Uptrillion Regression Test Template

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Version	Updated by	Date	Notes
V.1.00.00	Yao Ma	03/03/2025	1. Create Test Plan. 2. Create Test Cases for “Home” and “Inventory” modules.

1. App Version and Release Information

Field	Details
Application Name	Uptrillion
Version	v_x.xx.xx
Release Date	xx/xx/2025
Test Execution Date	03/01/2025 - 03/10/2025
Browser	Edge, Chrome
Operating System	Windows10

2. Bug Summary

1. BUG-001 - No confirmation email after successful registration with unverified email format in 'Sign up' feature.
2. BUG-002 - Not all the missing fields are visually flagged in 'Sign in' page.
3. BUG-003 - Incorrect Error Message and Popup Behavior for Unregistered Email in 'Forgot Password' Page.

3. Objective

The objective of this test plan is to define the testing approach for the Uptrillion Web Portal, focusing on the Analysis and Inventory modules, which are publicly accessible. The goal is to ensure these modules meet functional, usability, security, and performance requirements. The primary objectives are:

- Functional Testing: Verify that core features, such as data visualization in Analysis and item management in Inventory, function as expected.
- Usability Testing: Ensure the user interface is intuitive and user-friendly.
- Security Testing: Ensure that publicly accessible data is protected and that no vulnerabilities exist.
- Performance Testing: Evaluate the responsiveness and load handling of the portal under varying conditions.
- Cross-Platform Testing: Ensure consistency across devices (mobile, tablet, desktop) and browsers (Chrome, Firefox, Safari).

This plan focuses on public-facing features due to time constraints and to avoid disclosing confidential, non-public parts of the portal.

4. Scope

This test plan focuses on the public-facing functionalities of the Analysis and Inventory modules of the Uptrillion Web Portal. The scope includes:

Modules: Analysis (data visualizations and charts) and Inventory (viewing items and categories).

Test Types:

- Functional Testing: Verifying key features.
- Usability Testing: Assessing user interface and experience.
- Performance Testing: Load and response testing.
- Security Testing: Ensuring no vulnerabilities in public-facing pages.
- Cross-Platform Compatibility Testing: Ensuring the modules function across multiple devices and browsers.

Exclusions: Non-public features like Reseller, Merchant, Device, Transaction, and System modules are not included in this test plan. The test coverage will focus on high-priority test cases due to time constraints.

5. Test Strategy

5.1. Test Types

1. **Functional Testing**: Manual testing to verify that all features within the Analysis and Inventory modules are working as intended, with attention to user interactions, data displays, and navigation.
2. **Usability Testing**: Evaluation of the interface for ease of navigation and intuitive design, ensuring users can interact with the system effectively.
3. **Performance Testing**: Load and stress testing to ensure that the portal performs well under varying traffic conditions, focusing on response time and system resource usage.
4. **Security Testing**: Vulnerability scanning and security assessments of public-facing pages to ensure sensitive data is protected and no exploits are present.
5. **Cross-Platform Testing**: Testing on various browsers (Chrome, Firefox, Safari) and devices (mobile, tablet, desktop) to ensure consistent functionality and user experience.

5.1. Test Approach

1. **Test Planning**: Outline detailed test cases based on the requirements of the Analysis and Inventory modules, focusing on high-priority scenarios.
2. **Test Case Design**: Develop detailed test cases, including expected results and test data, covering functional, usability, security, and performance aspects.
3. **Manual and Automated Testing**: Perform manual testing for functional and usability aspects, and automated testing for performance and repetitive scenarios.

4. **Test Execution**: Conduct tests in a staging environment that replicates the production environment.
5. **Regression Testing**: Re-test after bug fixes or updates to ensure no new issues have been introduced.
6. **Bug Reporting and Tracking**: Log defects in the issue tracking system (e.g., GitHub) and ensure prompt resolution.
7. **Test Reporting**: Generate test reports to document results, including passed/failed test cases, defects, and recommended actions.

6. Test Cases

6.1. Home

Precondition:

1. User is logged in.

2. Navigate to the “Home” page.

Test Case ID	Scenario	Steps	Expected Result	Test Result
TC-001	**Logout icon behavior**	1. Click the logout icon ➡ . 2. Click "Cancel" on the confirmation prompt. 3. Click "Yes" on the confirmation prompt.	1. A confirmation prompt appears with the message: “Are you sure you want to log out?” 2. The prompt disappears, and the user remains logged in, staying on the current page. 3. The prompt disappears, and the user is successfully logged out, redirected to the login page.	
TC-002	**Last login time -** Verify Last Login Time	1. Login and record the login time. 2. Log out. 3.Log in again with the same account. 4. Check the “Last Login Time” displayed on the top right corner of the page.	1. Login successfully and the Login Time is recorded. 2. User is logged out successfully. 3. User successfully logs in again. 4. The “Last Login Time” is accurately displayed, matching the time recorded from the first login session.	
TC-003	**Admin drop-down menu**	1. Click “Admin”. 2. Hover over or click the items in the drop-down	1. A drop-down menu is displayed, containing options such as Profile, Settings, and any other relevant admin	

	functionality	menu. 3. Close the drop-down menu by clicking anywhere outside the menu or selecting an option.	options. 2. Each item is clickable and navigates to the appropriate page or section when selected. 3. The drop-down menu disappears as expected, returning the user to the main screen.	
TC-004	**Reseller Card**	1. Check the count of Resellers displayed. 2. Click "More Info" on the Reseller card.	1. The count of Resellers on the page matches the expected number from the database. 2. User is successfully redirected to the Reseller page.	
TC-005	**Merchant Card**	1. Check the count of Merchant displayed. 2. Click "More Info" on the Merchant card.	1. The count of Merchant on the page matches the expected number from the database. 2. User is successfully redirected to the Merchant page.	
TC-006	**Terminal Card**	1. Check the count of Terminal displayed. 2. Click "More Info" on the Terminal card.	1. The count of Terminal on the page matches the expected number from the database. 2. User is successfully redirected to the Terminal page.	
TC-007	**TrxLog Card**	1. Check the count of TrxLog displayed. 2. Click "More Info" on the TrxLog card.	1. The count of TrxLog on the page matches the expected number from the database. 2. User is successfully redirected to the TrxLog page.	
TC-008	**User Card**	1. Check the count of User displayed. 2. Click "More Info" on the User card.	1. The count of User on the page matches the expected number from the database. 2. User is successfully redirected to the User page.	
TC-009	**Reseller Card**	1. Check the count of Reseller.. 2. Click “More Info”	1. The number is consistent with the one in the database. 2. User is redirected to the “Reseller” page.	

TC-010	**Chart Analysis -** Transaction Data	1. Check if the transaction chart is displayed. 2. Hover the mouse over the line in the chart. 3. Click “Week”. 4. Click “Month”. 5. Click “Year”.	1. The chart is successfully displayed with the correct transaction data. 2. Data points are highlighted, and the transaction value is displayed. 3. The chart updates to display weekly data. 4. The chart updates to display monthly data. 5. The chart updates to display yearly data.	
TC-011	**Chart Analysis -** Refund	1. Check if the refund chart is displayed. 2. Hover the mouse over the line in the chart. 3. Click “Week”. 4. Click “Month”. 5. Click “Year”.	1. The chart is successfully displayed with the correct refund data. 2. Data points are highlighted, and the refund value is displayed. 3. The chart updates to display weekly data. 4. The chart updates to display monthly data. 5. The chart updates to display yearly data.	

6.2. Inventory

<table>
<tr><td colspan="5"><b>Precondition:</b>
1. User is logged in.
2. Navigate to the “Inventory - Items” page.</td></tr>
<tr><th>Test Case ID</th><th>Scenario</th><th>Steps</th><th>Expected Result</th><th>Test Result</th></tr>
<tr><td>TC-001</td><td><b>Search -</b> Name Field.</td><td>1. Input an existing full name in the search field and click “Search”.
2. Input a partial existing name in the search field and click “Search”.
3. Input a non-existing name in the search field and click</td><td>1. System returns the matching results and displays the relevant item(s).
2. System returns the matching results and displays the relevant item(s) that partially match the input.
3. System shows no results
4. System returns all available items with no “Name” restriction applied.</td><td></td></tr>
</table>

		“Search”. 4. Leave the name field empty and click “Search”.		
TC-002	**Search -** Category Field.	1. Select a specific category from the category field and click “Search”. 2. Leave the category field set to “ALL” and click “Search”.	1. System returns the matching results and displays the relevant item(s). 2. System returns all available items with no “Category” restriction applied.	
	Search - Is Modifier Field.	1. Select a specific Is Modifier from the Is Modifier field and click “Search”. 2. Leave the Is Modifier field set to “ALL” and click “Search”.	1. System returns the matching results and displays the relevant item(s). 2. System returns all available items with no “Is Modifier” restriction applied.	
TC-003	**Search -** Stock Quantity Field.	1. Input a value in the left field, leaving the right field empty. 2. Input a value in the right field, leaving the left field empty. 3. Input values in both left and right fields, ensuring left ≤ right. 4. Input values in both left and right fields, ensuring left > right. 5. Input special characters or invalid data in the pricing fields. 6. Leave both left and right fields empty.	1. System returns matching results for items with a stock quantity greater than or equal to the left field value. 2. System returns matching results for items with a stock quantity less than or equal to the right field value. 3. System returns matching results for items with a stock quantity between the left and right values, inclusive. 4. System displays an error message: “Invalid Stock Quantity!” indicating invalid range. 5. The field does not accept invalid characters input, except “-” for negative values (users can input negative stock quantities). 6. System returns all available items with no “Stock Quantity” restriction applied.	

TC-004	**Search -** Pricing Range Field.	1. Input a value in the left field, leaving the right field empty. 2. Input a value in the right field, leaving the left field empty. 3. Input values in both left and right fields, ensuring left ≤ right. 4. Input values in both left and right fields, ensuring left > right. 5. Input special characters or invalid data in the pricing fields. 6. Leave both left and right fields empty.	1. System returns matching results for items with a price greater than or equal to the left field value. 2. System returns matching results for items with a price less than or equal to the right field value. 3. System returns matching results for items with a price between the left and right values, inclusive. 4. System displays an error message: “Invalid price range!”. 5. The field does not accept invalid characters input. 6. System returns all available items with no “Pricing Range” restriction applied.	
TC-005	**Add New -** Create a new Item.	1. Click “Add New”.	1. User is successfully redirected to the “Create New” page. 2. The "Create New" page loads correctly. 3. Input fields for item details (e.g., Name, Price, Stock Quantity) "Save" and "Cancel" buttons	
TC-006	**View** - View the details of the item.	1. Click “View”. 2. Attempt to modify fields on the Details page. 3. Click “Edit”. 4. Click “Back”.	1. User is successfully redirected to the Details page. 2. User is not allowed to edit; fields are read-only. 3. User is redirected to “Edit” page. 4. User is redirected to “Inventory - Item” page.	
TC-007	**Valid Edit -** Edit an item with valid behavior.	1. Click “Edit”. 2. Modify fields with valid inputs. 3. Click “Save”.	1. User is successfully redirected to the “Edit” page. 2. User is allowed to edit the details. 3. Changes are successfully saved,	

		4. Refresh the page. 5. Navigate to other modules where this data is used.	reflected in the system, and a success message appears. 4. Edited details persist correctly. 5. Data is consistent across all relevant pages.	
TC-008	**Invalid Edit -** Attempt to save without making any changes	1. Click “Edit”. 2. Without making any changes, click "Save". 3. Observe system behavior.	1. User is successfully redirected to the Edit page. 2. System displays a message: “Nothing changed!” 3. The page remains on the Edit screen, and no unnecessary API calls or updates occur.	
TC-009	**Invalid Edit -** Edit with invalid values	1. Click “Edit”. 2. Enter invalid data (e.g., exceeding character limit, special characters, leaving required fields empty). 3. Click "Save". 4. Observe the flagged fields. 5. Try clicking "Save" again without correcting errors.	1. User is successfully redirected to the Edit page. 2. Fields accept input. 3. System prevents saving and displays appropriate error messages for invalid fields. 4. The error fields are highlighted with red border. 5. The system continues to block saving until all errors are resolved.	
TC-010	**Invalid Edit -** Navigate away without saving.	1. Click “Edit”. 2. Modify some fields. 3. Click "Back". 4. Click “Cancel” on the warning prompt. 5. Click “Yes” on the warning prompt.	1. User is successfully redirected to the “Edit” page. 2. Fields accept changes. 3. System displays a warning message: “You have unsaved changes. Do you want to leave?” 4. The warning prompt disappears, and the user remains on the Edit page with unsaved changes intact. 5. The warning prompt disappears, changes are discarded, and the user is redirected to the Inventory - Item page.	

TC-011	**Delete -** Delete an item	1. Click “Delete”. 2. Click "Cancel" on the confirmation prompt. 3. Click "Yes" on the confirmation prompt	1. A confirmation prompt appears with the message: "Are you sure you want to delete this item?" 2. The confirmation prompt disappears, and the item remains unchanged in the system. 3. The confirmation prompt disappears, and the item is successfully deleted from the system. The item should no longer be visible in the list or database.	

7. Pass/Fail Criteria

The following criteria will be used to determine whether the tests pass or fail:

- Pass Criteria:
  - The feature behaves as expected according to the defined test case.
  - No critical or high-severity defects are found.
  - Performance benchmarks (e.g., response time, load handling) meet the defined thresholds.
  - All identified security vulnerabilities are addressed or mitigated.
  - The user interface is functional and intuitive, with no major usability issues.
- Fail Criteria:
  - A test case does not meet the expected results or the feature is not functioning as intended.
  - Critical or high-severity defects are identified that affect the core functionality of the Analysis and Inventory modules.
  - Performance does not meet the acceptable thresholds (e.g., slow load times or failure under load testing).
  - Any security vulnerabilities or breaches are discovered.
  - Usability issues severely impact the user experience or make the interface difficult to navigate.

8. Risks & Mitigation

Risk	Mitigation Plan
Time Constraints: Due to the limited time for testing, not all	Prioritize high-risk and critical scenarios based on functional importance. Focus testing efforts on Analysis

modules and scenarios may be tested exhaustively.	and Inventory modules as per the scope.
Limited Access to Non-Public Modules: The plan does not cover non-public modules (e.g., Reseller, Merchant), which may result in incomplete test coverage.	Ensure all critical functionalities within the Analysis and Inventory modules are thoroughly tested. Any future testing of non-public modules can be conducted once access is granted.
Inconsistent Test Environments: There may be discrepancies between the test/staging environment and the production environment, leading to undetected issues.	Validate that the staging environment replicates the production setup as closely as possible. Include testing in multiple browsers and devices to account for environment variations.
Unforeseen Security Vulnerabilities: New security vulnerabilities may be discovered during testing.	Run regular security scans and address any vulnerabilities immediately. Use established security testing tools to detect potential issues proactively.

9. Assumptions & Dependencies

Assumptions:

1. The **Analysis** and **Inventory** modules are functional and have been developed to the expected requirements.
2. The staging environment is set up and configured to replicate the production environment as closely as possible.
3. All required data for testing (e.g., sample transactions, items) is available for testing the modules.
4. The public-facing features of the portal are not dependent on internal, non-public-facing systems or features.

Dependencies:

1. **Availability of Testing Resources**: Testers need access to appropriate tools and resources (e.g., testing environments, test data, security scanning tools) to perform tests effectively.
2. **Development Team Support**: The testing schedule is dependent on timely access to the development team to fix issues and provide any necessary updates or clarifications.
3. **Tool Availability**: The automated testing tools (e.g., for performance testing) should be available and functional to support the testing process.
4. **Approval for Public Access**: Testing assumes that the **Analysis** and **Inventory** modules are publicly accessible, as these are the only modules included in this test plan.