€TRAINING

Effective Software Testing Techniques

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Introduction:

This training program provides participants with essential knowledge and skills in software testing methodologies. It empowers them to effectively test software applications, ensuring quality and reliability in software products.

Program Objectives:

At the end of this program, participants will be able to:

- Understand the fundamentals of software testing.

- Apply various testing techniques and methodologies.

- Develop effective test plans and cases.

- Execute tests and report findings accurately.

- Utilize automation tools for efficient testing processes.

Targeted Audience:

- Software Testers.

- Quality Assurance Professionals.

- Software Developers.

- IT Project Managers.

- Employees involved in the software development lifecycle.

Program Outline:

Unit 1:

Introduction to Software Testing:

- Overview of software testing.

- Importance of testing in software development.

- Types of testing manual vs. automated.

- Testing lifecycle and processes.

- Common challenges in software testing.

Unit 2:

Test Planning and Design:

- Developing a test strategy.

- Writing effective test plans.

- Designing test cases and scenarios.

- Risk-based testing approach.

- Test environment setup and configuration.

Unit 3:

Testing Techniques and Methodologies:

- Black-box vs. white-box testing.

- Functional and non-functional testing.

- Regression testing and its importance.

- Exploratory and ad-hoc testing.

- Using testing frameworks and tools.

Unit 4:

Test Execution and Reporting:

- Executing test cases.

- Logging and tracking defects.

- Analyzing test results.

- Effective test reporting.

- Communication and collaboration with development teams.

Unit 5:

Test Automation:

- Introduction to test automation.

- Selecting the right automation tools.

- Writing and maintaining automated test scripts.

- Continuous integration and automated testing.

- Best practices for successful test automation.