Testing Document and Specification

Test Report
CS451R

Recur

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Introduction

This document outlines the outcome of completed system tests for the Recur subscription tracking application. Incidents, Defects, and Changes that need to be made will be presented here formally. Although the ideas expressed here are separate entities, they will be combined into this one document.

Incidents

This section defines the incidents discovered while performing various tests on the system. This section will expand as more incidents are found. For each incident, the initial Incident ID (excluding Letter) determines the test case that it ties to. For example, Incident ID 4.1.5.1-A is an incident stemming from test case 4.1.5.1.

Incident ID 4.1.5.1-A
Description: Category pie chart shows incorrect category total after subscription edit until page refresh
Originator: Logan George - Tester
Discover Date: November 6, 2025
Severity: Medium
Steps Required to produce incident:
Log in as a user with multiple subscriptions in different categories.
Navigate to /analytics with chart mode set to "category".
Note the current total for a category (for example, "Entertainment").
Navigate to the subscriptions list and edit one subscription in that category to increase its monthly amount.
Save the subscription changes.
Return to /analytics without performing a full page refresh.
Responder: Brendan Clouston - Developer
Current Status: Closed
Cause: Category totals were calculated once on initial load and not recomputed after subscription updates in the same session.
Resolution: Updated analytics page to recompute category totals whenever subscription data changes or when navigating back to /analytics, ensuring fresh data is used.
Addressed Date: November 8, 2025
Creation Phase: Implementation
Detection Phase: Testing
Correction Time: 2 hours

Incident ID 4.2.1.2-A
Description: Email notification toggle appears updated in the UI but does not persist to userlogin.prefs
Originator: Curtis Lemke - Tester

Discover Date: November 11, 2025
Severity: High
Steps Required to produce incident:
Log in as a user with email_notifications initially set to true.
Navigate to /preferences.
Toggle Email notifications from ON to OFF and wait for the success message.
Refresh the /preferences page.
Inspect userlogin.prefs in the database or via logs.
Responder: Viger Romo - Developer
Current Status: Closed
Cause: Only Supabase auth user_metadata was being updated; userlogin.prefs field was not updated in the same operation, causing a mismatch between UI and persistent data.
Resolution: Extended the preference save routine to update both user_metadata and userlogin.prefs in a single flow and added error handling for partial failures. Also added a regression test to verify consistency.
Addressed Date: November 12, 2025
Creation Phase: Implementation
Detection Phase: Testing
Correction Time: 3 hours

Incident ID 4.1.3.2-A
Description: When Plaid Link is cancelled, the user remains stuck on a loading state with no clear error message
Originator: Viger Romo - Tester
Discover: Date November 20, 2025
Severity: Medium
Steps Required to produce incident:
Log in as a user who is on /setup/bank.
Click the "Connect Bank" button to open Plaid Link.
In the Plaid sandbox window, cancel the flow or close the window instead of selecting an institution.
Return focus to the Recur browser tab and observe the UI.
Responder: Brendan Clouston - Developer
Current Status: Closed
Cause: Initial Plaid integration assumed a successful onSuccess callback and did not fully handle onExit or cancellation callbacks, leaving loading state flags set.
Resolution: Implementation of full onExit handling with user-visible messaging and reset of loading indicators.
Addressed Date: November 28, 2025
Creation Phase: Implementation
Detection Phase: Testing
Correction Time: 5 hours

Defects

At this time, defects that were found were initially labeled as incidents. Some incidents represented user-facing defects that could impact data accuracy (for example, preferences not persisting correctly), while others were cosmetic or workflow-related. Most defects discovered so far have been easy to correct once identified, and fixes were applied promptly during the testing phase.

Incidents such as 4.2.1.2-A were classified as high-severity defects because they created inconsistencies between what the user sees in the UI and what is stored in the database. These have been fully corrected. Other incidents, such as 4.1.5.1-A, were medium severity because the issue resolved itself on a full page reload, but could still cause confusion, and they have also been corrected.

Summary

The testing procedure to date has been conducted using manual system testing and concurrent unit or integration testing where appropriate. Features tested include but are not limited to:

- Ability for a user to log in and out via email and password and access or be redirected from protected pages

Test Cases: 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.1.4

- Ability for a new user with no transactions to be redirected to setup, complete setup via manual subscriptions or imports, and subsequently access the homepage

Test Cases: 4.1.2.1, 4.1.2.2, 4.1.2.3

- Ability for a user to connect a bank via Plaid and import transactions, with proper handling of recurring detection and error conditions

Test Cases: 4.1.3.1, 4.1.3.2, 4.1.3.3

- Ability for a user to import subscriptions from file and manually add or edit subscriptions, with those changes reflected in subscription lists and analytics

Test Cases: 4.1.4.1, 4.1.4.2, 4.1.4.3

- Ability to view analytics including category pie chart, monthly bar chart, subscriptions list and insight messaging

Test Cases: 4.1.5.1, 4.1.5.2, 4.1.5.3, 4.1.5.4

- Ability for the homepage to display a personalized greeting, remain robust when profile queries fail, and provide navigation to major sections

Test Cases: 4.1.6.1, 4.1.6.2, 4.1.6.3

- Ability to list subscriptions derived from recurring transactions, adjust recurrence classification, and integrate reminders with user preferences

Test Cases: 4.1.7.1, 4.1.7.2, 4.1.7.3

- Ability for users to configure and persist preferences such as email notifications, weekly summaries, theme, and access shortcuts to reminders and insights

Test Cases: 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.1.4, 4.2.1.5

- Ability for users to manage account settings including profile data, two-factor authentication (2FA), OTP delivery method, and account deletion entry point

Test Cases: 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.2.4, 4.2.2.5, 4.2.2.6

- Ability to access privacy and terms pages without authentication

Test Cases: 4.3.1.1, 4.3.1.2

- Non-functional behavior including performance, reliability under transient Supabase errors, data isolation between users, protected route enforcement, and basic accessibility of critical pages

Test Cases: 4.4.1.1, 4.4.2.1, 4.4.3.1, 4.4.3.2, 4.4.4.1

To date, several incidents have been found and addressed. Most identified issues have been corrected quickly and have not resulted in large-scale issues.