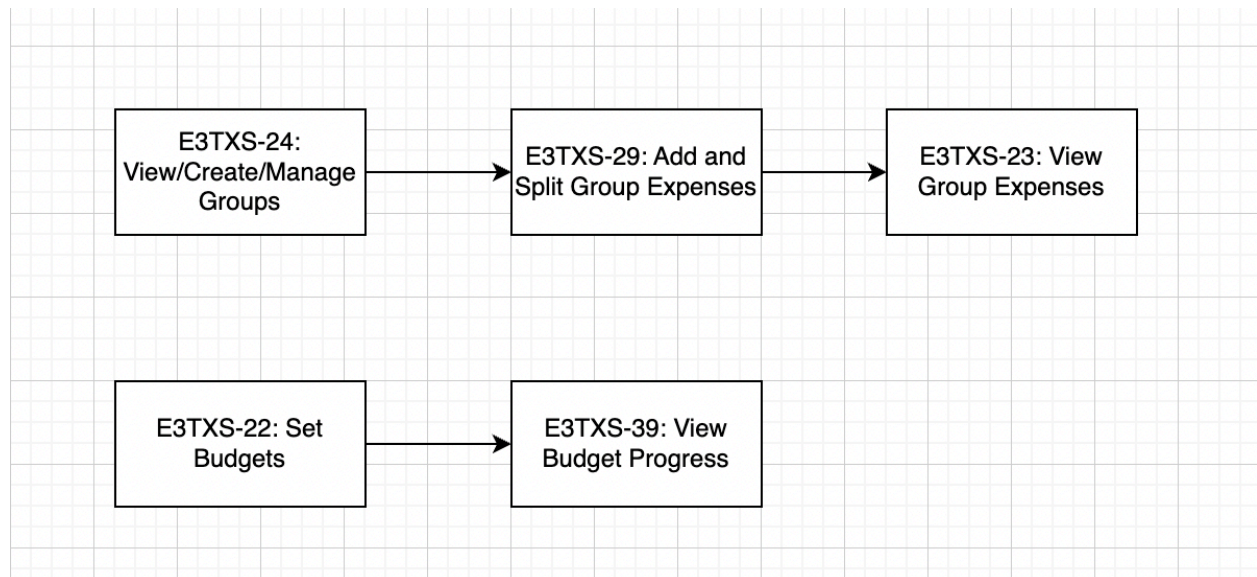


Network Flow Diagram



Explanation

During Sprint 2, not every story depended on another, but a few had clear sequencing requirements.

The main dependency chain was in the Groups feature:

E3TXS-24: View/Create/Manage Groups

This had to be completed first because it set up all the group-related data structures and endpoints, as well as added and updated the backend tables in Supabase.

E3TXS-29: Add and Split Group Expenses

This required groups to exist first, but didn't require the viewing logic to be finished. We only needed the backend and basic expense-creation logic in place.

E3TXS-23: View Group Expenses

This story depended on both previous steps because you can't show expenses until group expenses actually exist and are added by the user.

The **critical path** is the longest sequence of dependent tasks. For sprint 2, it was this group feature because any delay in one of these tasks would automatically delay the next, making this the path with the highest time impact on the sprint.

We also had a smaller dependency chain in the Budgets feature:

E3TXS-22: Set Budgets → E3TXS-39: View Budget Progress

The other tasks in the sprint, like Recurring Monthly Expenses, Pie Chart Visualization, and the Dashboard, were independent and didn't rely on previous work.

How We Worked Together

As a team, we stayed on track by doing the following:

- We used our standups to coordinate who was working on each story and flag blockers quickly.
- We followed the dependency order intentionally, making sure the upstream tasks were completed before starting the downstream ones.
- We made sure to assign the upstream tasks to someone who would be able to finish the task in the first few days of the sprint, to give the subsequent tasks enough time to be completed. For example, E3TXS-24 (View/Create/Manage Groups) was assigned to Eesha with the goal of finishing it within the first three days. That allowed Abrar to start the remaining stories in the dependency chain without being blocked.
- We broke each story into smaller sub-tasks and allowed parallel work where possible, such as with E3TXS-36 - Add recurring monthly expenses.
- We communicated frequently through our sprint board and updated story statuses so everyone stayed aligned.