Product Name: Roommate Expense Tracker (RET)

Team Name: RET

Release Date: July 22, 2025

Release Summary

Key User Stories:

The following will analyze the completion of acceptance criteria for the list of user stories outlined within our Release Plan.

Sprint 1: Environment Setup

1.1 As a user, I would like to be able to log in to my own personal account.

• Acceptance Criteria:

- Given I am on the login page, When I enter valid credentials, then I should be successfully logged in and redirected to my dashboard.
- Given I am on the login page, When I enter invalid credentials, then I should receive an error message indicating invalid credentials and remain on the login page.
- Given I am on the login page, When I click "Forgot Password," then I should be redirected to the password reset flow.
- 1.2 As a user, I want the information I share with the app to be private and secure.
 - Acceptance Criteria:
 - Given I have sensitive information (e.g., email, password) stored in my account,
 When I am logged in, then this information should not be publicly accessible to other users.
 - Given I am interacting with the application, When data is transmitted, then the connection should be secured using HTTPS/SSL.
 - Given I view my profile or account settings, then my personal information should only be visible to me.

Sprint 2: Users & Expense CRUD Operations

2.1. As the head of house, I want to create a household so that I can manage shared expenses with my roommates.

Acceptance Criteria:

Given I am logged in as the head of house, When I navigate to the "Create
Household" section and provide a valid household name, then a new household
should be successfully created, and I should be assigned as its head.

- Given a household is created, then I should be able to invite other users to join this household.
- 2.2. As the head of house, I want to read roommate information so I can manage members.
 - Acceptance Criteria: (Note: This is a Known Problem. The acceptance criteria here reflect the desired functionality for a complete system, even if not implemented in this release.)
 - Given I am logged in as the head of house, When I navigate to the "Household Members" section, then I should see a list of all current roommates within my household, including their names and contact information (if applicable).
 - Given I am logged in as the head of house, When I select a specific roommate from the list, then I should be able to view their individual details.
 - Status: Incomplete
- 2.3 As the head of house, I want to update who the head of house is when I move out.
 - Acceptance Criteria: (Note: This is a Known Problem. The acceptance criteria here reflect the desired functionality for a complete system, even if not implemented in this release.)
 - Given I am logged in as the current head of house and there are other members in the household, when I select another active household member and confirm the transfer, then the selected member should become the new head of house, and my role should be updated accordingly.
 - Given I am logged in as the head of house, When I attempt to transfer the head of house role to a non-existent or inactive member, then I should receive an error message.
 - Status: Incomplete
- 2.4 As the head of house, I want to delete a roommate from the household when they move out.
 - Acceptance Criteria: (Note: This is a Known Problem. The acceptance criteria here reflect the desired functionality for a complete system, even if not implemented in this release.)
 - Given I am logged in as the head of house, When I select an active roommate and confirm their removal, Then the selected roommate should be successfully removed from the household, and they should no longer have access to household expenses.
 - Given I am logged in as the head of house, When I attempt to delete the last remaining roommate (which is myself), then I should receive a warning or be prompted to disband the household instead.
 - Status: Incomplete

2.5 As a user, I want to create an expense when I need to split a receipt or other bill with the other roommates.

- Acceptance Criteria:
 - Given I am logged in as a user, When I navigate to the "Create Expense" section, provide a valid description, amount, and select the involved roommates, then a new expense should be successfully created and visible to all selected roommates.
 - Given I am logged in as a user, When I attempt to create an expense with missing required fields (e.g., amount, description), then I should receive an error message and be prompted to fill in the missing information.
 - Given an expense is created, then it should default to an "unpaid" or "pending" status.

2.6 As a user, I want to read the expenses my roommates create so I can stay up to date with who I owe money to.

- Acceptance Criteria:
 - Given I am logged in as a user, When I navigate to the "My Expenses" or "Household Expenses" section, then I should see a clear list of all expenses I am involved in, including the amount, description, and who created it.
 - Given I am logged in as a user, When I view an expense, then I should be able to see the breakdown of how the expense is split among involved members.
 - Given an expense's status changes (e.g., from unpaid to paid), then the updated status should be reflected when I view the expense.
- 2.7. As a user, I want to update an expense so I can correct or adjust details and mark an expense as completed.
 - Acceptance Criteria:
 - Given I have created an expense, When I select the expense and modify its details (e.g., description, amount, involved roommates), Then the expense should be successfully updated and the changes visible to all involved parties.
 - Given I am an involved user in an expense, When I mark the expense as "completed" or "paid," Then the expense status should be updated accordingly, and this change should be reflected for all involved members.
 - Given I attempt to update an expense I did not create or am not involved in, then
 I should receive an error or be prevented from making changes.
- 2.8. As a user, I want to delete an expense so that I can remove incorrect entries.

- Acceptance Criteria: (Note: This ties into a Known Problem: "No handling of cascade deletes with shared expenses." For a complete system, ensure that deleting an expense correctly updates balances for all involved members.)
 - Given I have created an expense, when I select the expense and confirm its deletion, then the expense should be permanently removed from the system and no longer visible to any household members.
 - Given I attempt to delete an expense I did not create or am not authorized to delete, then I should receive an error or be prevented from deleting it.
- Status: Incomplete

Sprint 3: Advanced Expense Logic

- 3.1 As a user, I want to edit and view my profile information so that I can personalize my experience.
 - Acceptance Criteria:
 - Given I am on my profile page, When I edit my nickname and save changes, then my updated nickname should be displayed.
 - Given I am on my profile page, When I edit my payment method/link and save changes, then my updated payment information should be stored.
 - Given I am logged into the app, When I click the "Log Out" button, then I should be logged out and redirected to the login page.
 - Given I am viewing the app, When I toggle the Light/Dark mode button, then the app's theme should switch accordingly.
- 3.2 As a user, I want to manage house information and members so that shared expenses are linked to the correct group.
 - Acceptance Criteria:
 - Given I am on the house dashboard, When I edit the house name and save changes, then the updated house name should be displayed to all members.
 - Given I am on the house dashboard, When I view the member list, then I should see a list of all current members.
 - Given I am viewing the member list, When I tap on a member's card, then their contact information (if applicable) should be copied to my clipboard.
- 3.3 As a user, I want to invite or remove members from my house so that the group stays current.
 - Acceptance Criteria:
 - Given I am on the member management page, When I enter a valid email to invite a new member, then an invitation should be sent, and the member should appear in the pending list.

- Given I am on the member management page, When I select an existing member and confirm their removal, then the member should be removed from the house.
- Given I attempt to invite or remove a member, then I should receive a success or failure message.
- 3.4 As a user, I want to navigate from the homepage to my house and profile pages seamlessly.
 - Acceptance Criteria:
 - Given I am on the homepage, When I click on the "My House" button, then I should be redirected to my house dashboard.
 - Given I am on the homepage, When I click on the "My Profile" button, then I should be redirected to my profile page.
 - Given I am on any page, When I click the navigation buttons, then the correct page should load without errors.
- 3.5 As a user, I want to see updates reflected in real-time so that shared changes are instantly available.
 - Acceptance Criteria:
 - Given I am viewing the house dashboard, When another member creates or updates an expense, then the changes should appear on my screen automatically without refreshing.
 - Given I am viewing the member list, When another member joins or leaves the house, then the list should update in real-time.
- 3.6 As a user, I want to create, view, and update expenses so that shared costs are clearly tracked and managed.
 - Acceptance Criteria:
 - Given I am on the "Create Expense" page, When I fill in the required details and submit, then a new expense should be created and visible on the house dashboard.
 - Given I am on the house dashboard, When I view the list of expenses, then I should see all current household expenses.
 - Given I select an existing expense, When I modify its details (e.g., amount, description) and save, then the expense should be updated.
 - Given I select an existing expense, When I confirm its deletion, then the expense should be removed from the list.

Known Problems:

The following are known issues within the app:

- Cannot mark individual splits as resolved - only the entire expense

- No handling of cascade deletes with shared expenses
- No transfer of ownership between house members
- No house member management
- No profile pages to check history of payments
- No on-time payment tracking

Product Backlog:

The following are features on our backlog:

- As a user, I want to be able to set up recurring payments.
- As a member of a house, I want to see individual breakdowns of expenses between other members of the house and myself
- As the head of house, I want to be able to remove house members who no longer live in the house.
- As a user, I want to pass on the role of "head of house" when I move out.
- As a user, I want to be able to upload an image of a receipt and have an itemized and editable expense automatically created from it.
- As a user, I want to be able to create an expense and have my roommates see it instantly.
- As a user, I want to be able to receive a notification every time an expense is updated.