Manual Testing Roadmap

1. Fundamentals of Software Testing

- What is Testing?
- Importance of Testing
- Software Development Life Cycle (SDLC)
- Software Testing Life Cycle (STLC)

2. Types of Testing

- Functional Testing
- Non-Functional Testing
- Unit Testing
- Integration Testing
- System Testing
- User Acceptance Testing (UAT)

3. Testing Levels

- White Box Testing
- Black Box Testing
- Grey Box Testing

4. Test Planning

- Test Strategy
- Test Plan Creation
- Test Estimation
- Test Exit Criteria

5. Test Case Design

- Test Scenarios
- Test Case Writing
- Test Case Execution
- Test Data Preparation

6. Defect Reporting

- Bug Lifecycle
- Bug Reporting Tools (e.g., JIRA, Bugzilla)
- Defect Classification (Critical, Major, Minor)

7. Exploratory Testing

- Ad Hoc Testing
- Session-based Testing

8. Regression Testing

- Purpose of Regression Testing
- Test Case Selection
- Automation Suitability

9. Performance Testing

- Load Testing

- Stress Testing
- Scalability Testing

10. Usability and UI Testing
- Usability Principles
- User Interface Testing

11. Cross-browser and Cross-platform Testing
- Browser Compatibility Testing
- Platform Compatibility Testing

12. Mobile Testing
- Mobile Application Testing
- Mobile Testing Tools

13. Testing Tools
- Test Management Tools (e.g., TestRail, Zephyr)
- Defect Tracking Tools (e.g., JIRA)
- Browser-based Testing Tools (e.g., BrowserStack)

14. Agile Testing
- Agile Methodology
- Role of Testing in Agile
- Test-Driven Development (TDD)

15. API Testing (Introduction)
- API Basics
- Manual API Testing with Postman

16. Reporting and Documentation
- Test Summary Reports
- Defect Reports
- Test Metrics

17. Soft Skills
- Communication with Development Teams
- Collaboration in Agile Environments
- Analytical and Critical Thinking