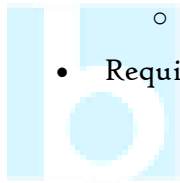# Manual Testing Course Syllabus

- Introduction to testing
- Verification vs validation
- Types of Applications
- Probabilities of getting an error in an application
- SDLC – Software Development Life Cycle
    - Waterfall
    - Prototype
    - Spiral
    - Incremental (Agile methodology and Scrum Framework)
    - V-Model
- Advantages and Disadvantages of each software development life cycle
- Principles of Testing
- STLC –Software Testing Life Cycle
- Difference between Test case, Use case and Scenario.
- How to prepare test plan and strategy
- How to prepare a test case template?
- Difference between Error, bug, defect, and failure
- Test Case Design Technique
    - Boundary Value Analysis
    - Equivalence Partitioning
    - Decision Table
    - State Transition Diagram
    - Use Case Testing
- Bug Life cycle
- How to Prepare the Bug template?
- Bug Tracking tool
- Types of Testing
- Difference between Static and Dynamic testing

- Difference between Functional and Non-functional testing

- Black box testing and its types

- White box testing and its types

- System Integration Testing vs User Acceptance Testing

- Entry Criteria and Exit Criteria

- Test Environment and Test data preparation

- Flow graph notations

    o Statement coverage

    o Branch Coverage

    o path coverage

    o Cyclometric Complexity

- Integration testing

    o Big Bang Integration

    o Incremental Approach – Top-Down, Bottom-up, and Hybrid

- Requirement traceability matrix