**Skills Required for Software Tester**

**Important Activities in IT (Information Technology) Industry:**   
  
• Project Management  
• Business Analysis   
• Software Development (Front-end and Back-end)   
• Software Testing (Manual Testing and Automated Testing)    
• Technical Support (Network Administration/System Administration)   
• DBA (Database Administration)  
 • Software Maintenance  
  
**If you want to choose software testing as your career then you need to familiar with the following concepts.**  
  
**I) Communication Skills**  
   
• Customer Communication.  
• Team Communication  
• Presentation Skills  
• Writing Skills  
  
**II) Computer Fundamentals**  
   
• Knowledge on Computer Operating Systems (MS Windows, UNIX, Macintosh etc...)  
• knowledge on Mobile device operating systems - Optional  
• Documentation skills ((MS Office, Star office(optional)).  
• Knowledge on Software Environments (Stand-alone, Intranet, Internet and Extranet).  
  
**III) Manual Testing Knowledge**  
   
• Software Project life cycle  
• Ability to analyze Functional and Non-functional requirements  
• Test Levels (Unit, Integration, System and Acceptance Testing)  
• Test Types (Functional and Non-Functional Testing)  
• Test Planning  
• Test Design Techniques (Equivalence Partitioning, Boundary value Analysis, Decision Table testing, State transition testing etc...)  
• Test Design (Test Scenarios, Test Case and Test Data)  
• Test Execution (Sanity, Comprehensive and Regression Testing. Defect Reporting & Tracking)  
• Maintenance of Testing resources  
• Ability to track changes  
  
**IV) Database knowledge**   
  
• Database objects  
• Create new databases  
• Create new tables in a database  
• Insert records in a database  
• Update records in a database  
• Delete records from a database  
• Retrieve data from a database  
• Execute queries against a database  
• Data Integrity  
• Data Comparisons  
• Data backup and Recovery etc...  
  
**V) Programming knowledge**   
  
• Comments  
• Data Types  
• Modifiers  
• Variables  
• Operators  
• Conditional Statements  
• Loop Statements  
• Input and Output operations  
• Built-in Functions / Methods  
• User defined Functions / Methods  
• Working with Files  
• Working with Databases  
• Regular Expressions  
• Exception handling  
• OOPS concepts (Abstraction, Polymorphism, Inheritance, Encapsulation)  
  
  
**VI) Test Tools knowledge**  
   
• UFT or Selenium or both UFT and Selenium for Functional and Regression Testing.  
• LoadRunner or any other Performance test tool knowledge for PerformanceTest Automation.  
  
**a) UFT (QTP)**   
  
• UFT Tool fundamentals  
• VBScripting  
• Creating Tests using either Object Repository or Descriptive programming.  
• Enhancing Tests using Tool features like Checkpoints, Output values, Data Table etc...  
• Enhancing Tests using VBScript features like Flow Control statements, Functions and Automation objects etc...  
• Parametrization, synchronization.  
• Creating Test Batches.  
• Debugging & Running Tests  
• Analyzing Test Results  
• Reporting Defects and Tracking Defects.  
• Regression Testing  
• Maintenance of Automation Resources.  
  
**b) Selenium**  
• Selenium IDE, Selenium WebDriver and Selenium Grid Fundamentals  
• Java Programming (Core Java)  
• Create Test Cases  
• Enhance Test Cases  
• Run Test Cases - Batch Testing, Data Driven Testing, Parallel Test execution.  
• Cross Browser Testing.  
• Analyzing Test Results  
• Reporting and Tracking Defects (Defects Management)  
• Regression Testing  
• Maintenance of Automation Resources.  
  
**VII) Domain knowledge**  
   
• BFSI (Banking Financial Services and Insurance)  
• ERP (Enterprise Resource Planning)  
• Telecom  
• Healthcare  
• Ecommerce  
• Retail Market etc...  
  
**Note:**  
  
• Defect management using Bugzilla or any other tool is essential.  
• Knowledge on Performance Testing using LoadRunner or any other tool is an added advantage.  
• Test Management (Defect Management is part of Test Management) using ALM or any other tool is an added advantage.