
Case Study

Scenario "Reviews"

A software development organization wants to introduce some specific improvements to its test process. Currently, most of their testing resources are focussed on system testing. They are developing embedded software, and do not have a simulation environment to enable them to execute software modules on the development host. They have been advised that introducing inspections and reviews could be the most appropriate step forward.

Question: 1

Identify the THREE types of formal peer reviews that can be recognized. 1 credit

- A. Inspection
- B. Management review
- C. Walkthrough
- D. Audit
- E. Technical review
- F. Informal review
- G. Assessment

Answer: A, C, E

Question: 2

As part of the improvement program, the organization is also looking at tool support. Which type of tool could be used to ensure higher quality of the code to be reviewed? 1 credit

- A. Review tool
- B. Test execution tool
- C. Static analysis tool
- D. Test design tool

Answer: C

Question: 3

What is the main reason why reviews are especially beneficial in the above-mentioned scenario? 2 credits

- A. They ensure a common understanding of the product.
- B. They find defects early.
- C. They enhance project communication.

D. They can be performed without exercising the code.

Answer: D

Question: 4

The introduction of reviews and inspections has often failed as a process improvement action. Identify the THREE most important measures that should be taken to reduce the risk that this test process improvement will fail. 2 Credits (for 2 out of 3 correct 1 credit)

- A. Process ownership and experienced moderators who drive the inspection process.
- B. Management support
- C. Training of those involved
- D. The availability of standards and processes
- E. Usage of a more traditional software development lifecycle
- F. Alignment with software process improvement
- G. Using a reference model, e.g. TMMi

Answer: A, B, C

Question: 5

IEEE 1028 also defines “management review” as a type of review. What is the main purpose of a management review? 1 credit

- A. Align technical concepts during the design phase
- B. Establish a common understanding of requirements
- C. Provide independent evaluation of compliance to processes, regulations, standards etc.
- D. To monitor progress, assess the status of a project, and make decisions about future actions

Answer: D

Question: 6

Which of the following is an example of testing as part of the requirements specification phase? 1 credit

- A. A requirements review meeting
- B. A business analyst eliciting requirements
- C. Performing acceptance tests against requirements
- D. A test report showing requirements coverage

Answer: A

Case Study

Scenario "Tool Selection and Implementation"

Your company is considering whether or not to purchase a test tool suite from a respectable vendor. Your manager has searched the internet for comparable products but none of them meets his specific requirements. A tool demonstration has been arranged for next week and your team has been invited to attend. The tool suite consists of a test management tool, test execution tool and a requirements management tool. There is the possibility of adding a performance testing tool at a later stage. You have decided to attend the demo but raise some issues beforehand regarding expectations.

Question: 7

Select THREE issues from the options provided that should at least be raised. 1 credit

- A. Has there been sufficient comparison of tools?
- B. What are the problems we are trying to address?
- C. Do we have a set of tool requirements to validate the tool against?
- D. How will the implementation be organized?
- E. Which project will be selected to perform the tool pilot?
- F. Is customized training available?
- G. How will the change process be managed?

Answer: A, B, C

Question: 8

Which of the following would you least expect to form part of the analysis of initial tool costs? 1 credit

- A. Integration with other tools
- B. Learning time required to use the new tool
- C. Tool portability
- D. Evaluation of suitable tools

Answer: C