Test Cases, Test Scenarios and Test Execution

QA
Fundamentals

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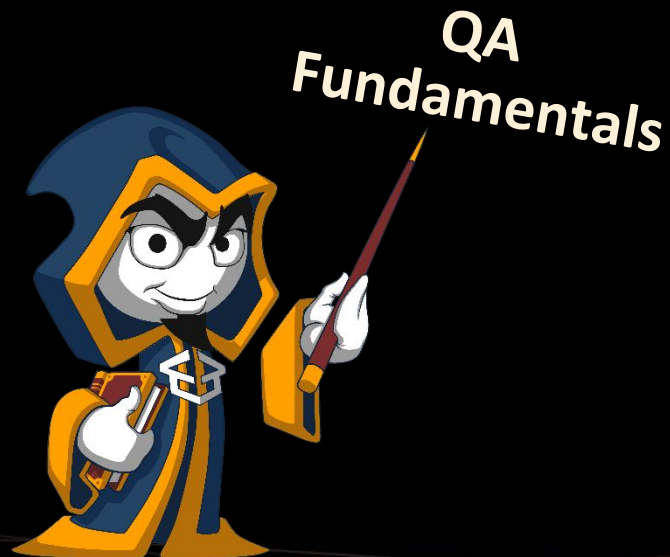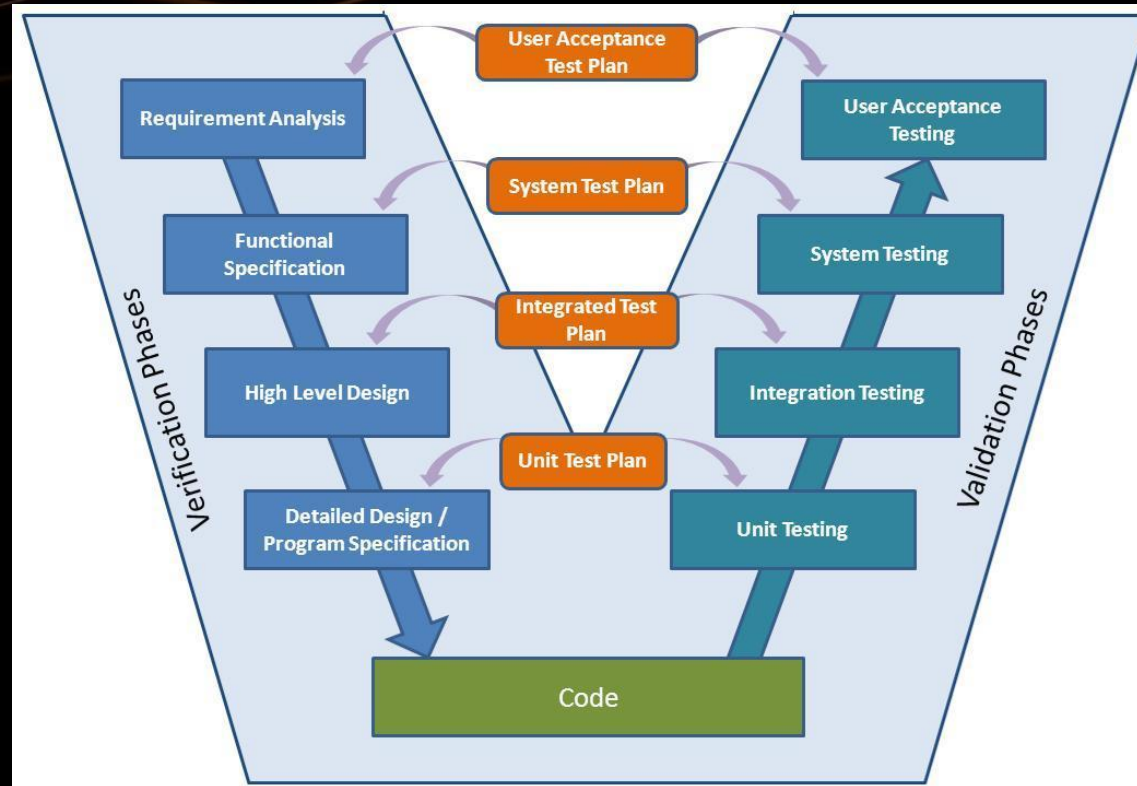
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KEEP CALM AND MAKE A PLAN

Test Plan

V-model

Test Plan

- Documents the verification strategy

- Strategy may vary on

  - Design verification or Compliance test

  - Development or Production test

  - Acceptance or Commissioning test

  - Service and repair test

  - Regression test

Test Plan (2)

- Three major elements should be described

  - Test coverage

  - Test methods

  - Test responsibilities

Test Plan (3)

- Test plans usually are written with templates

- Example test plan
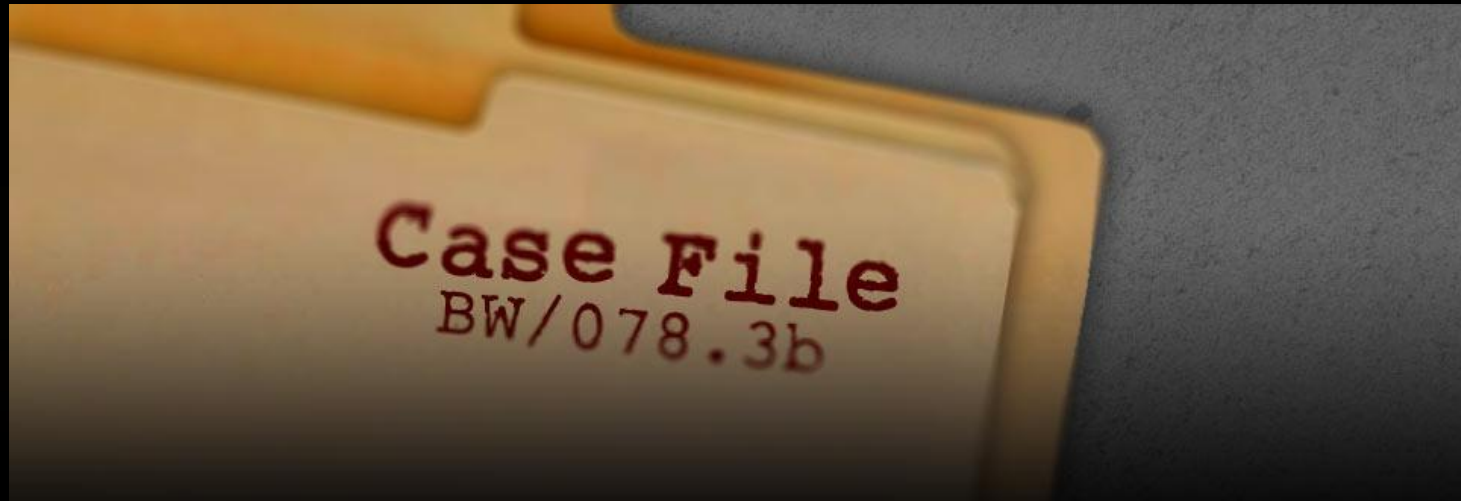
Test Case

Test Case

- Sequence of steps to check the correct behavior

- At least two cases to fully test a requirement

  - A positive test

  - A negative test

- Consist of

  - Title

  - Steps to follow

  - Expected result

Test Case (2)

- Optionally may consist of
  - ID

  - Description

  - Related requirements

  - Test category

  - Author

  - Is automated

  - Pass/fail

Test Case (3)

- Example test case

```
Step No: 1
Step description: Login to the app with user:
"XXX" and password: "YYY"
Expected result: Home page is displayed

Step No: 2
Step description: Click "Logout"
Expected result: Login page is displayed
```

Test Case (4)

- Test cases can be part of a Test suite

- Test suite is a group of similar Test cases

  - Login functionality test cases leads to Login test suite

- Test suites can be

  - Abstract test suites

  - Executable test suites
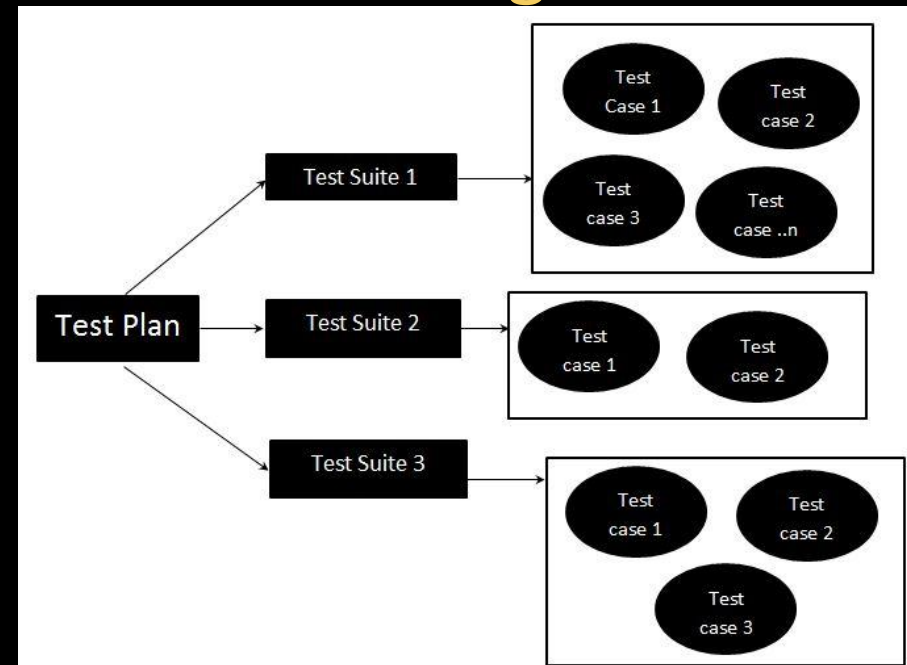
Test Scenario

Test Scenario

A scenario describes how a system is used in context of activity in a defined time-frame

- Provides overview of
  - What to be tested
  - In which conditions

Test Scenario (2)

- Test cases vs. test scenarios

```
Test scenario: Verify that device automatically
connects to Wi-Fi if user creates new profile

Test cases:
    Test case 1: Create Wi-Fi profile and verify
        that it created successfully
    Test case 2: Verify that device is able to
connect to Wi-Fi
```

Test scenario (3)

- Test scenario examples

User should have an option to get his username/password back in case he has forgotten the same

User should have an option to sell items in any currency one wants to

Test Execution

Test Execution

Test execution is the process of executing the code and comparing the expected and actual results.

- Test execution process factors
  - Test suites to be executed in that cycle
  - Assigning test cases to respective testers
  - Resolve blocking issues as they arise

Summary

- The V-Model

- Test plan

- Writing test cases

- Bundling cases into a suite

- Test execution

Useful Links

- Demo applications to test:
https://openui5.hana.ondemand.com/#/demoapps

- Seven testing principles:
http://istqbexamcertification.com/what-are-the-principles-of-testing/

- TestRail (Test management system): https://january2018.testrail.io

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Questions?

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