Managing Software Testing and Quality Assurance

Course Summary

Description

Test management involves a different set of skills that doing testing. This course is intended for those who are or will be responsible for managing a testing or QA program or project.

The course starts by evaluating a testing project from a project management perspective encompassing objectives, risk analysis, resource allocation, time and budget estimates, task definition and related concepts.

This provides a contextual framework with allows testers to view test plans, designs, strategies and cases from a management perspective instead of a functional perspective. The course emphasizes the role of the test manager in setting quality goals in conjunction with other team members, including development and BA leads and the project manager and administration, and to ensure that the testing activities are fully integrated into the development project in both and efficient and effective manner.

The topics of test evaluation – assessing how well the testing activities are being performed and how well they are meeting the testing objectives – are covered from a management perspective. There is an emphasis throughout the course of creating reusable testing artifacts, processes and documentation. How to communicate test results and reporting to developers and stakeholders are discussed within the context of standard test documentation as well as graphical and statistical reporting. The course also touches on the importance of record keeping and having test documentation and results that can be audited.

The course illustrates the concepts presented through a hands-on walk through of a sample development project from inception to delivery from the test manager's perspective to illustrate the tasks, responsibilities, techniques and deliverables they are responsible for and to demonstrate how the test manager interacts with other components of the development team. All of the theory presented is reinforced with examples, real world case studies, hands on exercises and projects.

Topics

- Good enough quality – setting quality goals and standards for the project
- Risk analysis and mitigation
- Assessing organizational capabilities and effectiveness – discovering limits
- Resource analysis: personnel, skill sets, tools and other resources
- Test prioritization: timelines and budgets
- Developing the master test plan and developing specific subtest plans
- Working with requirements analysts to develop high quality testable requirements
- Scheduling based on resources and development progress
- Planning for testing throughout the application life cycle
- Reviewing the test plan – metrics for a good test plan and schedule

- Prioritizing testing – risk based and other ranking methods
- Developing test designs – planning for reuse
- Developing test cases – planning for reuse
- Test design and test cases reviews and evaluation
- Developing pass/fail criteria based on quality standards
- Stop test and resume test criteria
- Managing the actual test activities
- Evaluation and analysis of test results
- Evaluation and analysis of the testing activities (how good was the testing?)
- Reporting and assessment – standard documentation
- Record keeping
- Developing reusable test resources

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Course Summary (cont'd)

Audience

The course is intended for software testers or QA staff members who are responsible for planning and managing testing activities.

Prerequisites

The course assumes a basic understanding of test concepts and techniques.

Duration

Three days