

Story UFC-190: Accounts Date Filtering

The following document will go over the design of the date range filtering for the account scene, as outlined in Story ticket UFC-190.

Acceptance Criteria

For reference, the following are the acceptance criteria for this ticket:

- When I go to the Accounts page, I can see the balances for each account for the current month.
- I can change to the next/previous month or change the date range however I want.
- As the date range changes, the account balances in the Accounts list update accordingly.

Design Brainstorming

OK, so thankfully the bulk of this story has already been done as part of the Transactions date filtering (UFC-199).

We have the transactions date index, we have the `DateRangePicker` component and Context hook, so we really just need to slap them together into the Accounts scene and we should be good to go.

Getting the Date Range Balances into the Account List

OK, so I thought this would be a piece of cake because we already have a method (i.e. selector) for calculating an account's balance (changes) between dates. But then I had a moment of panic when I realized that the selector gets *all accounts* (by ID) and we need to inject the date range balances to each list item at the list item level.

And this is problematic because the `AccountListItem` uses `connect` to get the account, which means that we need to change that since we need to use the hook that accesses the date range Context.

So... a couple options:

- i. Remove getting the account from `connect` and create a new hook for getting the account via the existing `selectBalanceChanges` selector and date range hook.
- ii. I don't know if there is an option 2. Besides just creating a better selector for getting an account with a date range bound balance.

- And I don't think there is another option because we *need* to access the date range state from a hook. As far as I'm aware, short of creating a HOC to wrap a connected component, there isn't any way to access Context state inside connect. And we very well *could* create a HOC to pass date range state to connect, but I feel that might be a bit *too* contrived. Plus, I seem to already be all in on the 'hooks as a unit of logic' as opposed to 'HOCs for injecting logic'.

So, I guess it's decided: we'll create a new hook (let's call it `useDateRangeAccount`) that accepts an ID as a param. This hook will then use a new selector (let's call it `selectAccountBetweenDates`) that takes in the start/end date *and* the account ID.

- Obviously, this will need to be a cached selector.
- It will also need to take in the ID as the *4th* parameter, since the start/end date are already locked into the 2nd/3rd args as part of other selectors.

So once we have this selector, we can use it directly in `AccountListItem` to get the name/balance.

Then all that's left is adding the `DateRangePicker` and `DateRangeProvider` to the Accounts scene. Easy peasy (it always seems that way at the start...).

Scene Header with Date Range Picker

During the course of implementing of this story, I decided to create a standard scene header that has the `DateRangePicker` so that it can be used across all of the Scenes.

A consequence of this is that the `DateRangePicker` is now inline with the title on the Transactions scene, which wasn't the original design. The original design had an "Add Transaction" button in the header instead.

As such, this is now a change in the design of the Transactions scene. I think we can probably get away with not putting a dedicated Add Transaction button on the scene, considering the Global Add Button is very prominent and the a fallback Add Transaction button shows up when the user navigates to a date range with no transactions. So I think we'll be fine.

Component Breakdown

Atoms

- N/A

Molecules

- [modification] `AccountListItem` (remove the account query from connect, add in new date range hook)

Organisms

- N/A

Scenes

- [modification] Accounts (add `DateRangePicker` and wrap in `DateRangeProvider`)

Tasks

- Create the `selectAccountBetweenDates` selector.
- Create the `useDateRangeAccount` hook.
- Remove the account query from `AccountListItem` connect.
- Add `useDateRangeAccount` to `AccountListItem`.
- Add the `DateRangePicker` and `DateRangeProvider` to the Accounts scene.