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## ***SQA Assignment-05***

The necessity of documentation in STLC are explained below:

### **➤ Documentation of Each Phase:**

#### **1. Requirement Analysis:**

**Purpose:** In this phase, the testing team reviews and analyzes the software requirements to identify testable aspects.

**Key Documents:**

- **Requirement Traceability Matrix (RTM):** Tracks requirements and ensures each requirement has corresponding test cases.

**Necessity:** Documentation of requirements helps testers understand the scope and helps ensure that all requirements are testable, providing a baseline for future phases.

#### **2. Test Planning:**

**Purpose:** Create a plan for how testing will be executed.

**Key Documents:**

- **Test Plan Document:** Outlines the testing strategy, objectives, schedule, resources, risk management, test environment, and deliverables.

**Necessity:** A test plan acts as a blueprint for the entire testing process, setting clear expectations for the testing team and stakeholders. It ensures that the testing process is well-defined and structured.

#### **2. Test Case Development:**

**Purpose:** Based on the requirements and test plan, test cases are designed and written.

**Key Documents:**

- Test Cases: Detailed descriptions of test scenarios, inputs, actions, and expected results.
- Test Data: Data prepared for testing, including both valid and invalid inputs.

Necessity: Well-documented test cases are essential for accurate and repeatable testing. Clear test data documentation ensures consistency in test execution across different testers.

### 3. Test Environment Setup:

Purpose: Prepare the environment where testing will be executed.

Key Documents:

- Environment Configuration Guide: Specifies hardware, software, and network configurations required for the testing.

Necessity: Documenting the setup helps avoid misconfigurations and ensures that the testing environment mirrors the production environment as closely as possible, leading to reliable test results.

### 5. Test Execution:

Purpose: Execute test cases and compare actual results against expected results.

Key Documents:

- Test Execution Report: Documents the outcomes of executed test cases, including passed, failed, and blocked cases.
- Defect Reports: Detailed records of any defects or bugs found, including steps to reproduce, severity, priority, and status.

Necessity: Maintaining execution logs helps track progress, identify areas for improvement, and provide stakeholders with up-to-date information on test results.

### 6. Test Cycle Closure:

Purpose: Review the entire testing process, analyze results, and close the testing cycle.

## Key Documents:

- **Test Summary Report:** Provides a high-level overview of the testing activities, results, defect density, test coverage, and lessons learned.
- **Defect Analysis Report:** Summarizes the defects found, their root causes, and the resolutions applied.

**Necessity:** Documentation from this phase provides insights into testing efficiency and effectiveness, helping to improve future projects.

### ➤ **Comprehensive Documentation:**

Comprehensive documentation ensures that the entire testing process is transparent, traceable, and replicable. It helps in:

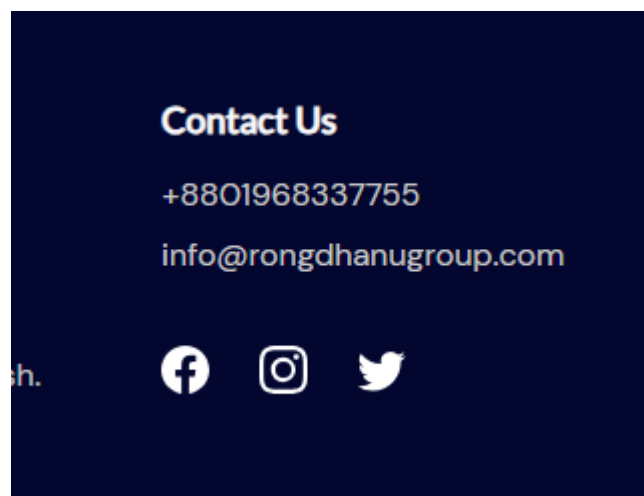
- **Tracking Progress:** Clear documentation allows for real-time tracking of what has been tested and what remains to be done.
- **Facilitating Communication:** It provides a common reference point for all team members, reducing misunderstandings and ensuring consistent interpretations of requirements and results.
- **Ensuring Accountability:** Every phase of testing has specific outputs that can be reviewed by stakeholders, which improves accountability.
- **Supporting Compliance:** In regulated industries, proper documentation is often required to meet legal and regulatory standards.
- **Enabling Maintenance and Reusability:** Documentation from previous projects can be used as a reference or starting point for future projects, improving efficiency and reducing costs.

### ➤ **Examples of Key Documents in STLC:**

1. **Requirement Traceability Matrix (RTM):** Tracks the relationship between requirements and test cases to ensure all requirements are covered by tests.
2. **Test Plan:** Describes the overall testing strategy, scope, objectives, resources, schedule, and deliverables.

3. Test Case Specification: Contains detailed steps to perform tests, expected outcomes, and any prerequisites.
4. Test Execution Report: Logs the results of test case execution, specifying whether each case passed or failed.
5. Defect Report: Documents bugs or defects found during testing, including their status, priority, and steps to reproduce.
6. Test Summary Report: Provides a summary of testing activities, defect trends, coverage, and recommendations for release readiness.

➤ **Bug Finding for a Website:**



When I click in these icons, it doesn't take me direct to their link.

URL: <https://www.rongdhanugroup.com/>

A dark blue rectangular box containing a newsletter sign-up form. At the top, the text "Newsletter Sign-up" is in white, bold font, followed by "For News & Special Offers" in a smaller white font. Below this is a white rounded rectangular input field containing the email address "prantyyhaque1@gmail.com". Underneath the input field is an orange rectangular button with the word "Submit" in black text.

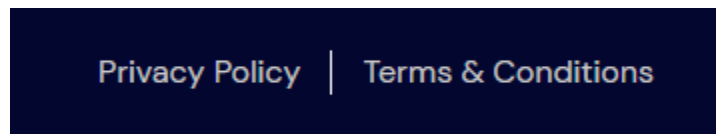
**Newsletter Sign-up**  
For News & Special Offers

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Submit

In this picture, when I click submit button, it doesn't show me any successful message. So I didn't understand if it is working or not.

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