

Software Testing / Quality Assurance

Course Syllabus and Training Plan:

What will I Learn ?

- ☐ *Introduction to software testing using real world scenarios.*
- ☐ *Lean Application Architecture to get a general overview Client-Server and Web-Applications*
- ☐ *Software development methodologies and testing techniques*
- ☐ *Understand the key issues in testing software applications.*
- ☐ *Learn how to design tests documents that adequately cover requirements and business events.*
- ☐ *Hands on exercises on software development processes / lab*
- ☐ *Hands on exercises on software testing techniques / lab*
- ☐ *Real world projects to implement your theoretical and technical knowledge.*
- ☐ *How to manipulate data in the database using SQL (Theory + Lab).*
- ☐ *Basics of automation testing USING selenium IDE and selenium Webdriver.*
- ☐ *You will meet QA professionals who are working in different companies / domains.*
- ☐ *Advance your career by reinforcing your testing expertise.*

Pre-requirements

- ☐ *Anyone who does not have any IT background*
- ☐ *A very basic software life cycle background is recommended (optional)*
- ☐ *Very basic software programming is needed (optional)*
- ☐

Part 1 - Physical infrastructure of software application

- ☐ **Client - Server application model**
- ☐ **Introduction to HTTP communication protocol**
- ☐ **How web browsers communicate with web server**

- ❑ Introduction to Computer operating Systems

Part 2 - Brief introduction to software systems & SDLC concepts









- ❑ Basic Testing Vocabulary
- ❑ Quality Assurance versus Quality Control
- ❑ The Cost of Quality
- ❑ Software Quality Factors
- ❑ How Quality is Defined
- ❑ Why Do We Test Software?
- ❑ What is a Defect?
- ❑ The Multiple Roles of the Software Tester(People Relationships)
- ❑ Scope of Testing
- ❑ When Should Testing Occur?
- ❑ Testing Constraints
- ❑ Life Cycle Testing
- ❑ Independent Testing
- ❑ What is a QA Process?
- ❑ Levels of Testing
- ❑ The “V” Concept of Testing

Part 3 - Creating Test plan and Strategy documents





- ❑ Requirement Analysis and Design
- ❑ Understand the Characteristics of the Software Being Developed
- ❑ Build the Test Plan
- ❑ Develop Test scenarios
- ❑ Building test cases
- ❑ Test data mining
- ❑ Test execution
- ❑ Test Reporting
- ❑ Defect Management
- ❑ Test Coverage – Traceability matrix






Part 4 - Testing principles and Techniques

-  White Box Vs Block box testing
-  Non-Functional versus Functional testing Technique Categories
-  Backend and Database testing
-  API testing
-  User Acceptance Testing
-  Upgrade Testing
-  Testing Tools
-  Real World Project (Test a Client - Server web application)

Part 5: Automation Testing Basics

-  Basics of automation testing – why, when and how to perform automation testing
-  Factors for choosing a particular tool
-  An overview for the major functional testing tools
-  Overview of Test management and bug tracking tools

Part 6: Sample Exams

-  Sample interview Questions with answers.
-  Mock interviews via phone calls.
-  Final project all the students will present on the stage.

PART 7: Resume preparation and Review

-  *Final Mock interview*