Software Testing Mentor

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ISTQB Foundation Level and Software Testing Training

Module 5 Test Management

Session 1 – Test Organization and Independence

Module 5 – Test Management

Test Organisation

How to organize testers and the testing

Test Planning and Estimation

 How to do test estimation, planning and strategy for test effort

Test Progress Monitoring and Control

 This addresses the testing progress, reporting and control

Configuration Management

 Relationship of configuration management with testing

Risk and Testing

How testing is affected by product and project risks

Incident Management

 Defect management and other incident management which require further investigation

Test Organization and Independence

Test organization is about organizing the test team and the testing

Independence is not a condition, its a continuum. At one end of continuum lies no independence where developers themselves perform testing

As you move towards independence, a group of testers work alongside with developers and report to development manager

Another team of testers can be more independent and outside development team which reports to project management

Near the other end of continuum lies complete independence, test team reports to a point equal to development team

Independent test team typically comprises of test manager, test lead and testers and brings great value to testing

Different Levels of Test Independence

Developers doing testing themselves

Testers working alongside with developers and report development manager

Test team outside the development team and reporting to project manager

Test teams with Specialist Skills like business domain, database, performance testers, automation testers etc.

Test teams from an external organization

Less Independence

More Independence

Advantages of Test Independence

It is seen that if you are reviewing your own work its difficult to find defects in your own work

Person other than developer will be able to find more defects

Independent tester brings a skeptical attitude of professional pessimism, if they have doubt in system behavior they ask, Is it a defect?

Independent testers provide unbiased view on the software issues and so find more defects

Independent testing is very important for testing complex and safety critical applications

Disadvantages of Test Independence

Testers and test team could be isolated from the developers, designers and project team

Leads to communication problems, feeling of alienation and antipathy

Blame games and political backstabbing can start

Due to independence developers may loose the sense of responsibility for quality

Working as a Test Leader

Tasks
performed
by
Test Lead

- Involved in planning, monitoring and control of testing activities
- Formulate test strategy and test plan in collaboration with stakeholders
- Estimate the testing required for the project and negotiate for resources with management
- Lead, guide, monitor the analysis, design, implementation and execution of the test cases, test suites
- Schedule the test execution and monitor the test execution progress and reporting
- During test execution test lead makes sure test environment is in place and continuously managed during execution
- They adapt test planning based on test results and progress and take control measures in case of any issues

Working as a Test Leader cont.

Tasks performed by Test Lead

- Ensure proper testware produced and traceability of test case with test basis
- Test lead introduces suitable metrics for measuring progress & evaluating the quality of the testing
- Recognize when automation is appropriate to start
- If automation needs to be done, they select automation tools and organize any training in that tool if required
- Decide about the implementation of the automation test environment
- Prepare test status and summary reports

Working as a Tester

Tasks of a Tester

- Testers review and contribute to test planning during test planning and preparation phases
- Analyse, review and assess software requirements specifications and design documents
- Identify test conditions, create test cases, test data and may also automate test cases
- Testers set up the test environment or help system admin to prepare test environment
- Testers execute and log tests, evaluate the results and document any test failures
- Testers use defect management, test management and test monitoring tools as required
- Testers log defects in defect management tool for any test failures during test execution
- Testers also measure performance of component or system if required(Performance testing)
- Testers do peer review of tests cases, defect reports, test results developed by other testers

Skills needed by Testers

Good test teams should have the right mix of skills based on the tasks and activities they need to perform

Ability to prepare and deliver written and verbal reports

Ability to communicate effectively

Application or business domain

- Tester should understand the intended behaviour of the application
- The problem that the software will solve and process it will automate
- Above business domain understanding helps tester to figure out any incorrect behaviour of software

Technology

- Tester must be aware of issues, limitations and capabilities of chosen technology
- Technical understanding helps tester to figure out any problems with system

Testing

Should have good understanding of testing concepts discussed in this course

Conclusion

Different Levels of Test Independence

Why independent testing is important

Advantages and disadvantages of independent testing

Tasks performed by testers and test lead

Skills needed by testers and test leads

THANK YOU!!!