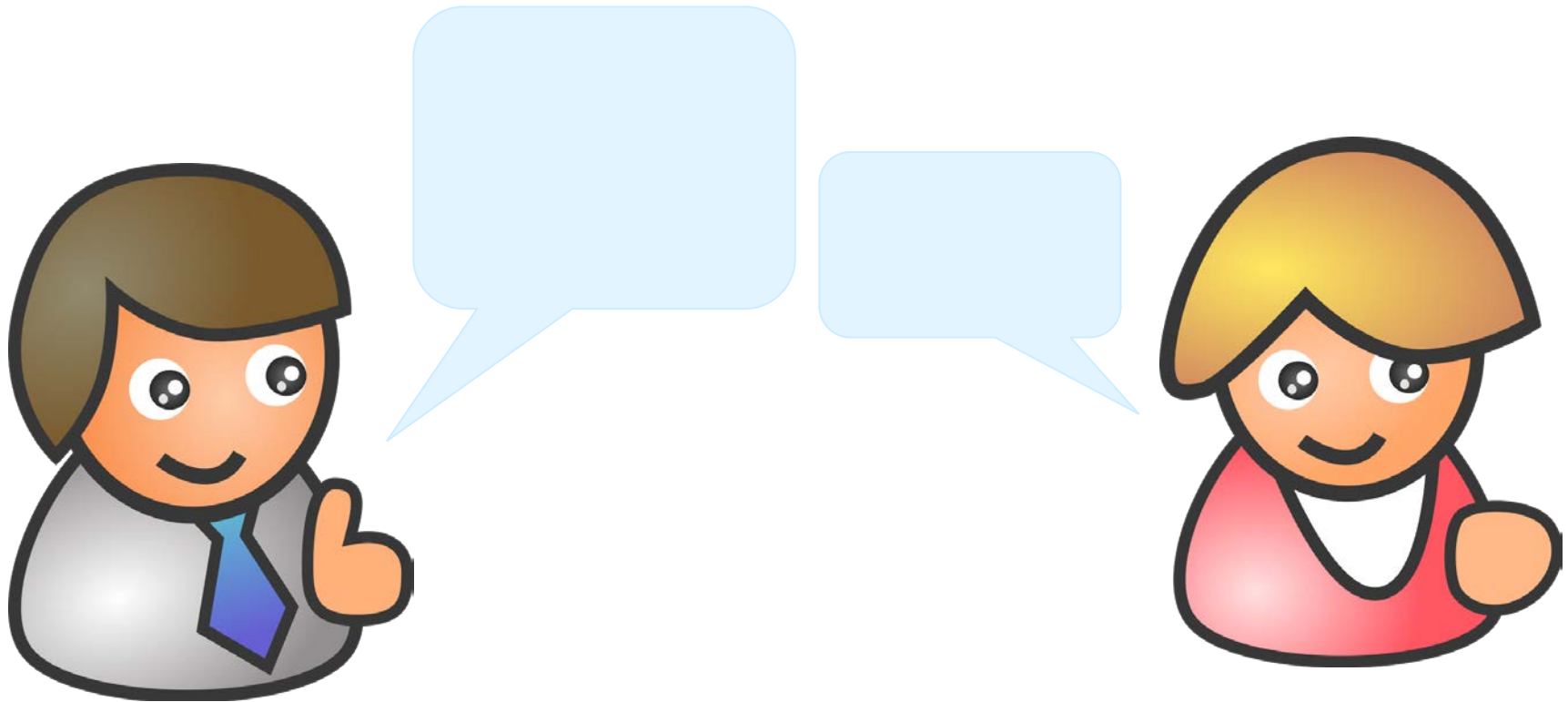


Aiming higher

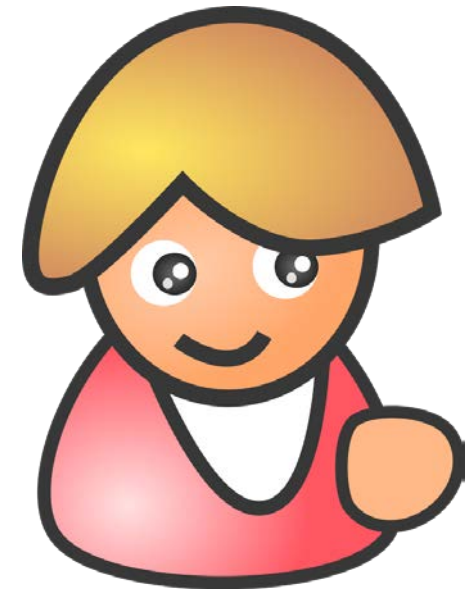
Using test automation to drive better quality

Alexandra Schladebeck

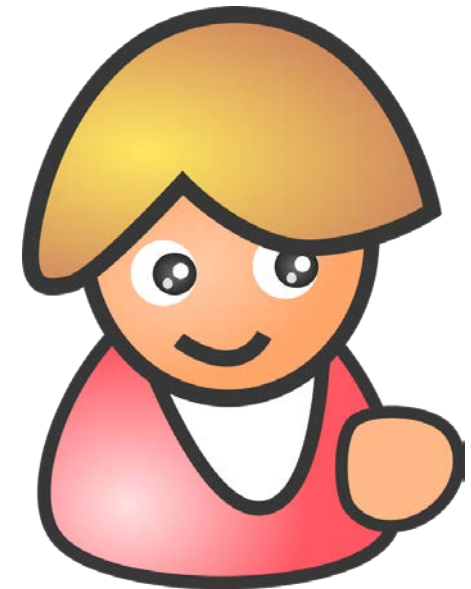
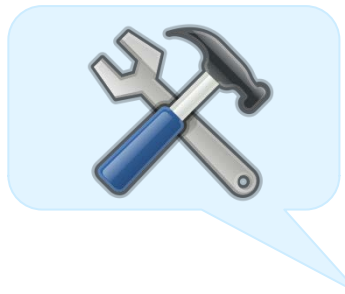
Conversations I've had



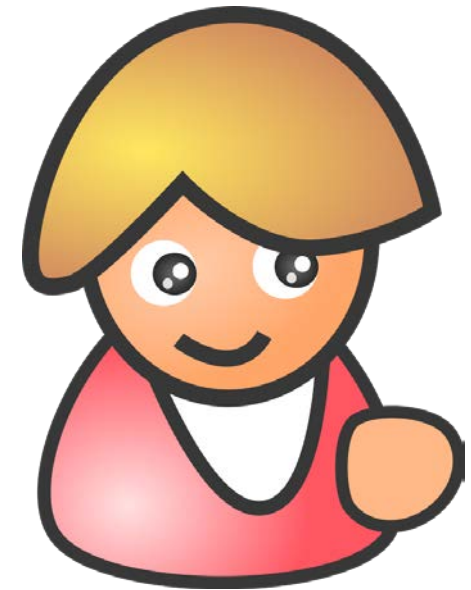
Conversations I've had



Conversations I've had



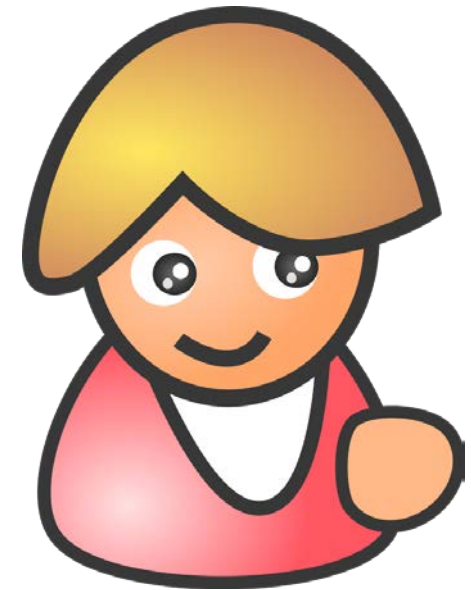
Conversations I've had



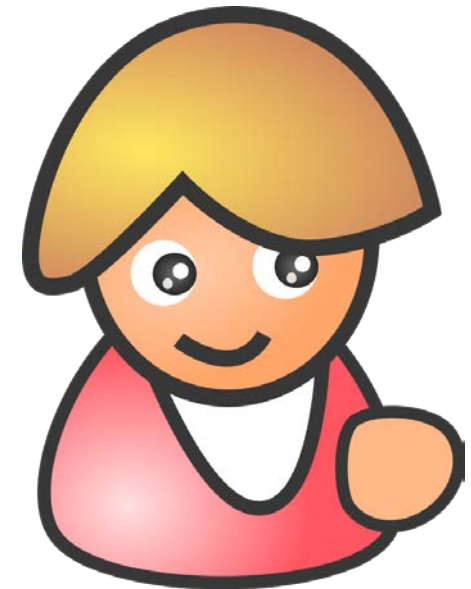
Conversations I've had



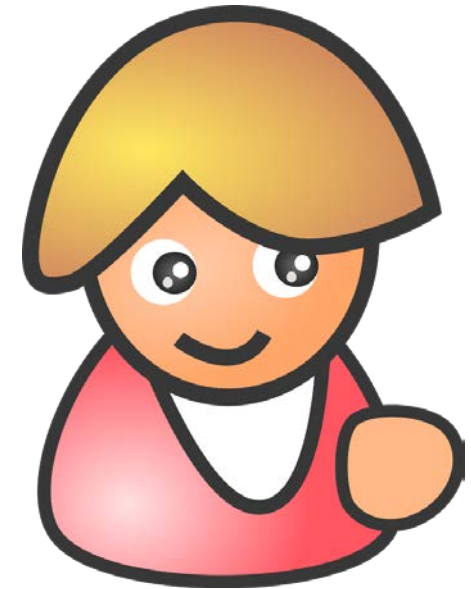
Conversations I've had



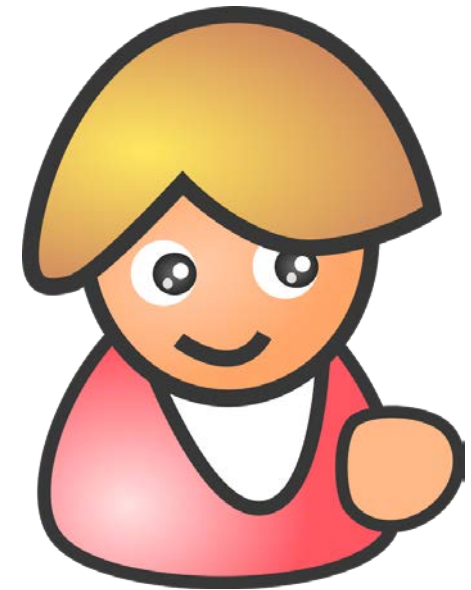
Conversations I've had



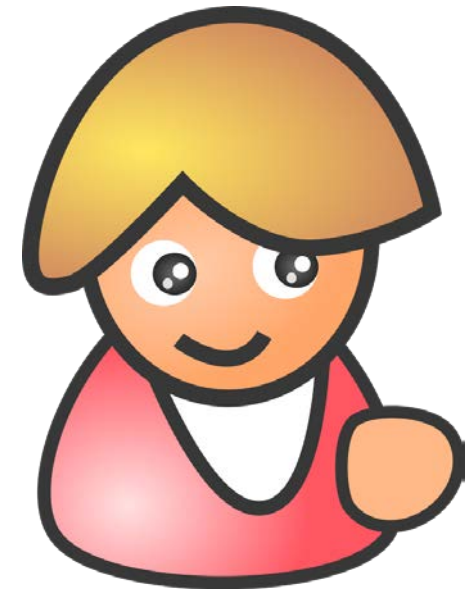
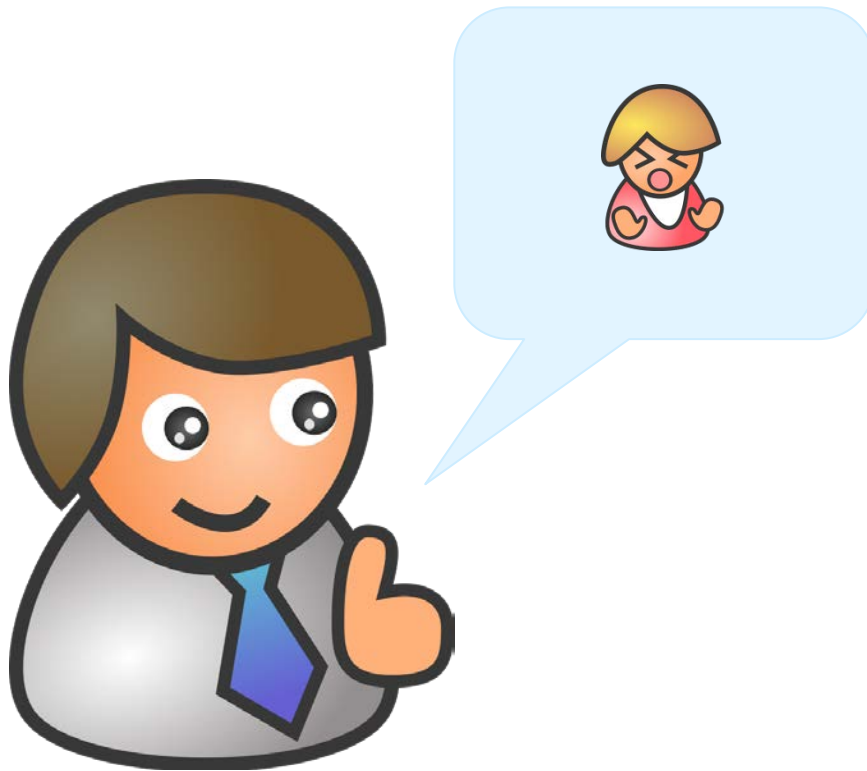
Conversations I've had



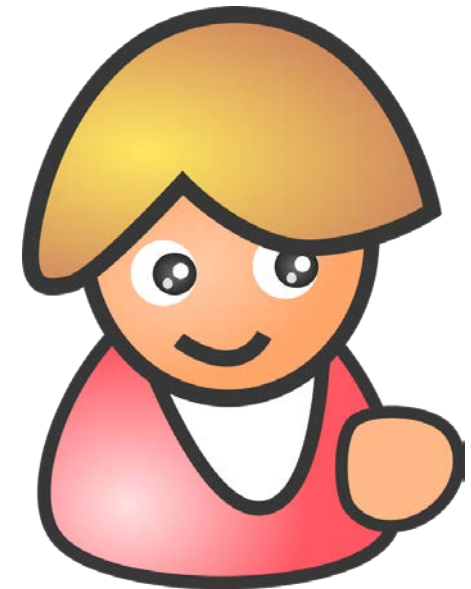
Conversations I've had



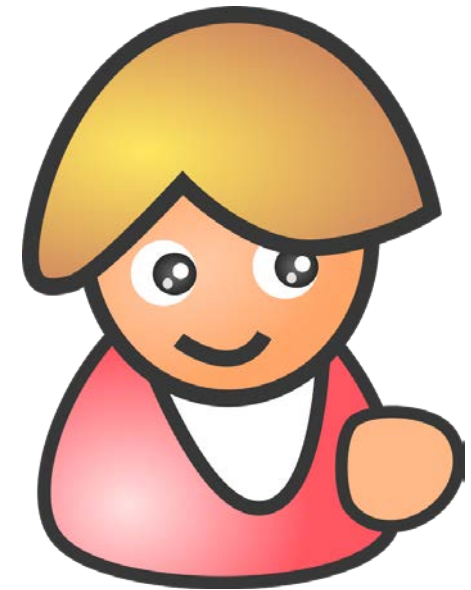
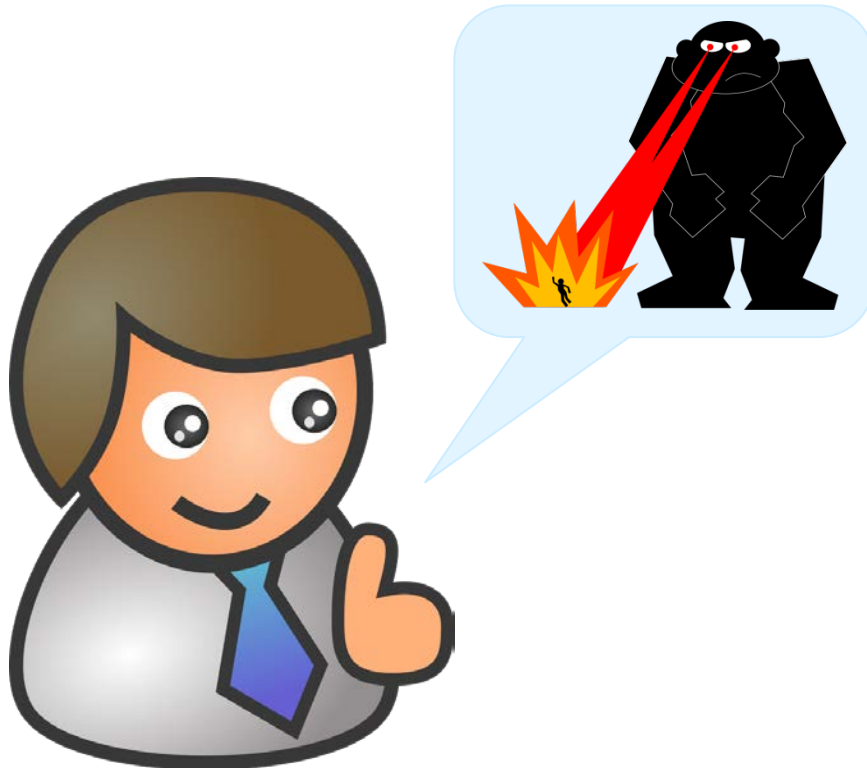
Conversations I've had



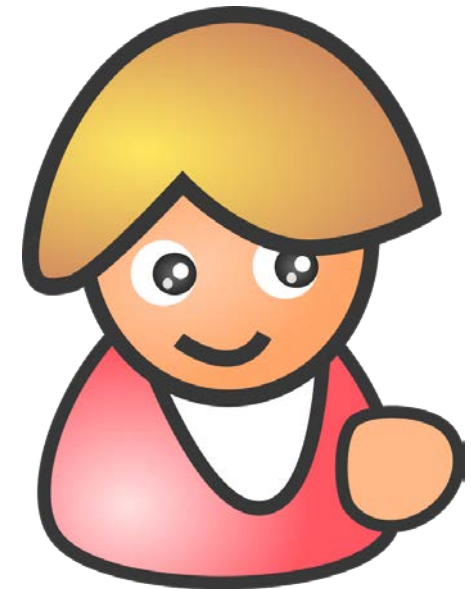
Conversations I've had



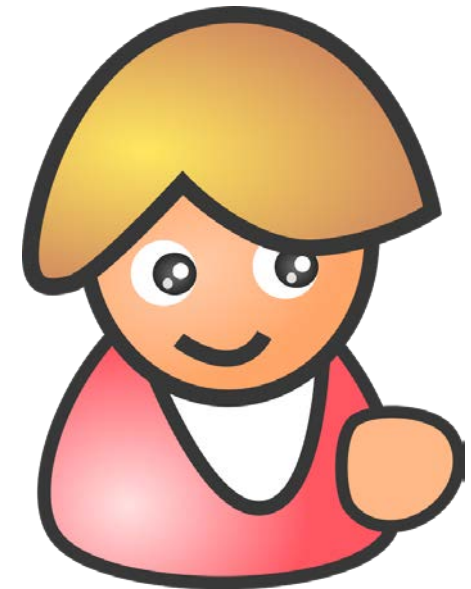
Conversations I've had



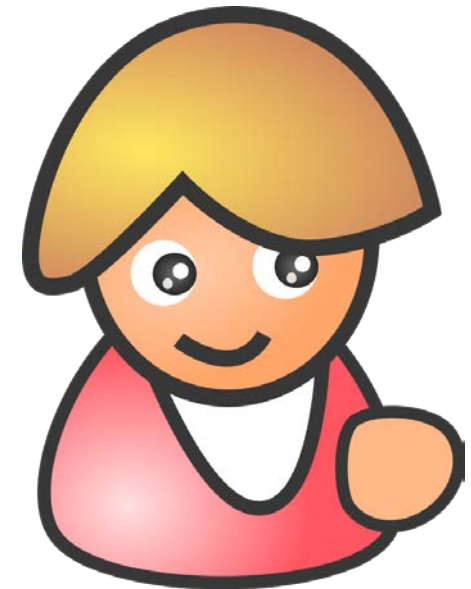
Conversations I've had



Conversations I've had



Conversations I've had



You snooze, you lose

Environment



- Software builds and CI
- Test data + scripts
- Test machine
- Bug tracking system
- Hardware
- Other required software

Tests



- Plan
- Prioritization
- Use cases

Buy-in

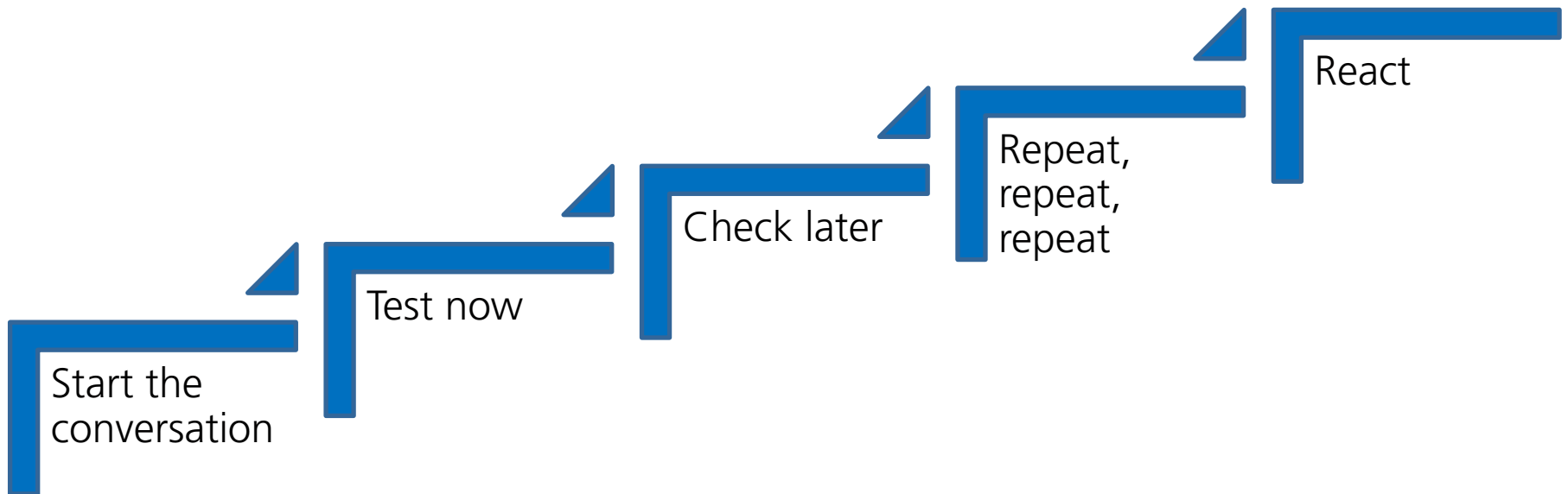


- Support from team
- Resources from management
- Contact person

My Christmas list...



Agenda – Stepping Stones



Start the conversation



Start the conversation

Feature X
- Implement
- Test
- Document

Start the conversation

What is to test?

What is good enough?

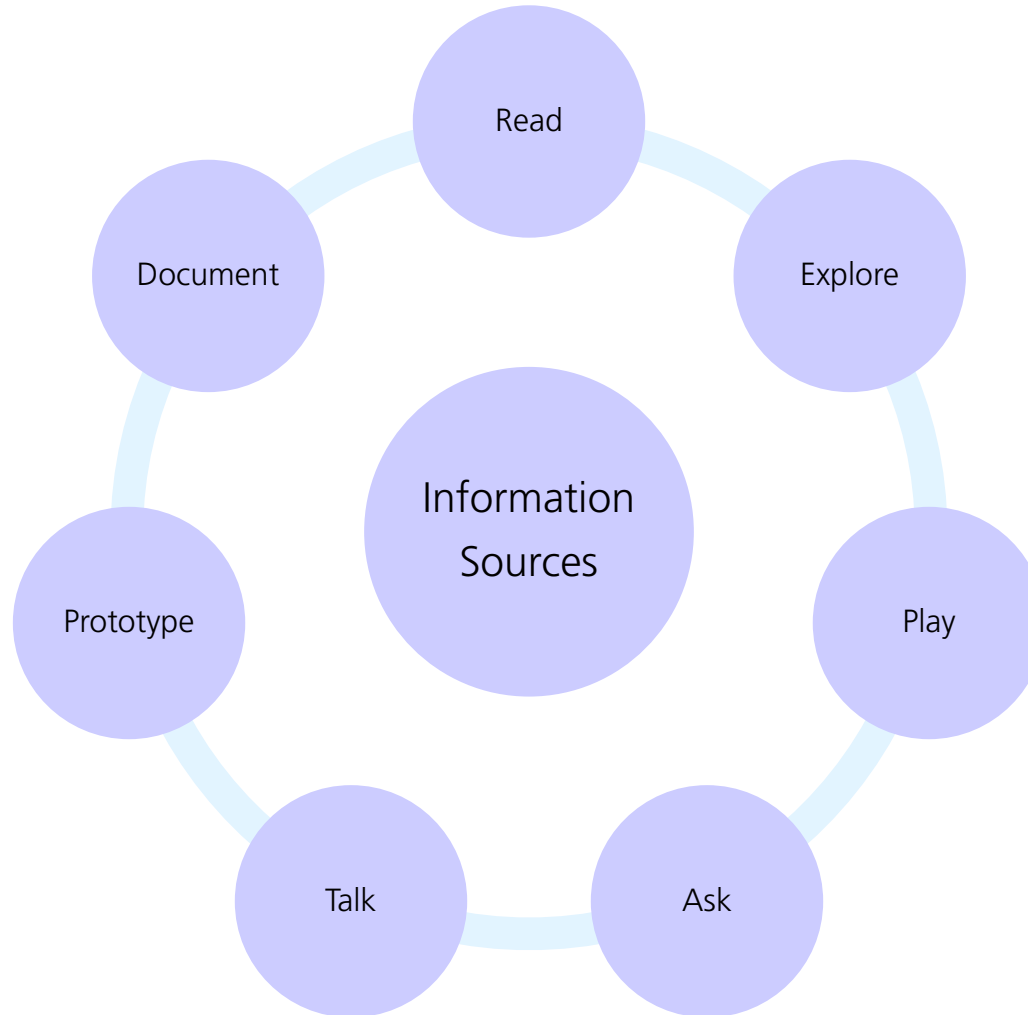
Feature X

- Implement
- Test
- Document

How will we know it works?

What should be automated?
How?

Start the conversation

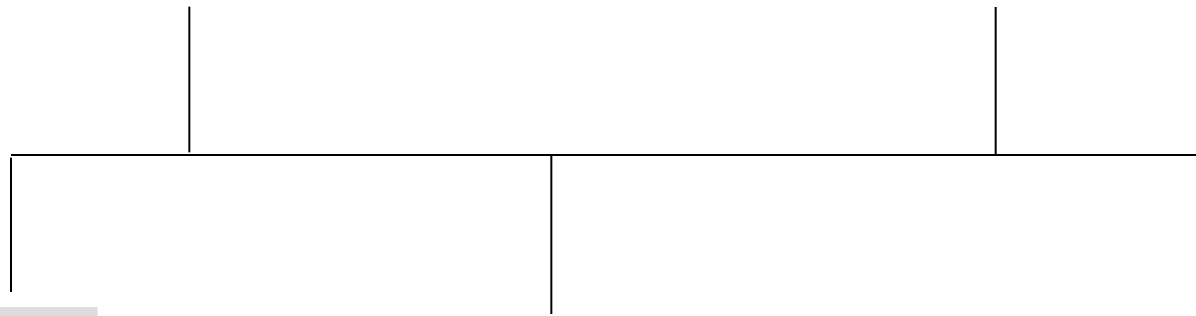


What does conversation bring us?

▶ Example one: remembered the whole feature

Report written during test

Report generated after test



Execution Stack

- ITE-FULLTEST-GDXP - TC (ok) - 1:23:34.204
- FULLTEST-WinXP - TC (ok) - 1:23:34.204
- FULLTEST-Win - TC (ok) - 1:23:34.204
- FULLTEST - TC (ok) - 1:23:34.188
- init - TC (ok) - 0:00:00.688
- SPECIFIC - TC (ok) - 1:23:33.500
- **Hauptfunktionen 01 - TC (ok)** - 1:15:36.646
- Ticket #2198 - TC (ok) - 0:02:20.816
- Ticket #2270 - TC (ok) - 0:01:51.628
- (ok) - 0:02:18.347
- (ok) - 0:01:26.063
- (ok) - 0:00:00.000
- (ok) - 0:00:00.016

Start the conversation

```

<?xml version="1.0" encoding="UTF-8"?>
<!--<?xml-stylesheet type="text/xsl" href="format.xsl"?-->
<report style="Complete">
  <project>
    <name>GUIDancer 5.2</name>
    <test-start>Thu Oct 06 19:59:09 CEST 2011</test-start>
    <test-end>Thu Oct 06 21:22:47 CEST 2011</test-end>
    <test-length>01:23:38</test-length>
    <expectedNumSteps>5985</expectedNumSteps>
    <numStepsTested>6389</numStepsTested>
    <numEventHandlerSteps>404</numEventHandlerSteps>
    <numFailedSteps>0</numFailedSteps>
    <language>Deutsch (Deutschland)</language>
    <testsuite duration="1:23:34.204">
      <name>ITE-FULLTEST-GDXP</name>
      <status>1</status>
    </aut>
  </project>

```

- ✓ UC_Spaltenkonfigurationen_AddFahrzeugspaltenkonfiguration
- ✓ TS_Common_AUT_InitCyrus
- ✓ TC_Spaltenkonfigurationen_CreateFahrzeugspaltenkonfiguration
- ✓ TS_Spaltenkonfigurationen_OpenDialogFahrzeugspaltenkonfigurationen
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpaltenkonfigurationRowInTableSpaltenkonfigurationenByBezeichnung
- ✓ TS_Spaltenkonfigurationen_ClickButtonAdd
- ✓ TS_Spaltenkonfigurationen_SelectSpaltenkonfigurationenRowInTableSpaltenkonfigurationenByBezeichnung
- ✓ TS_InputTextAndPressKeyENTER
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpalteInUnassignedListByBezeichnung
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpalteInAssignedListByBezeichnung
- ✓ TS_Spaltenkonfigurationen_MoveSpalteToAssignedList
- ✓ TS_Spaltenkonfigurationen_ClickButtonOkAndWaitForDialogToClose
- ✓ TS_Spaltenkonfigurationen_OpenDialogFahrzeugspaltenkonfigurationen
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpaltenkonfigurationRowInTableSpaltenkonfigurationenByBezeichnung
- ✓ TS_Spaltenkonfigurationen_SelectSpaltenkonfigurationenRowInTableSpaltenkonfigurationenByBezeichnung
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpalteInUnassignedListByBezeichnung
- ✓ TS_Spaltenkonfigurationen_CheckExistenceOfSpalteInAssignedListByBezeichnung
- ✓ TS_Spaltenkonfigurationen_ClickButtonCancelAndWaitForDialogToClose

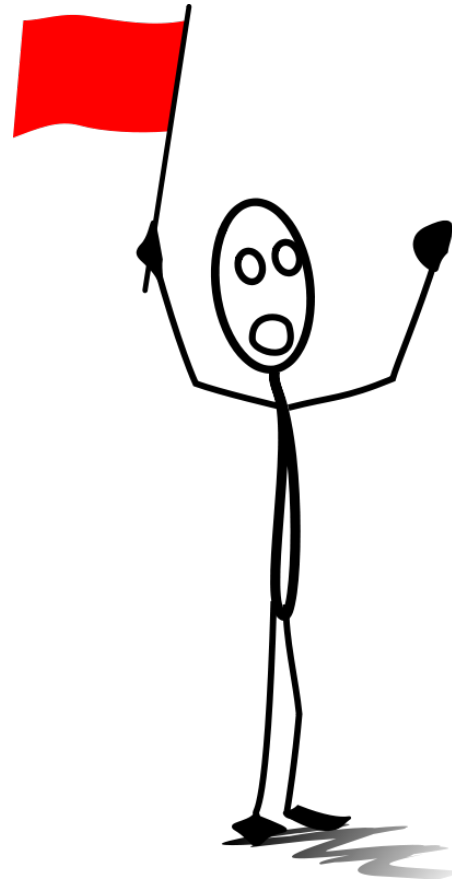
What can no conversation cost?

▶ Example two: Forgotten aspect



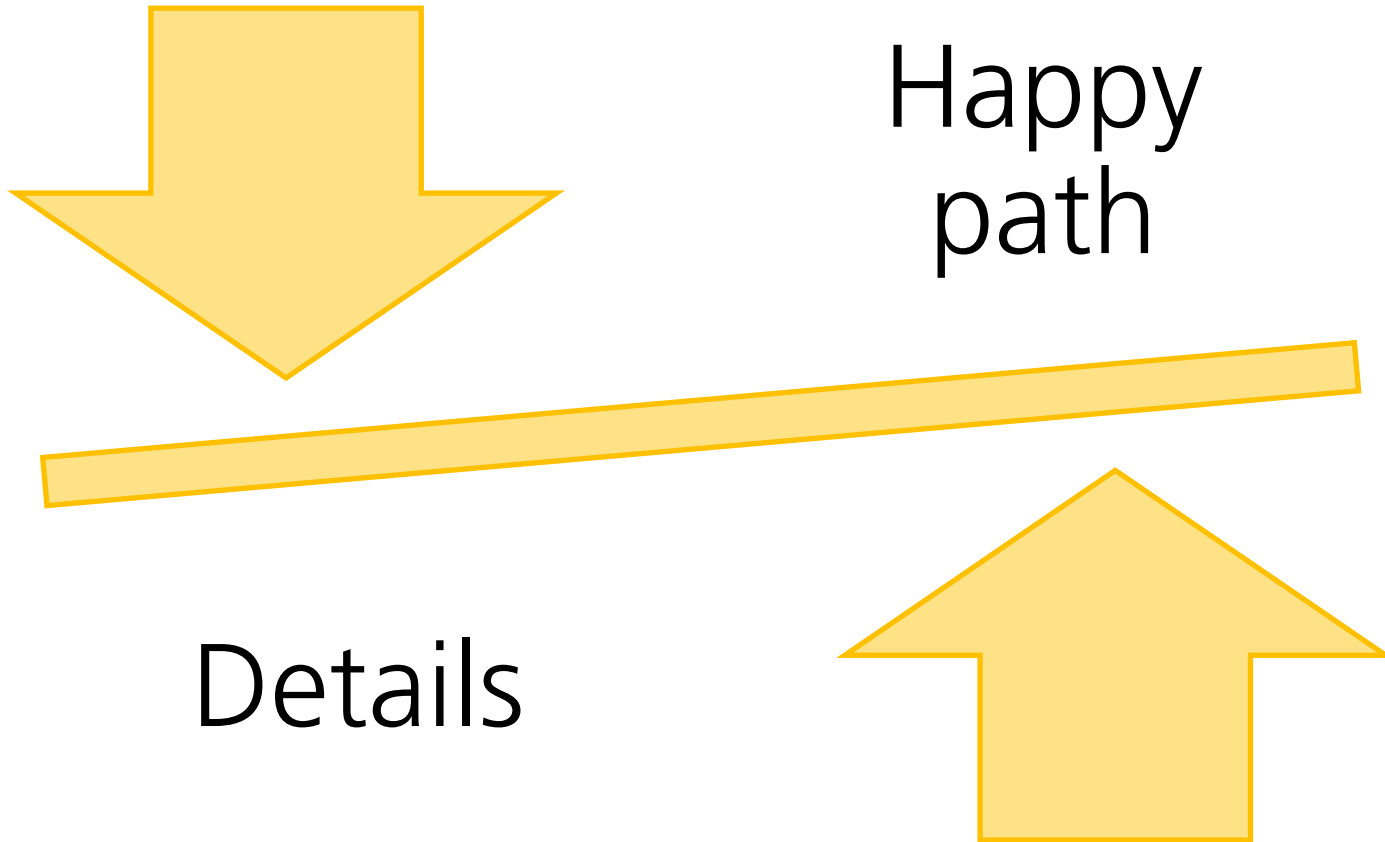
Start the
conversation

Start the automation



Test now

What do I need to start automating this?



What do I need to start automating this?

Feature

- How?
- What?
- Why?
- Who?
- Be mean
- Be nice
- Workflows
- Paths
- Complete?

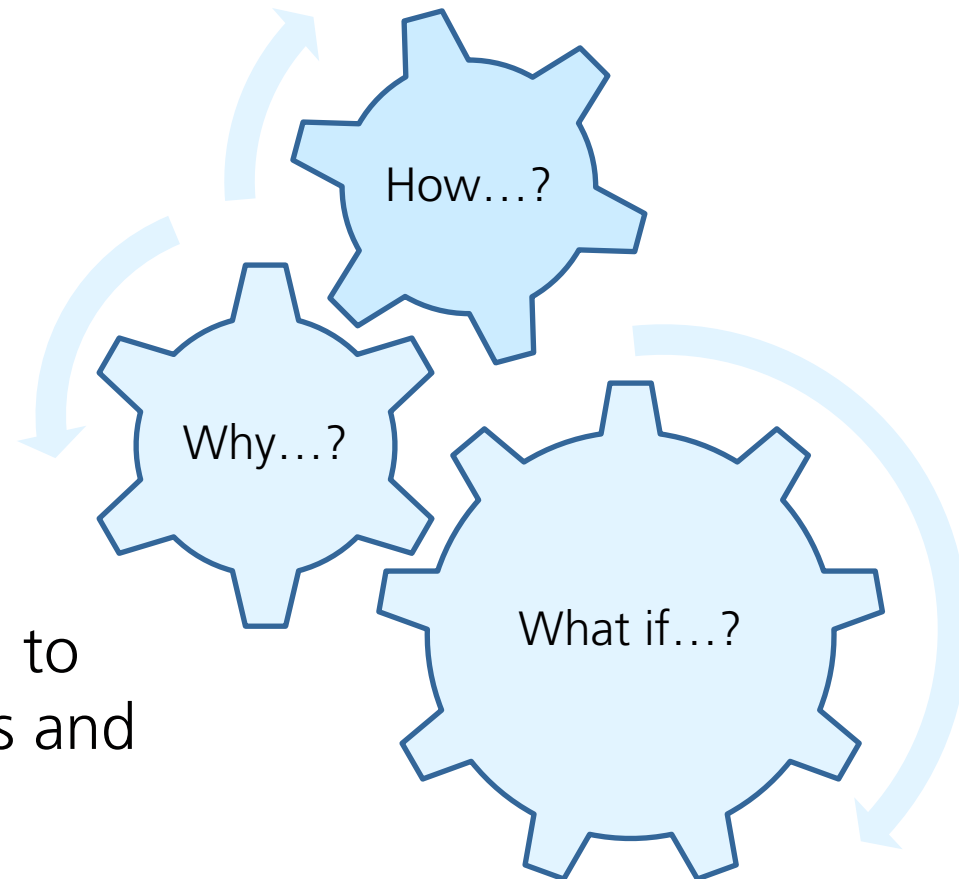
Context

- Interaction
- Dependencies
- Follow-ups
- Most common
- Most important
- Theme
- Usability

Specifics

- Repeatability
- Explicitness
- Synchronization
- Environment
- Affecting factors

Questions breed like rabbits



Start automating to
answer questions and
find more...

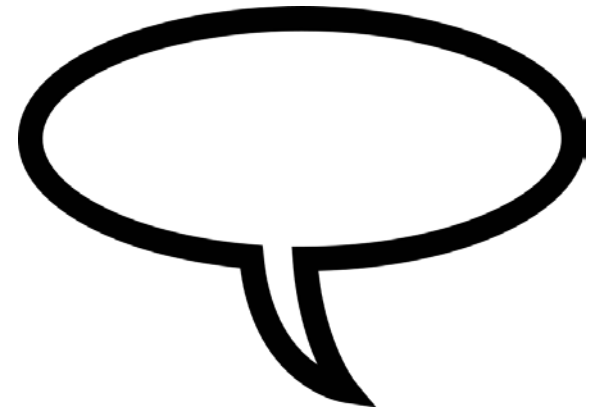
Test now

How the way to automation helps

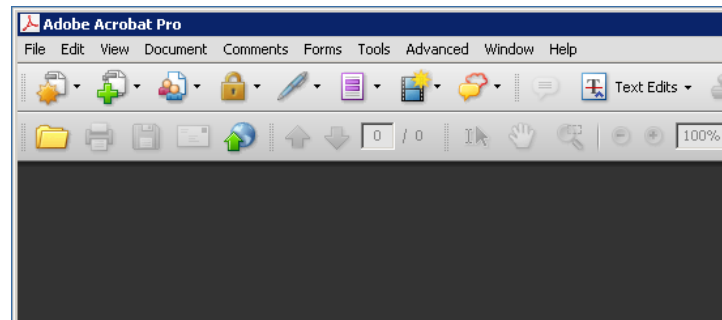
- ▶ Enter customer name
 - ▶ Enter address
 - ▶ Enter telephone number
 - ▶ Leave field via enter
- ▶ Enter customer name
 - ▶ Enter address
 - ▶ Enter telephone number
 - ▶ Don't leave field / leave field via click



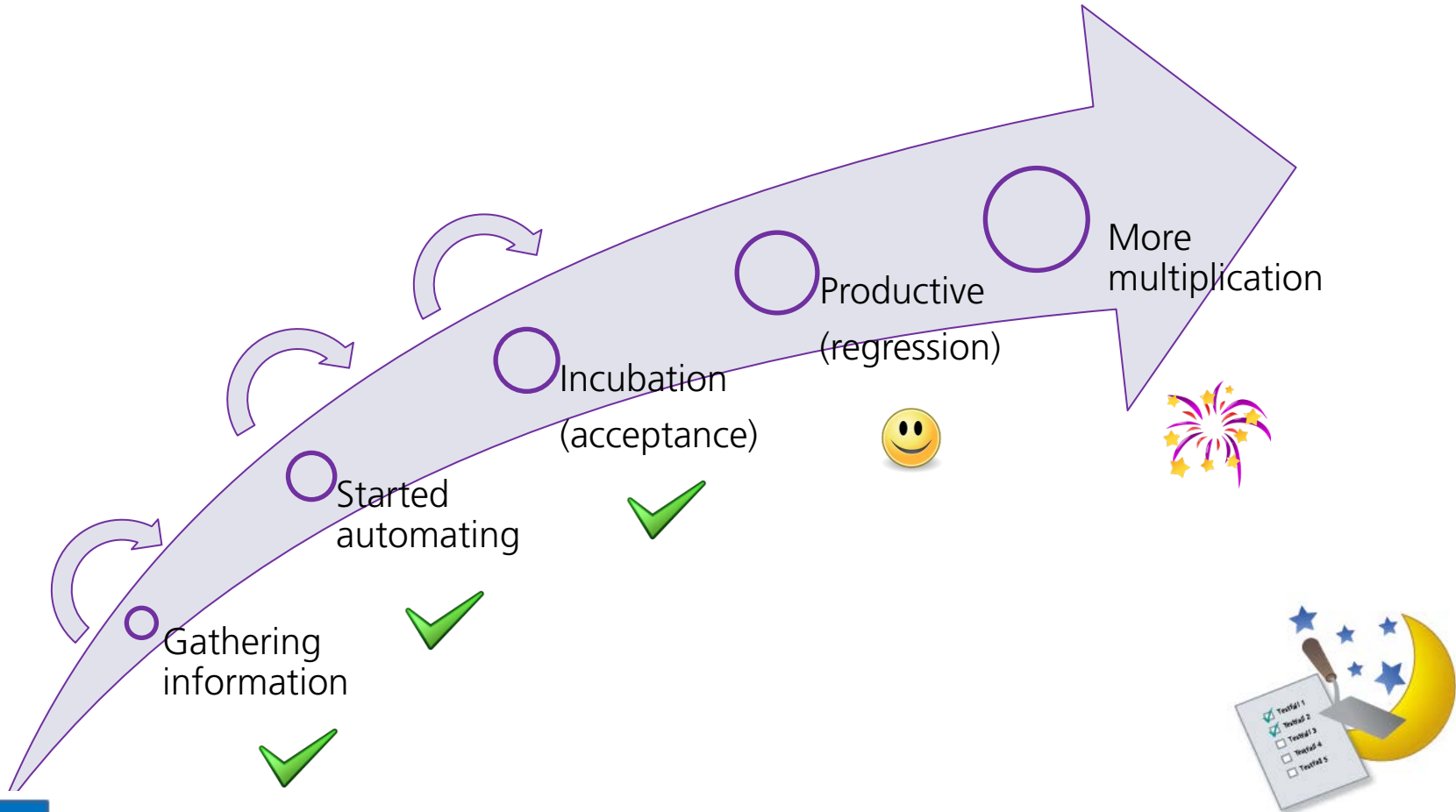
How the way to automation helps



How the way to automation helps



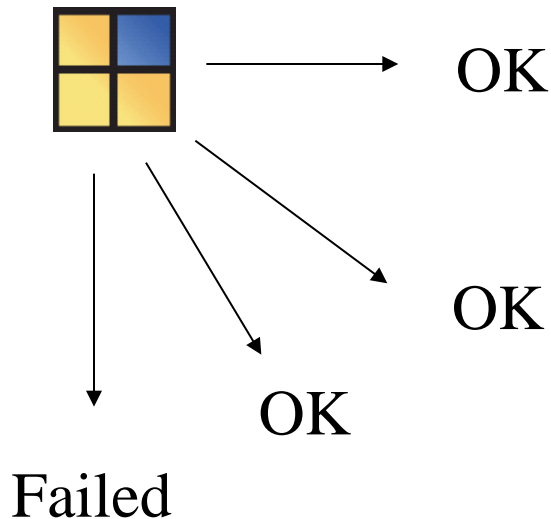
Check later



Check later

Checking finds problems too

► Multiplication



► Regression

- [-] X FULLTEST
- [-] X FULLTEST
 - [+] ✓ UC_Spaltenkonfigurationen_AddFahrzeugspaltenkonfiguration
 - [+] ✓ UC_Spaltenkonfigurationen_RemoveFahrzeugspaltenkonfiguration
 - [+] ✓ UC_Spaltenkonfigurationen_AddTerminspaltenkonfiguration
 - [+] ✓ UC_Spaltenkonfigurationen_RemoveTerminspaltenkonfiguration
 - [+] ✓ UC_Datenfilterkonfigurationen_CreateDatenfilterkonfiguration
 - [+] ✓ UC_Datenfilterkonfigurationen_DeleteDatenfilterkonfiguration
 - [+] ✓ UC_Referenzdaten_Fertigung_CreateFertigung
 - [+] ✓ UC_Referenzdaten_Fertigung_DeleteFertigung
 - [+] ✓ UC_Referenzdaten_Fertigung_CreateFertigungSortierung
 - [+] ✓ UC_Referenzdaten_Fertigung_DeleteFertigungSortierung
 - [+] ✓ UC_Referenzdaten_Marken_CreateMarke
 - [+] ✓ UC_Referenzdaten_Marken_DeleteMarke
 - [+] ✓ UC_Referenzdaten_Marken_CreateMarkenSortierung
 - [+] ✓ UC_Referenzdaten_Marken_DeleteMarkenSortierung
 - [+] ✓ UC_Referenzdaten_Symbole_CreateSymbol
 - [+] ✓ UC_Referenzdaten_Symbole_DeleteSymbol
 - [+] ✓ UC_Referenzdaten_Format_CreateFormatgruppe
 - [+] ✓ UC_Referenzdaten_Format_DeleteFormatgruppe
 - [+] ✓ UC_Referenzdaten_Fahrzeug_CreateFahrzeugsymbolgruppe
 - [+] ✓ UC_Referenzdaten_Fahrzeug_DeleteFahrzeugsymbolgruppe
 - [+] ✓ UC_Referenzdaten_Termin_CreateTerminsymbolgruppe
 - [+] ✓ UC_Referenzdaten_Termin_DeleteTerminsymbolgruppe
 - [+] ✓ UC_Daten_Zweige_CreateArbeitsstandFromArbeitsstand
 - [+] X UC_Daten_Zweige_CreateArbeitsstandFromBasisstand
 - [+] ✓ TS_Common_AUT_InitCypris
 - [+] ✓ TC_Daten_Zweige_CreateZweig
 - [+] ✓ TC_Daten_Zweige_CreateZweig
 - [+] X TC_Daten_Zweige_CreateZweig

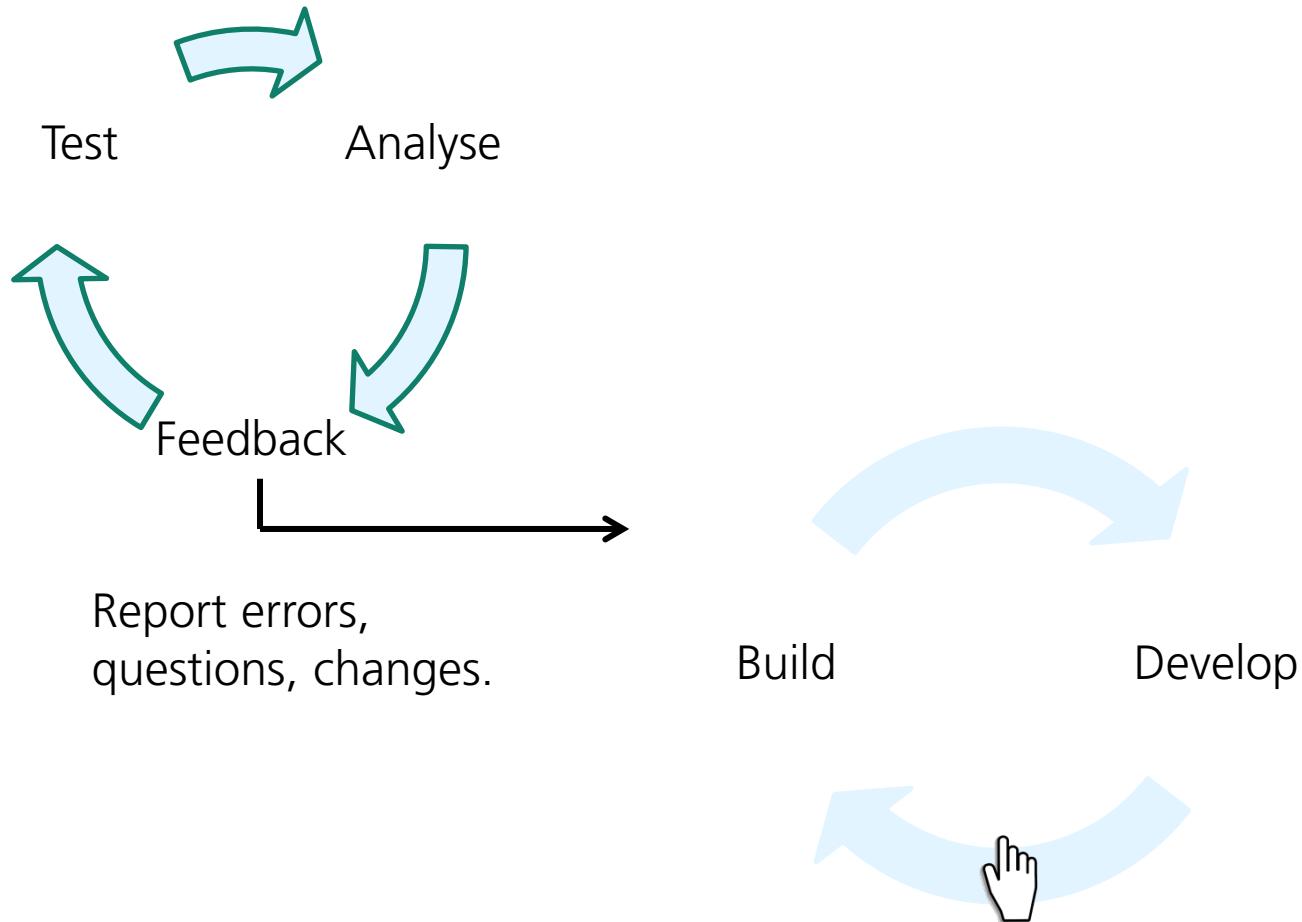
Check later

Repeat,
repeat,
repeat

How do I get my wish list?

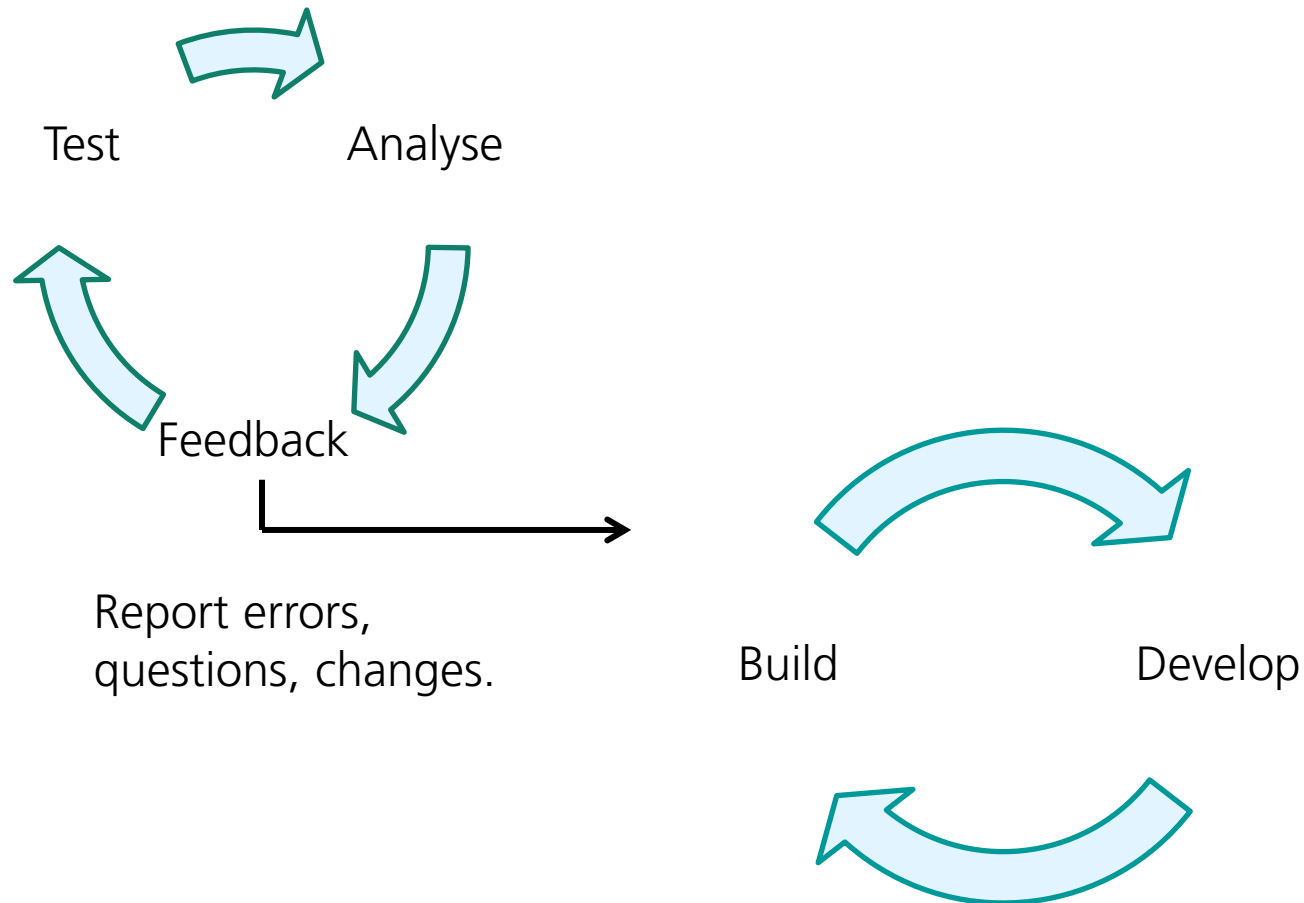


How do I get my wish list?



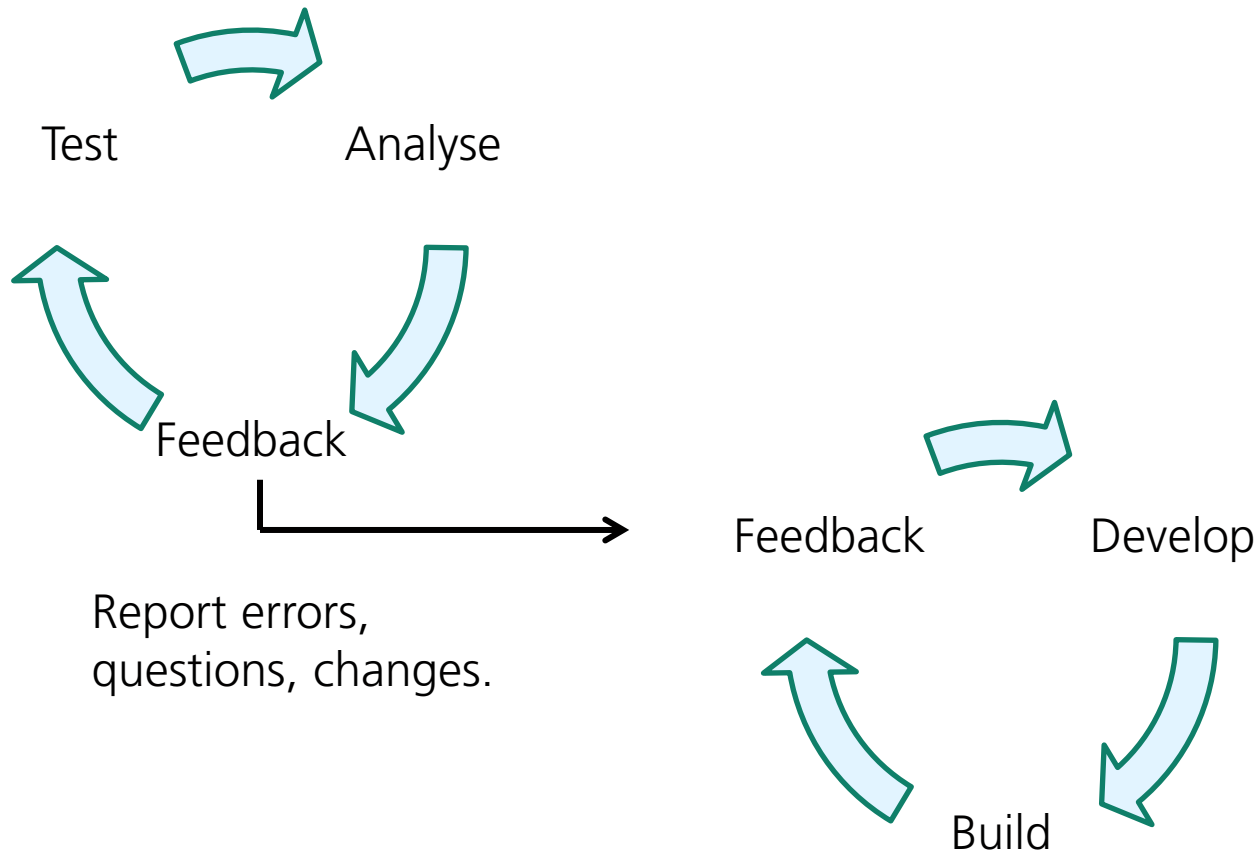
Repeat,
repeat,
repeat

How do I get my wish list?



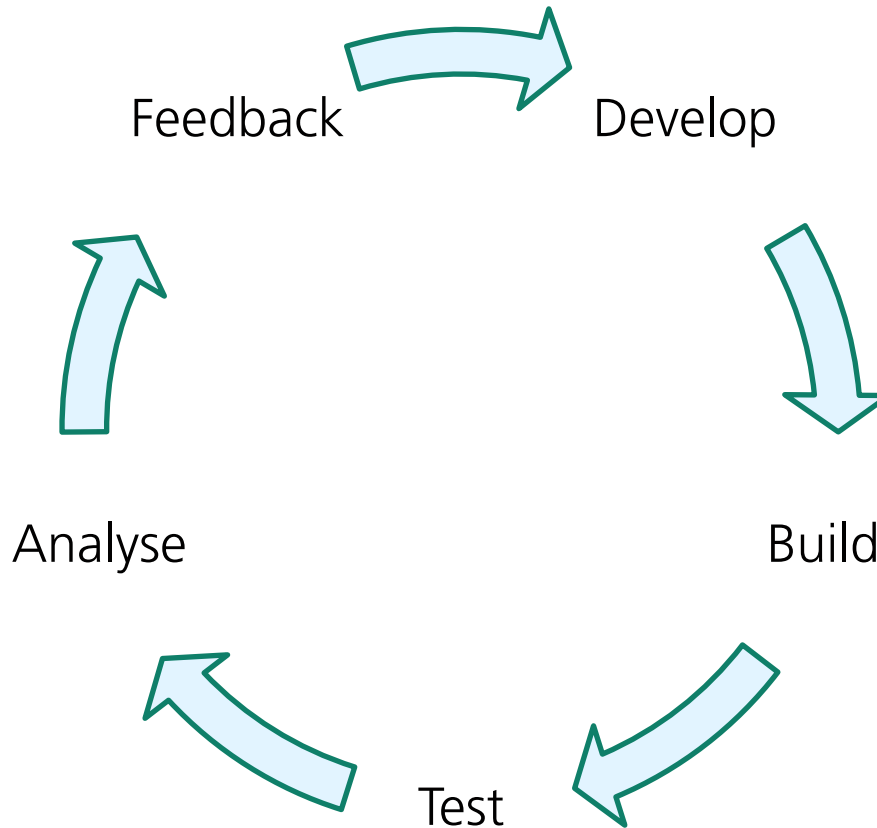
Repeat,
repeat,
repeat

How do I get my wish list?



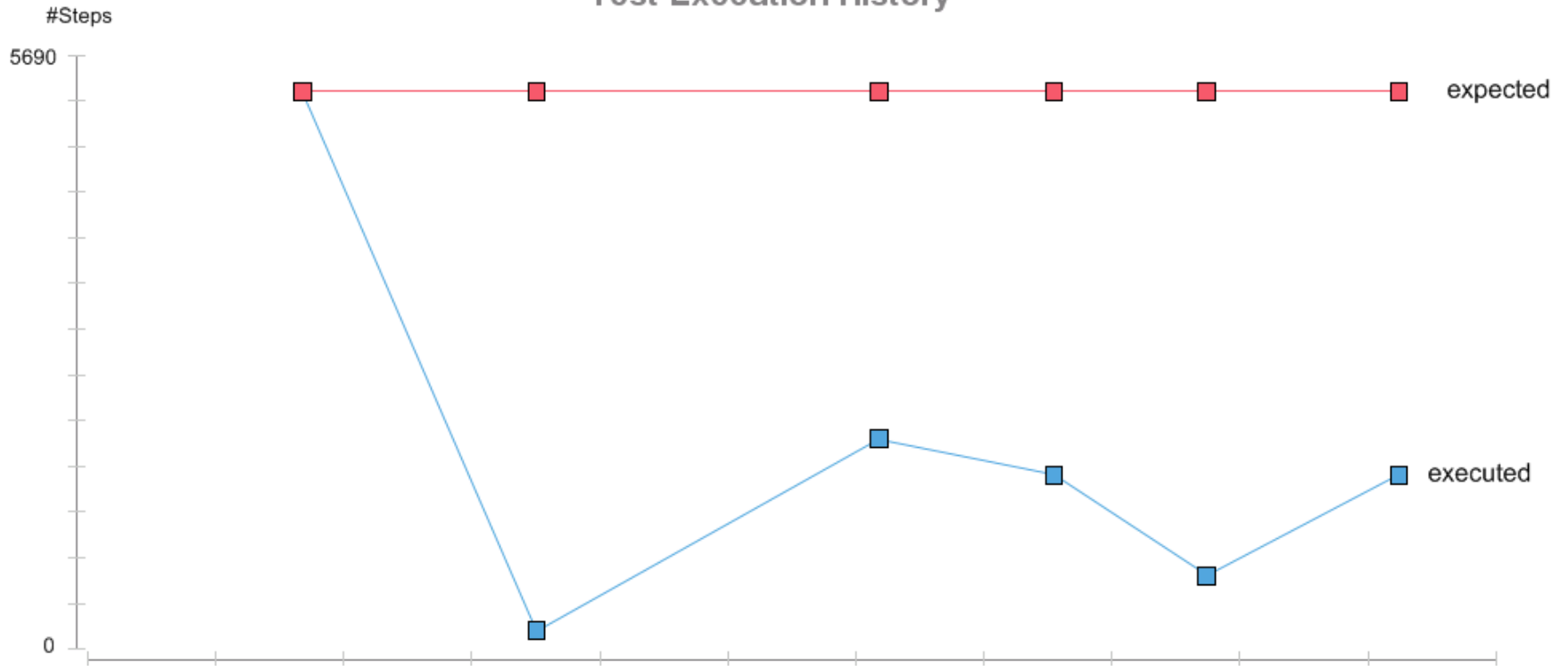
Repeat,
repeat,
repeat

How do I get my wish list?



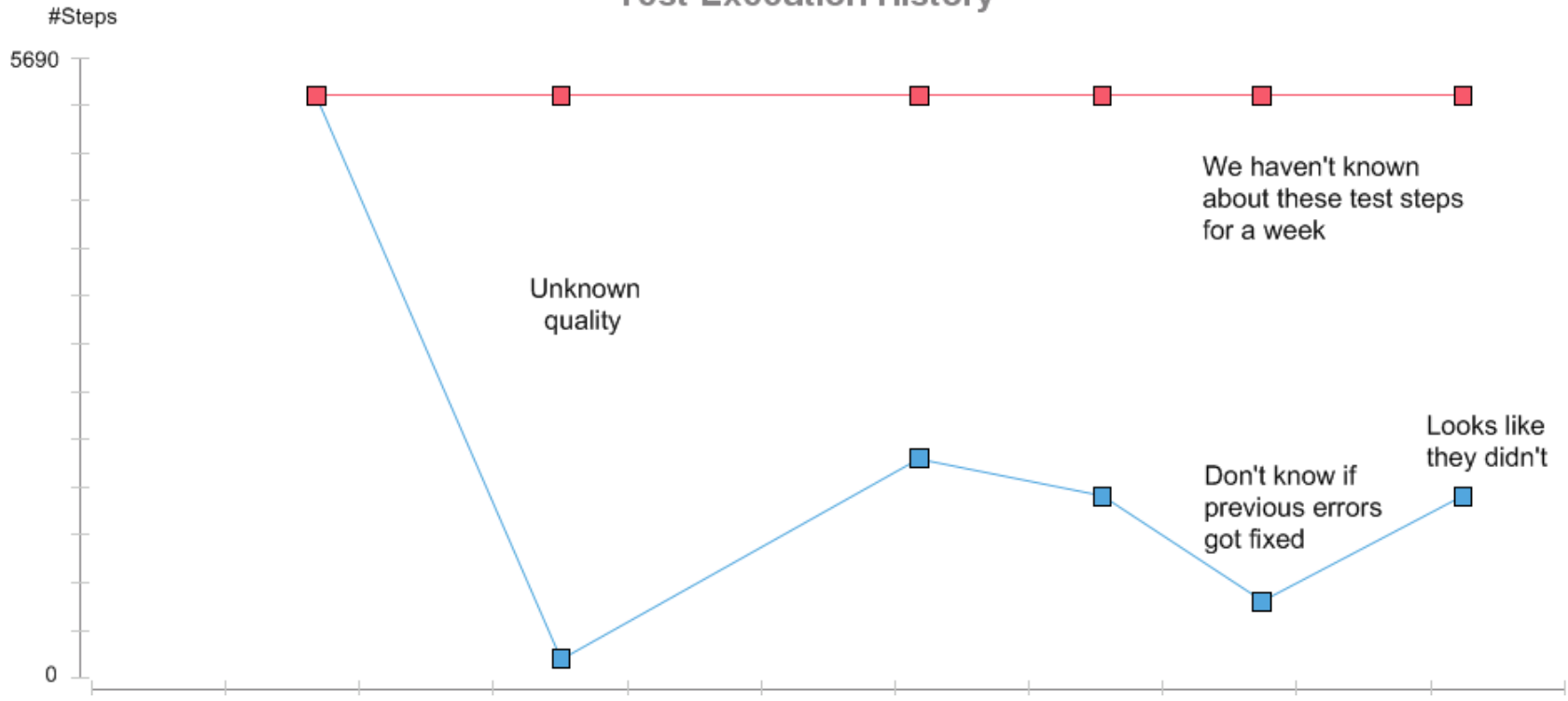
React

Test Execution History



React

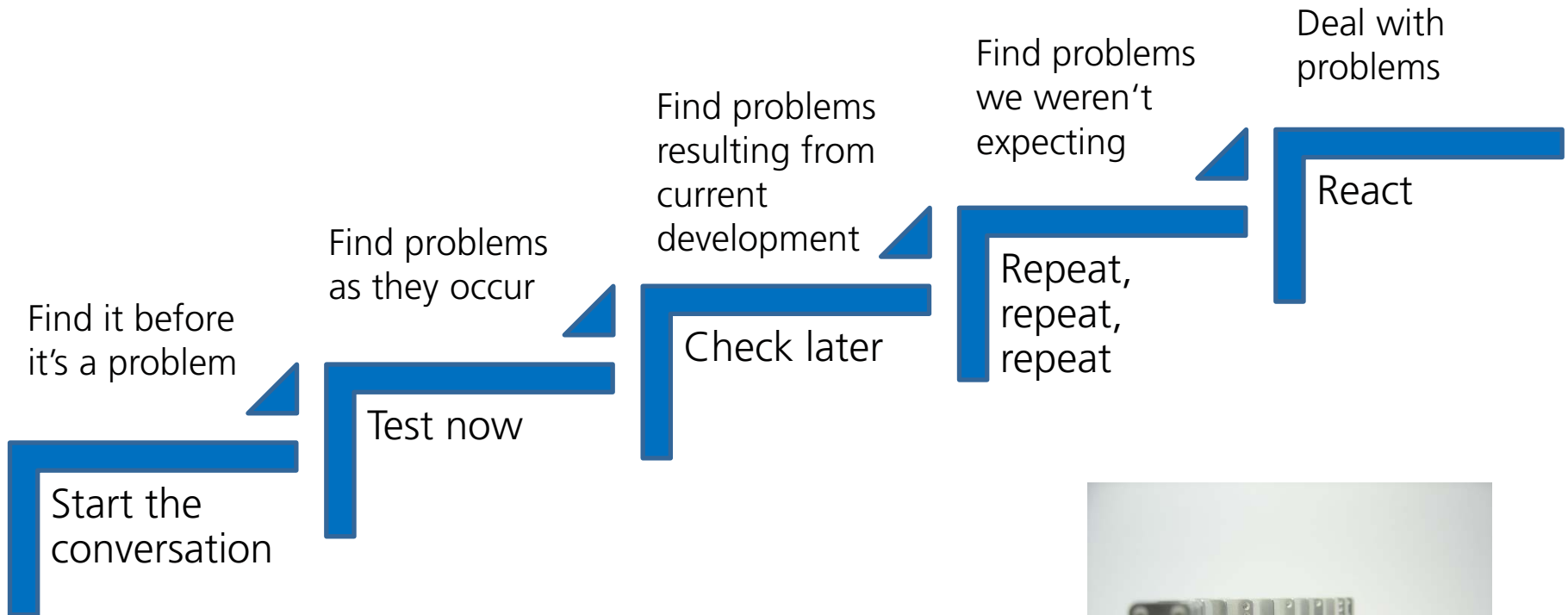
Test Execution History



Where can it lead us?

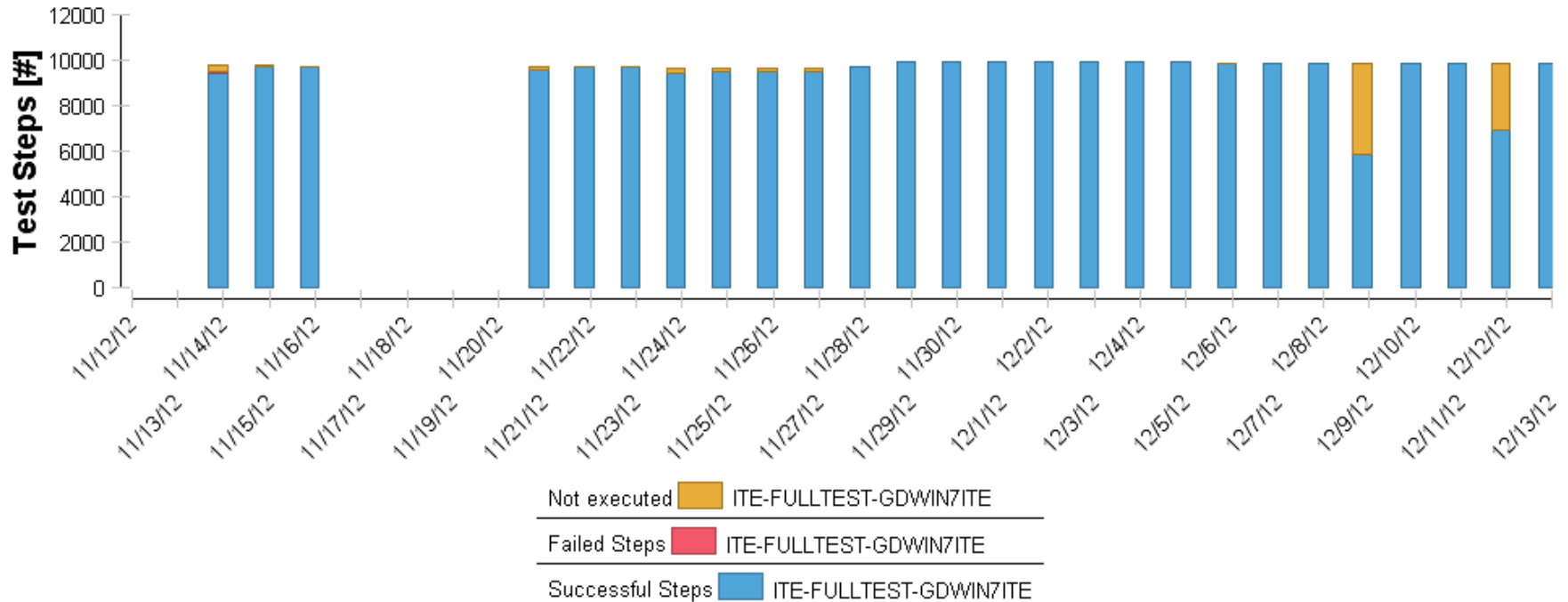
Type of error	Effect	Action
Regression	PRODUCTIVE test fails	Fix immediately - P1
Acceptance	Manual or automated (INCUBATION) acceptance test fails. Feedback from demonstration	Fix as a part of the development activity (P2)
Known errors or newly discovered	Error found in release or in development build	Prioritize and plan for upcoming development task (P2 – P5)
Blocker in released version	Data loss, function loss	Fix and release patch (P1)

What did we get on the way?



Where can it lead us?

Test Execution Histogram



Thank you!



Please evaluate my presentation by using the evaluation booklets which you can find in your conference bag.

Thank you!