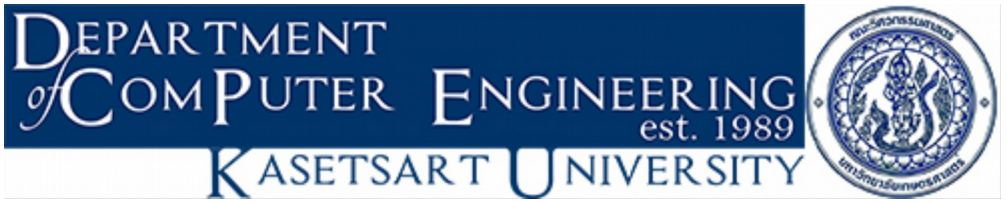

Software Testing

Lesson 8 – Test Management
Quiz

Uwe Gühl

Winter 2015 / 2016

1. Test Management Tasks in Test Team

Which of the following BEST describes the task partition between test manager and tester?

a) The test manager plans testing activities and chooses the standards to be followed, while the tester chooses the tools and controls to be used.

b) The test manager plans, organizes and controls the testing activities, while the tester specifies, automates and executes tests.

c) The test manager plans, monitors and controls the testing activities, while the tester designs tests.

d) The test manager plans and organizes the testing and specifies the test cases, while the tester prioritizes and executes the tests.

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2. Test Management
Exit Criteria

Which of the following are typical test exit criteria?

a) Thoroughness measures, reliability measures, test cost, schedule, state of defect correction and residual risks. ○

b) Thoroughness measures, reliability measures, degree of tester independence and product completeness. ○

c) Thoroughness measures, reliability measures, test cost, time to market and product completeness, availability of testable code. ○

d) Time to market, residual defects, tester qualification, degree of tester independence, thoroughness measures and test cost. ○

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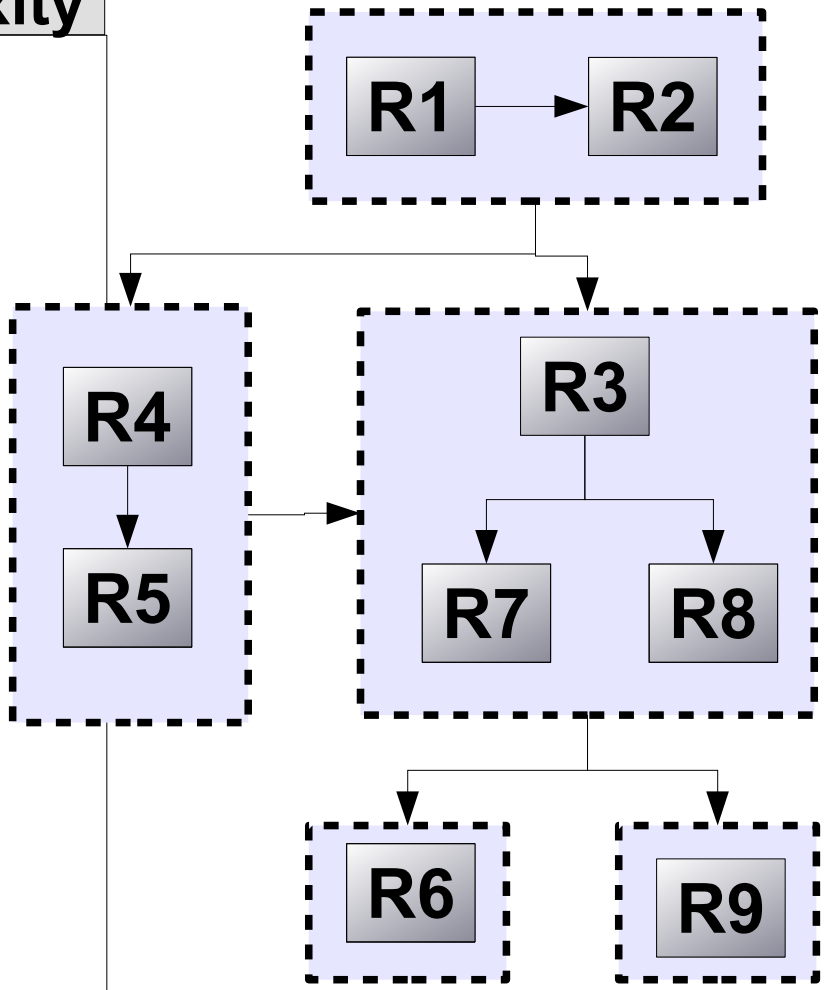
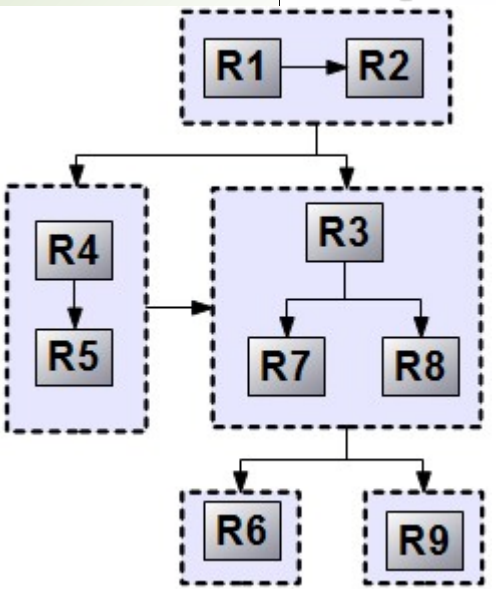
3. Test Management
Test Execution (1/2)

Requirements No. – Headline	– Complexity
R1 – Process Anomalies	– **High**
R2 – Remote Services	– **Medium**
R3 – Synchronization	– **Medium**
R4 – Confirmation	– **Medium**
R5 – Process closures	– **Low**
R6 – Issues	– **Low**
R7 – Financial Data	– **Low**
R8 – Diagram Data	– **Low**
R9 – Changes on user profile	– **Medium**

Logical dependencies:
A → B means that
B is dependent on A



3. Test Management
Test Execution (2/2)



The described requirements have to be tested.
How would you structure the test execution schedule according to the requirement dependencies?

a) R4 > R5 > R1 > R2 > R3 > R7 > R8 > R6 > R9.

b) R1 > R2 > R3 > R4 > R5 > R7 > R8 > R6 > R9.

c) R1 > R2 > R4 > R5 > R3 > R7 > R8 > R6 > R9.

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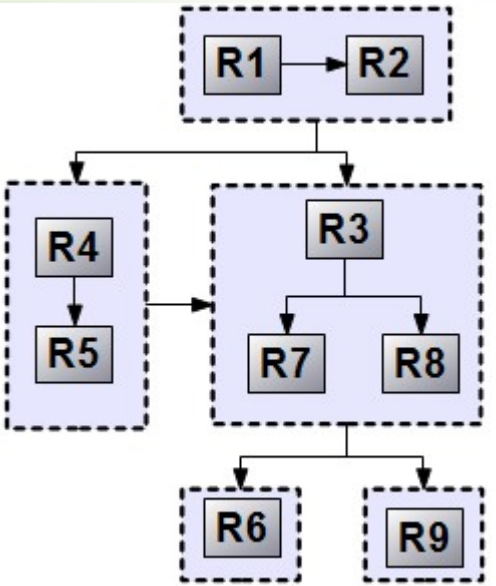

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4. Test Management
Test Manager

What of the following Test Manager should **NOT** do?

a) report on deviations from the project plan ○

b) reallocate resources to meet original plans ○

c) raise incidents on faults that they have found ○

d) provide information for risk analysis and quality improvement ○

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5. Test Management
Test Manager

What of the following is least important for a Test Manager?

a) Estimating test duration.

b) Incident Management.

c) Configuration Management.

d) De-bugging.

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6. Test Management
Test Manager

Which one is **NOT** the task of a Test Manager?

a) Coordinate the test strategy and plan with project managers and others. ◯

b) Review and contribute to test plans. ◯

c) Decide about the implementation of the test environment. ◯

d) Write test summary reports ◯

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7. Test Management
Product risks

Which of the following can be categorized as product risks?

a) Low quality of requirements, design, code and tests. ◯

b) Political problems and delays in especially complex areas in the product. ◯

c) Error-prone areas, potential harm to the user, poor product characteristics. ◯

d) Problems in defining the right requirements, potential failure areas in the software or system. ◯

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Project risks

Which of the following can be categorized as project risks?

a) Skill and staff shortages.

b) Poor software characteristics.

c) Failure-prone software delivered.

d) Possible reliability defect (bug).

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9. Test Management
Project risks

Concerning test activities and according to IEEE 829 Standard, what should be considered in a test summary report?

a) The number of test cases using Black Box techniques. ◯

b) A summary of the major testing activities, events and its status in respect of meeting goals. ◯

c) Overall evaluation of each development work item. ◯

d) Training taken by members of the test team to support the test effort. ◯

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10. Test Management Configuration Management

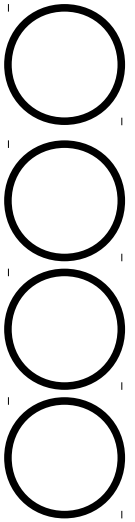
Which of the following is **NOT** part of configuration management?

a) status accounting of configuration items

b) auditing conformance to ISO9001

c) identification of test versions

d) record of changes to documentation over time



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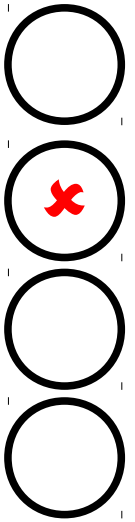

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11. Test Management Configuration Management

What test items should be put under configuration management?

a) The test object, the test material and the test environment. ○

b) The problem reports and the test material. ○

c) Only the test object. The test cases need to be adapted during test execution. ○

d) The test object and the test material. ○

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12. Test Management
Re-testing / Regression testing

Critical defects have been fixed in a software, all in one component, the admin module. The test manager should now decide to

a) … do only automated regression testing. ○

b) … do regression testing only on the admin module. ○

c) … do only re-testing. Regression testing is not required. ○

d) … do regression testing on other modules as well because fixing one module may affect other modules. ○

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13. Test Management
Test Management Terms

Which test management terms best matches following activity descriptions?

1) Test control
2) Test monitoring
3) Test estimation
4) Incident management
5) Configuration control

a) Calculation of required test resources
b) Maintenance of record of test results
c) Re-allocation of resources when tests overrun
d) Report on deviation from test plan
e) Tracking of anomalous test results

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1) Test control
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a) Calculation of required test resources = 3)
b) Maintenance of record of test results = 5)
c) Re-allocation of resources when tests overrun = 1)
d) Report on deviation from test plan = 2)
e) Tracking of anomalous test results = 4)

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14. Test Management Monitoring

Which set of metrics can be used for monitoring of the test execution?

a) Number of detected defects, testing cost; ◯

b) Number of residual defects in the test object. ◯

c) Percentage of completed tasks in the preparation of test environment; test cases ◯

d) Number of test cases run / not run; test cases passed / failed ◯

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Tasks

1 Task
Estimating test effort (1/2)

To calculate the test effort for a project “Web shop”, you collected following information:

- Test duration: 4 weeks, 3 weekly iterations planned – risk load 10%.
- Test planning should be done in 20 hours. Test control effort: 4 hours / week
- 20 Test cases to prepare, per TC 2 hours effort, including training. To execute per TC 1 hours effort.
- Defect management: 40 defects expected. Effort per defect: 30 min.
- Performance tests are already prepared, execution all in: 30 hours.
- 1 test machine for 40.000 Thai Baht is required.
- Cost / hour is 100 Thai Baht for every role.
- Reporting effort is 4 hours / week.
- No test closure activities required.

1 Task
Estimating test effort (2/2)

- Calculate the test effort using following effort estimation template “Template_TesteffortEstimation_v1.0.xlsx” (see https://mike.cpe.ku.ac.th/~uwe/01219343/)

1 Proposal
Estimating test effort

	Personal costs	Details				Planning values			Real values		
Id	Task	Number	hours per item	intermediate hours	Comment	Cost / hour	hours	Costs	Cost / hour	hours	Costs
1.1	Test planning			20							
1.2	Test control	4	4	16	*4 weeks 4 hours/week*						
1	Test planning and control			36		฿ 100	36	฿ 3.600			
2.1	Test case preparation	20	2	40	*Per test case 2 hours*						
2	Test analysis and design			40		฿ 100	40	฿ 4.000			
3.1	Test case execution	20	1	20							
3.2	Defect management	40	0,5	20	*2 defects / test case*						
3.3	Load and performance tests			30							
3	Test implementation and execution			70		฿ 100	70	฿ 7.000			
4	Evaluating exit criteria and reporting	4	4	16	*4 hours / week*	฿ 100	16	฿ 1.600			
5	Test closure activities					฿ 100	-	฿ -			
	Sum						**162**	**฿ 16.200**		**0**	**0**

	Material costs					Planning values			Real values		
Id	Item					Price	Quantity	Costs	Price	Quantity	Costs
M1	1 test machine					฿ 40.000	1	฿ 40.000			
	Sum							**฿ 40.000**			**0**

	Overview	Planning values		Real values	
	Personal costs		฿ 16.200		0
	Material costs		฿ 40.000		0
	Intermediate result		฿ 56.200		
	Risk load	10%	฿ 5.620		
	Overall result		**฿ 61.820**		**0**