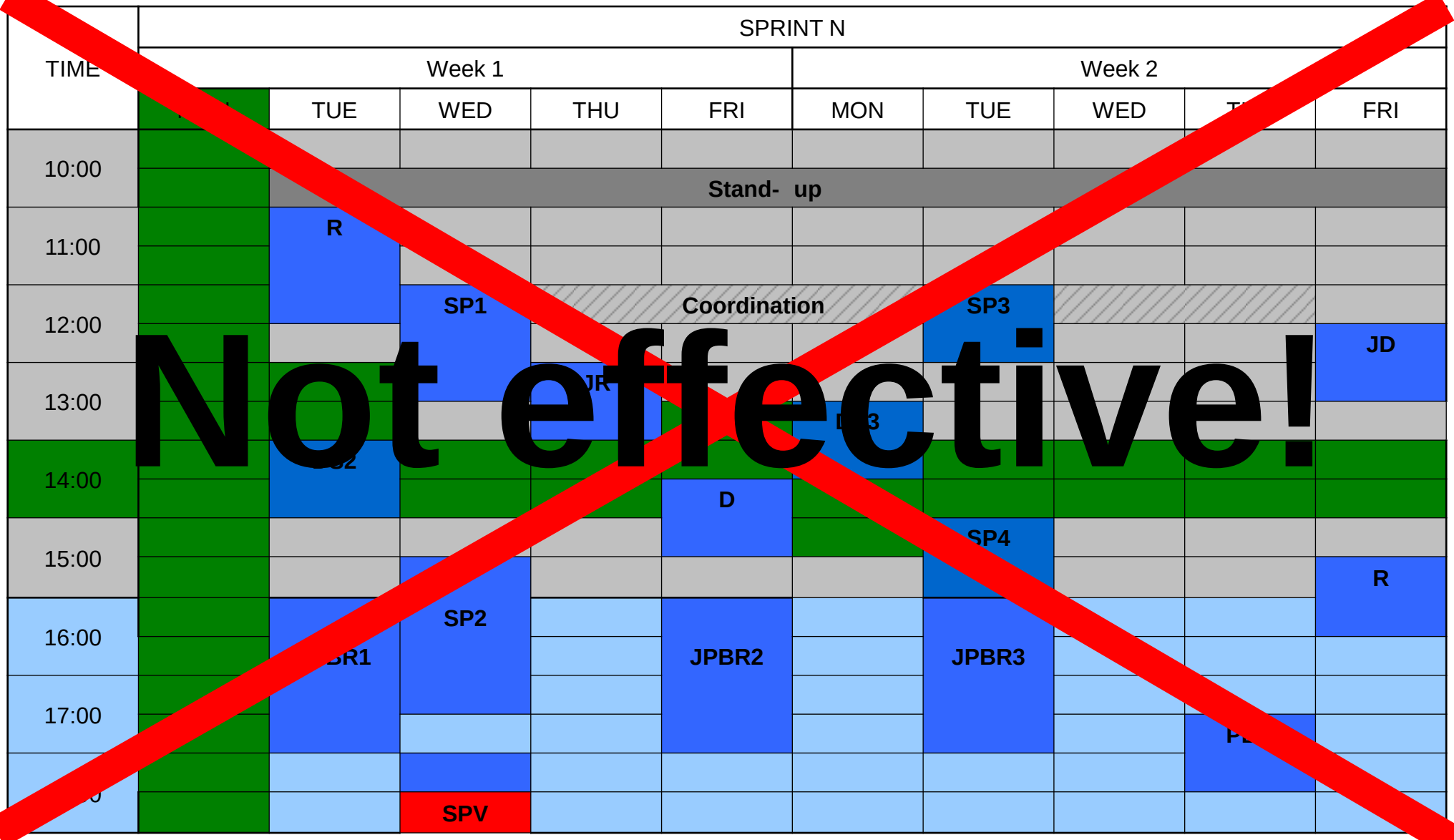
Real results



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Keep it SIMPLE!

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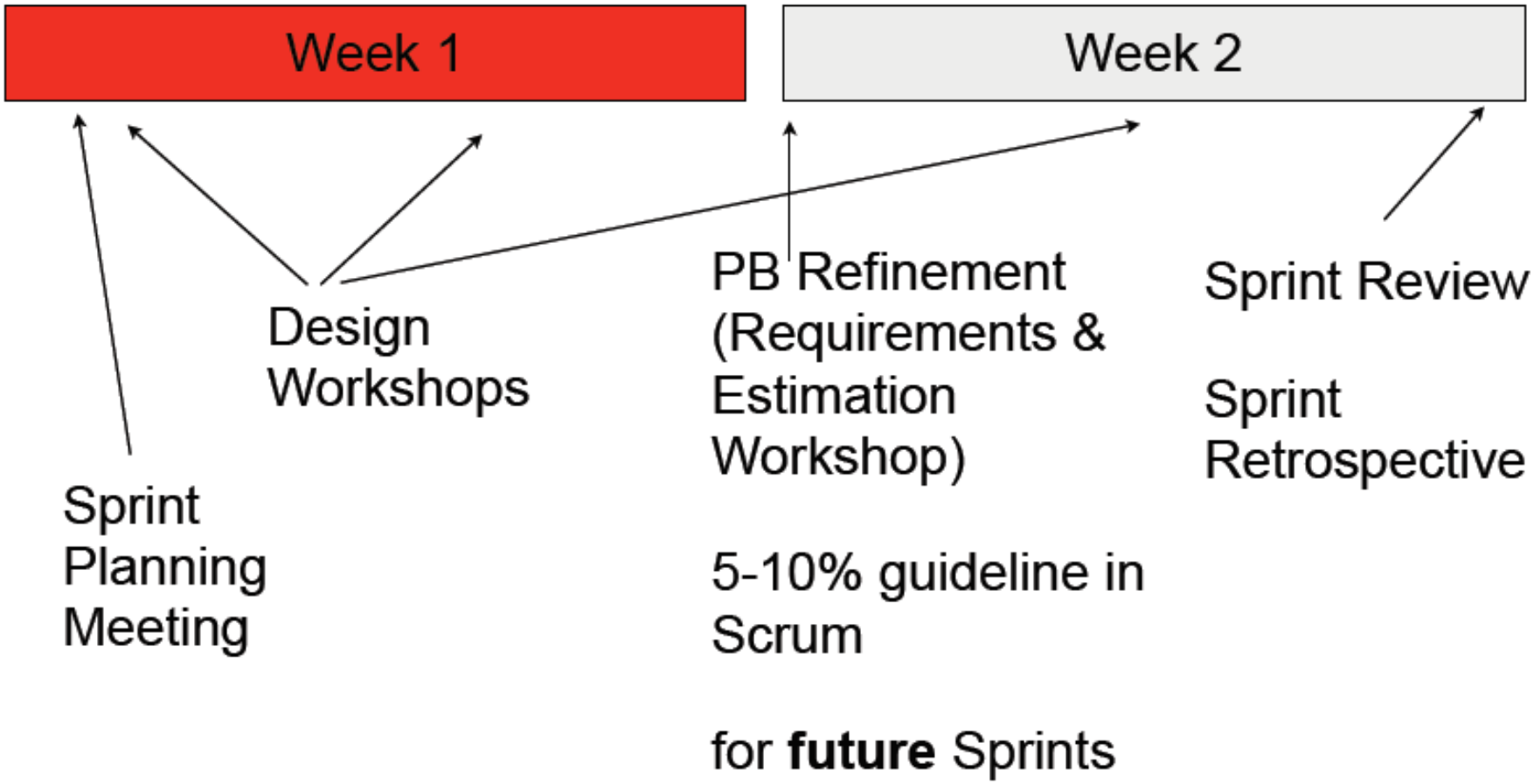
Main ideas

- No predefined process
- Estimates – “It’s just an estimate”
- Team is allowed to descope
- Maximize automation
- Minimize manual testing
- Quality proved by test coverage


Week 1
Week 2
Sprint Planning Meeting
Design Workshops
PB Refinement (Requirements & Estimation Workshop)
5-10% guideline in Scrum
for **future** Sprints
Sprint Review
Sprint Retrospective

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ATDD

Requirements as Executable Tests...

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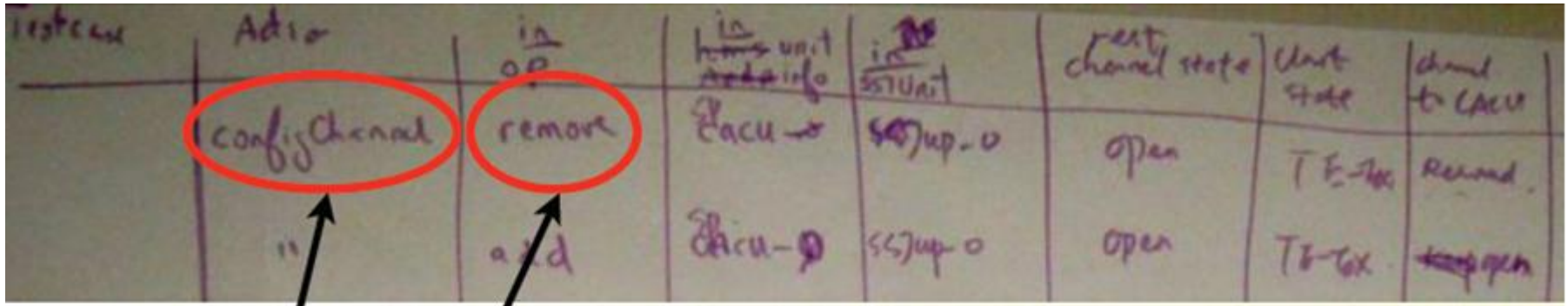
Examples = Specifications = Requirements = Automated Acceptance Tests!



Test Cases (data-driven Robot style)

Test Case	Action	IN: operation	IN: unit info	POST-CONDITION: rest channel state	POST-CONDITION: unit state	POST-CONDITION: channel to CACU
1	Configure channel	remove	SP-CACU	open	TE-TEX	removed
2	Configure channel	add	SP-CACUn	open	TE-TEX	open

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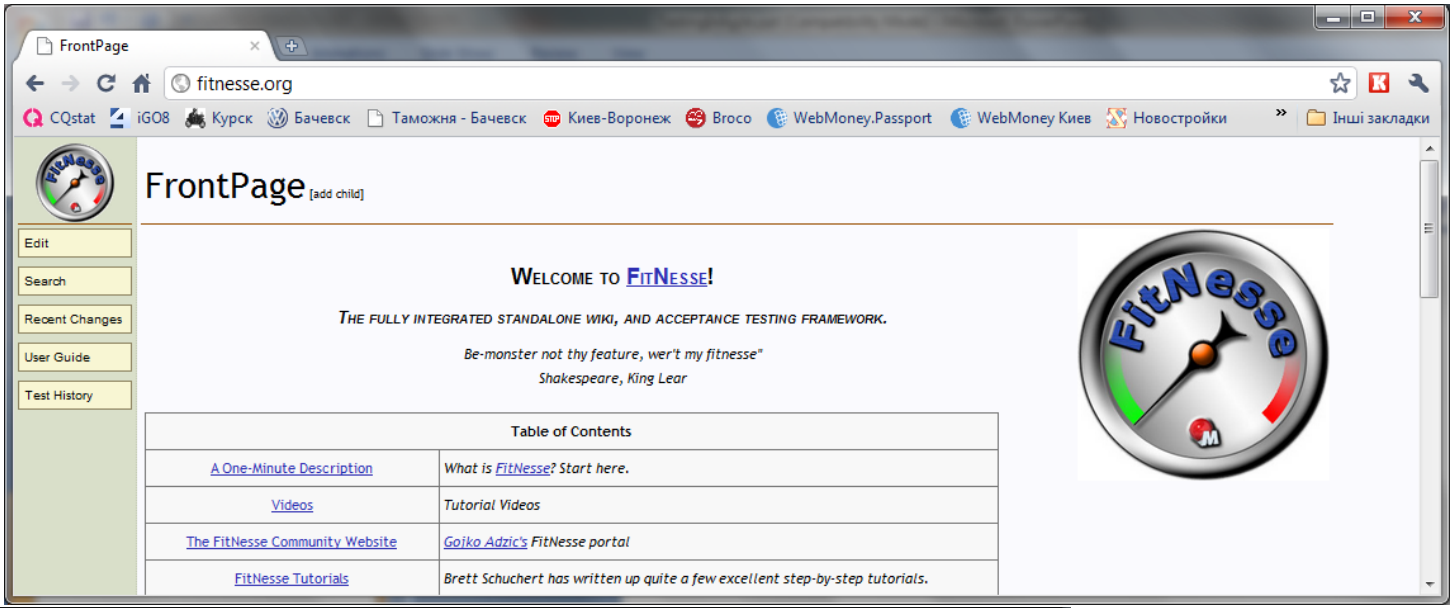

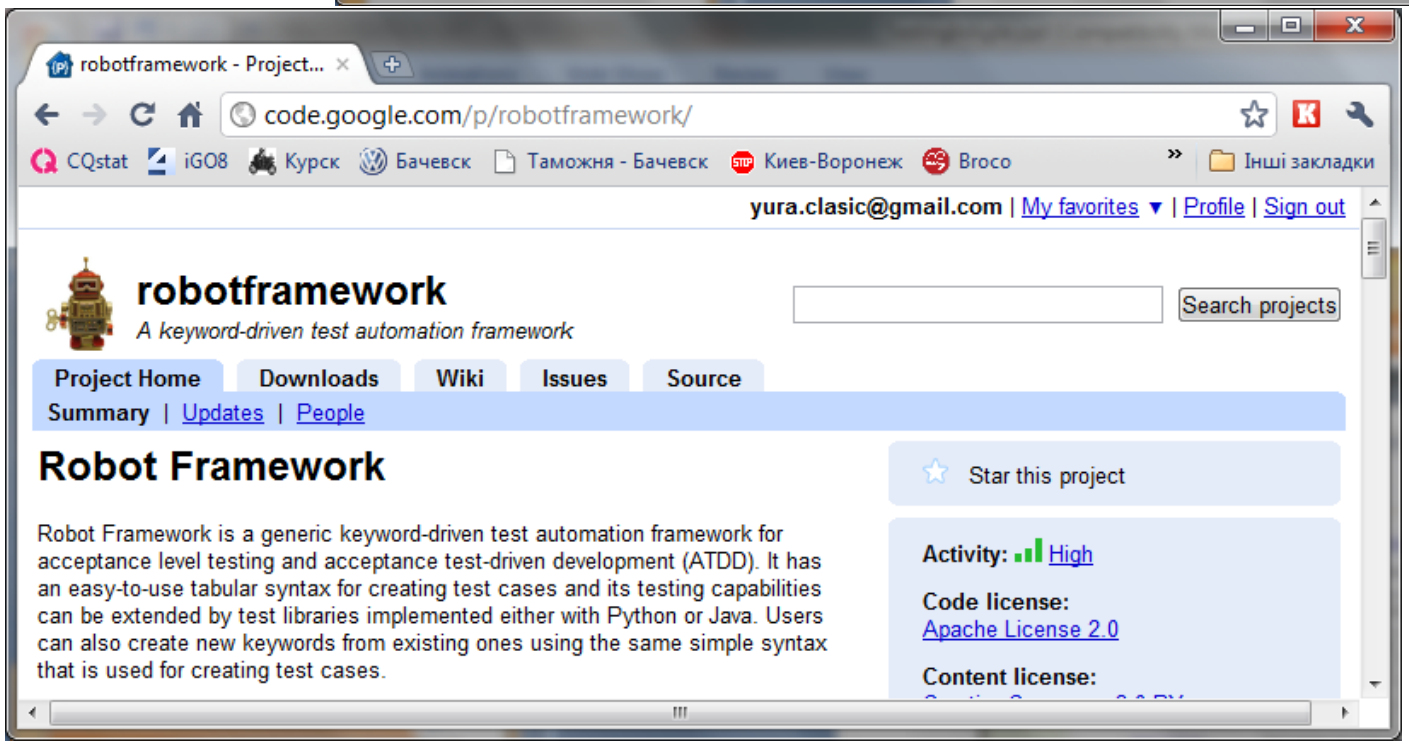

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Feedback to improve requirements...

Make sure he is dead

http://www.youtube.com/watch?v=Wpsf-EbyBhI

Testing types

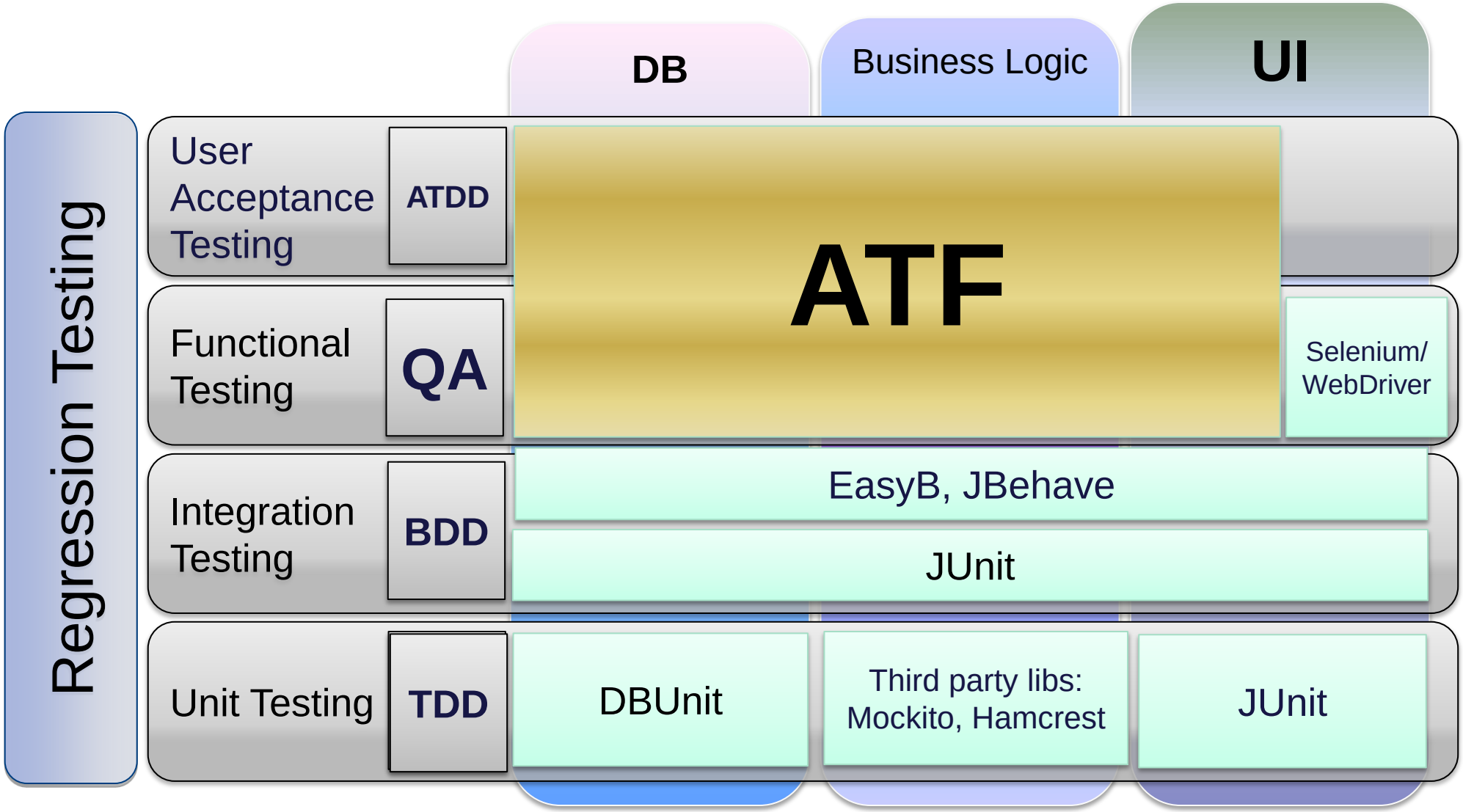
- Unit

- ATF Scripts

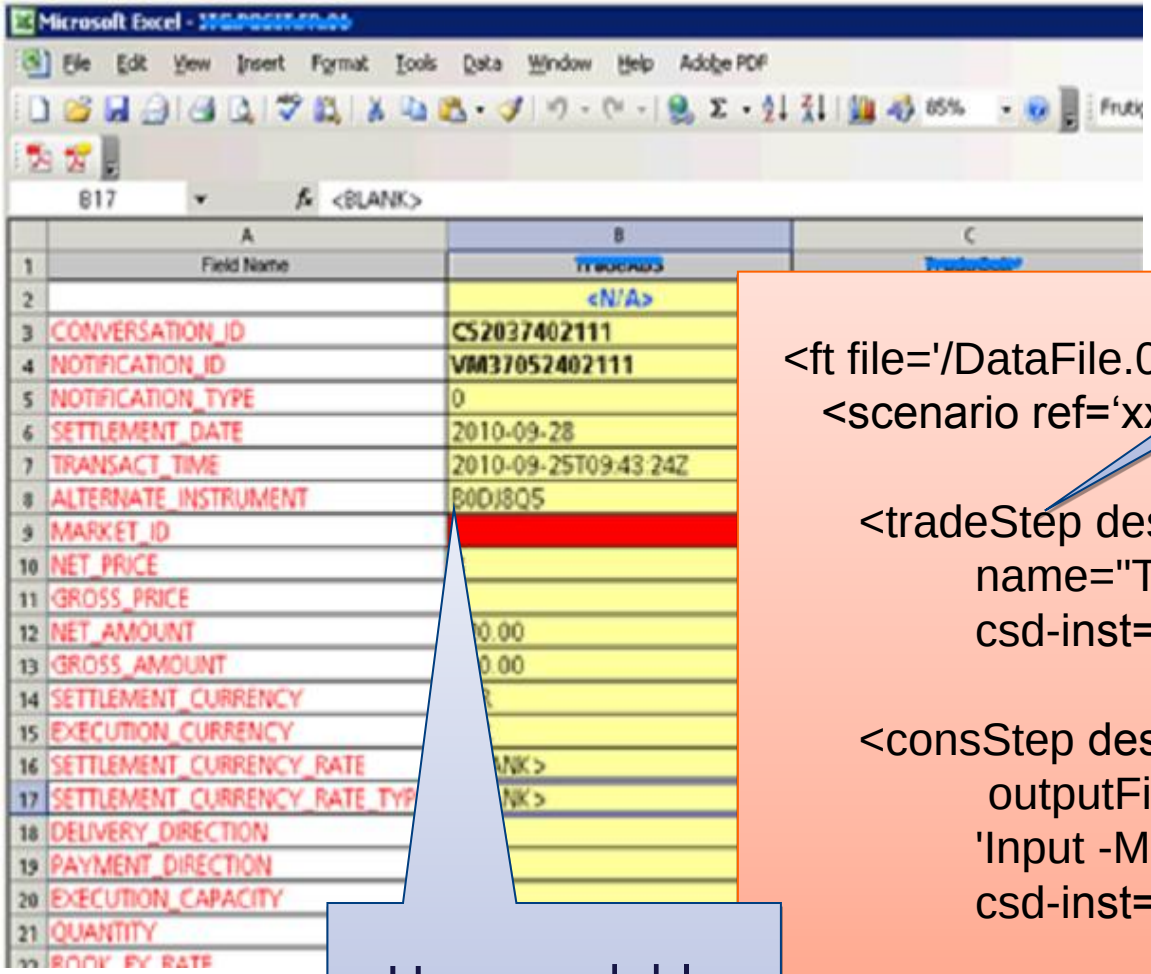
- Manual

- Regression (ATF)

- F2B (For continuous integration projects)


DB
Business Logic
UI
Regression Testing
User Acceptance Testing
ATDD
ATF
Functional Testing
QA
Selenium/ WebDriver
Integration Testing
BDD
EasyB, JBehave
JUnit
Unit Testing
TDD
DBUnit
Third party libs: Mockito, Hamcrest
JUnit

Scenarios and data examples




```
<ft file='/DataFile.01.xls' template='/Trade.v4.2.tpl'>
  <scenario ref='xxx1.01'>

    <tradeStep description='Step1: Inject Trade - Buy '
          name="Trade"  ack='Y' bog- trade='Y' cash='N'
          csd-inst='N' work='Trade.Unmatched'/>

    <consStep description='Step2: Inject CSV Cons1 from '
          outputFile="fileCons" inputSheetName=
          'Input -MKT - Cons' columns="Cons1" cash='N'
          csd-inst='N'  work='Trade.Matched'/>

  </scenario>
</ft>
```

Test steps coincide with business flow and cover STP

User readable input and output data in Excel

Validators are related to the external systems requests

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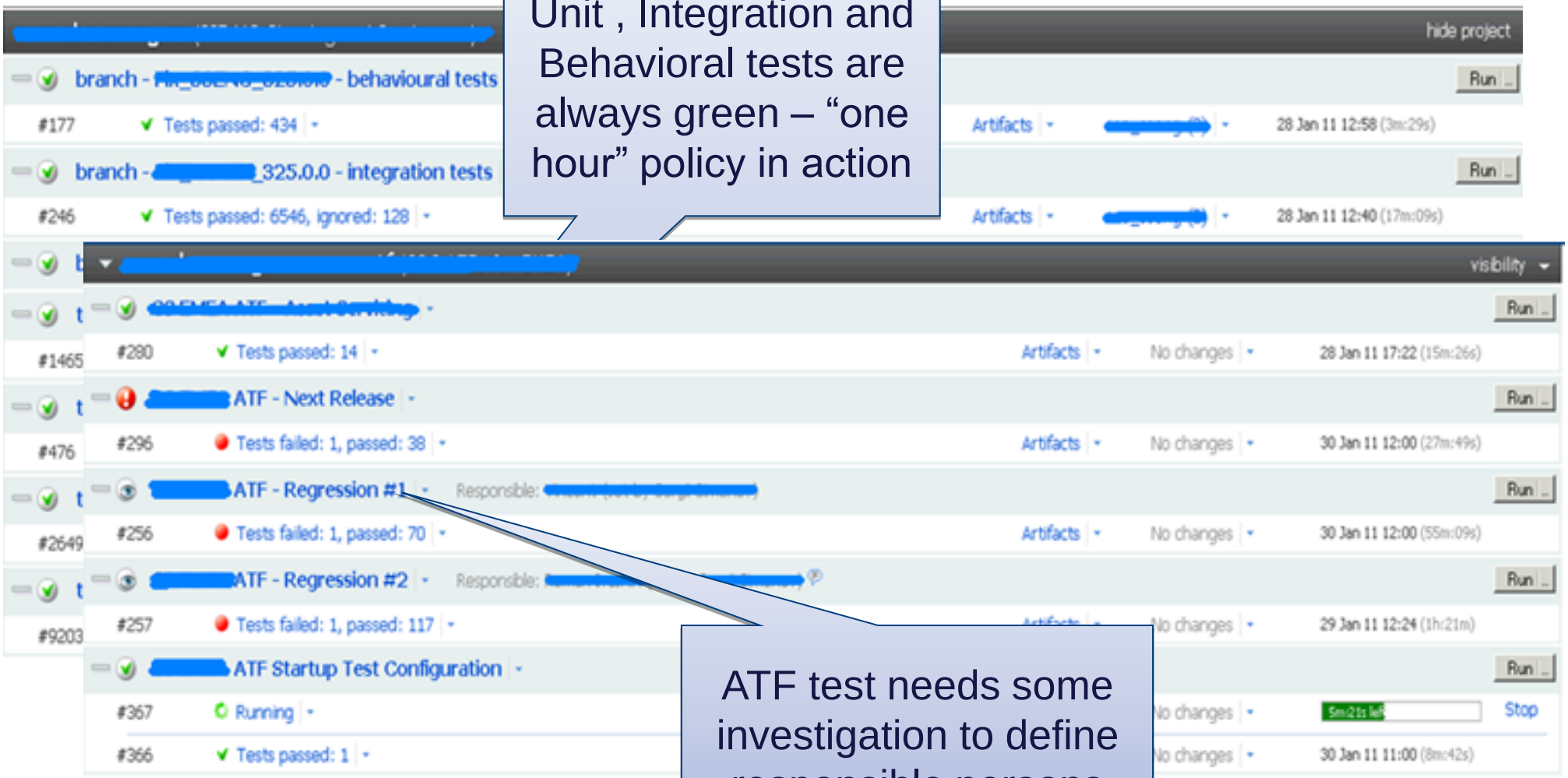
Ground rules

- Ensure what you commit will work
- Take responsibility for you commit
- Don’t “commit and run”
- Don’t make things worse
- Fix the build fast… or else!
- Be responsible

System health monitoring
TeamCity projects

Unit , Integration and Behavioral tests are always green – “one hour” policy in action



ATF test needs some investigation to define responsible persons

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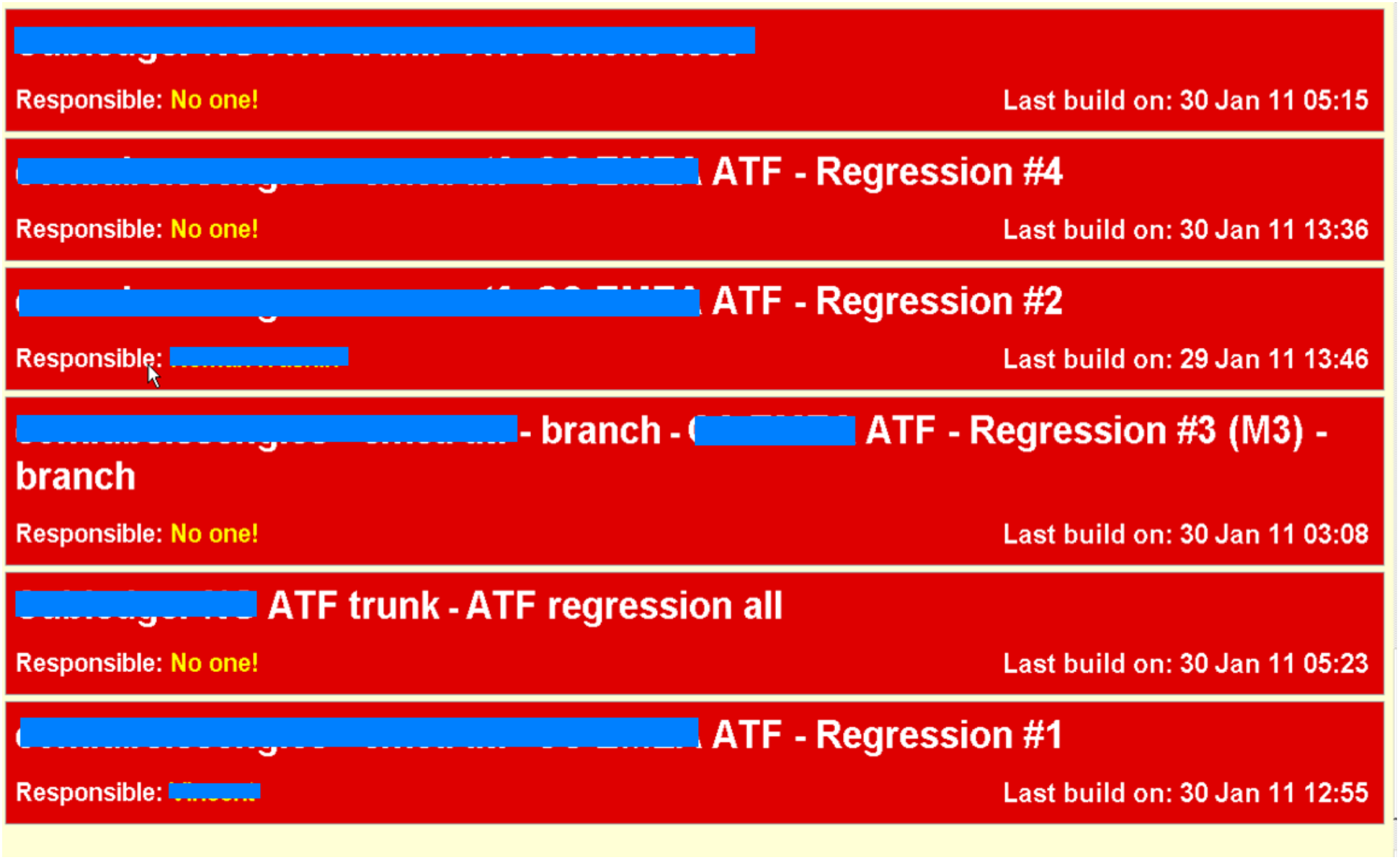
Failed builds on plasma at all locations



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Pressure to deliver and engineering quality...

The Downfall of Agile Hitler

http://www.youtube.com/watch?v=l1wKO3rID9g

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"If you are going through hell,
keep going."

-- Winston Churchill

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adstream
streamlining advertising

Q/A?