**TASK #3**

**General Templates for Test Cases**

**Test Case 1: Functional Testing - Verify User Login Functionality**

* **Title:** Validate User Login Functionality
* **Test Objective:** To confirm the correct functioning of the user login feature.
* **Preconditions:**
  + The application is in an operational state.
  + Valid user credentials are available.
* **Test Steps:**
  + Launch the application.
  + Go to the login page.
  + Input a valid username and password.
  + Click on the "Login" button.
* **Expected Outcome:**
  + Successful user login.
  + User is directed to the home page.
* **Actual Outcome:**
  + Successful user login.
  + User is directed to the home page.
* **Status:** Passed
* **Priority:** High
* **Execution Date:** 2023-09-22
* **Defects:** None

**Test Case 2: Performance Test Case - Evaluate Application Response Time Under Load**

* **Title:** Assess Application Response Time During High Load
* **Test Objective:** To gauge the application's response time under specified load conditions.
* **Preconditions:**
  + Performance testing environment is established.
  + Load testing tools are configured appropriately.
* **Test Steps:**
  + Simulate a load of 1000 concurrent users.
  + Monitor the response time for a specific transaction.
* **Expected Outcome:**
  + Application response time remains within acceptable limits.
* **Actual Outcome:**
  + Response Time: 450 milliseconds
  + Throughput: 120 requests per second
* **Status:** Passed
* **Priority:** High
* **Execution Date:** 2023-09-22
* **Defects:** None

**Test Case 3: Security Test Case - Validate Input Handling for SQL Injection**

* **Title:** Test Input Handling for SQL Injection
* **Test Objective:** To confirm proper handling of SQL injection attempts by the application.
* **Preconditions:**
  + Security testing environment is established.
  + Input validation mechanisms are implemented.
* **Test Steps:**
  + Input the following text into a text field: "'; DROP TABLE users--".
  + Submit the form.
* **Expected Outcome:**
  + The application should reject the input and prevent any malicious SQL queries from executing.
* **Actual Outcome:**
  + The application correctly rejects the input.
* **Status:** Passed
* **Priority:** High
* **Execution Date:** 2023-09-25
* **Defects:** None

**Test Case 4: User Acceptance Test (UAT) - E-commerce Checkout Process**

* **Title:** UAT for E-commerce Checkout Process
* **Test Objective:** To ensure that the e-commerce checkout process meets user satisfaction criteria.
* **Preconditions:**
  + The e-commerce website is deployed.
  + User accounts and products are set up.
* **Test Steps:**
  + Add a product to the cart.
  + Proceed to the checkout page.
  + Enter shipping and payment information.
  + Complete the purchase.
* **Expected Outcome:**
  + User successfully completes the purchase without encountering any issues.
* **Actual Outcome:**
  + User completes the purchase smoothly.
* **Status:** Passed
* **Priority:** Medium
* **Execution Date:** 2023-09-26
* **Defects:** None

**Comparison of Tools: Excel, Notion, and TestRail**

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| --- | --- | --- | --- |
| Feature | Excel | Notion | TestRail |
| Primary Use | Documentation, Individual Test Case Management | Versatile Workspaces, Collaboration, and Documentation | Dedicated Test Case Management |
| Automation | Custom Macros | Rules and Workflow Automation | Test Execution and Reporting |
| Integration | Limited | Integration Options Available | Limited |
| Collaboration | Limited Collaboration | Real-time Collaboration | Collaboration Features |
| Templates | Limited, Not Structured | Customizable Templates | Structured Templates |
| Learning Curve | Low | Learning Curve | Moderate |
| Cost | Typically included with Excel license | Free Tier Available, Paid Plans | Paid |
| Pros | Familiarity, Custom Macros, Offline Access | Versatility, Linked Databases | Dedicated Test Management, Focused on Testing |
| Cons | Limited Collaboration, Not Structured, Low | Learning Curve, Limited | Limited Test Execution and Reporting, Paid |