Import Rules System

Inspiration

[redacted]

Brainstorming

Rules as Sentences

What if our rules were laid out kind of like our recurring transaction rules? That, in the style of a sentence.

- Specifically, I'm thinking things like "When a transaction..." as the starter, then incrementally add conditions.

- Following design, we could do the property name (e.g. "description"), then the condition type ("contains" or "matches regex", for plain text vs regex match), then the condition value (e.g. "phone bill").

  - So a condition 'sentence' would be like "When a transaction [description] [contains] [phone bill],"

  - This is the "If" portion of rule.

    - Note that conditions are "contain", "start with", and "match exactly".

- Then our "Then" part would be like "Change...", and then the user can pick another property to set a specific value.

- So the final sentence would be like "When a transaction [description] [contains] [phone bill], change [account] to [Phone]."

- Of course, we could have multiple conditions and multiple actions, so need to keep that in mind.

- Don't need to get much fancier than "contains/matches" and "change value" (for conditions/actions respectively), unlike who did get much fancier (with actions like side effects of sending emails).

Create Rule Form

Just like (and just like all of our other forms), we should use a Sidebar form.

In terms of conditions/actions, I mostly like how has it laid out, but I think we would be served with a "Add Condition" and "Add Action" button in each section, rather than a searchable dropdown. Then, each new condition/action is just a part of the sentence, with the necessary dropdowns and inputs.

Once we've run out of possible conditions/actions, the Add buttons for those sections should be disabled.

Rule Table Item

I don't think we need to split conditions/actions into separate columns (ala how does it). Just one giant column with an arrow between, ala how we do accounts on mobile.

And then, with multiple conditions/actions, just list them one below each other. Yes, that means we can have table items taller than a single one.

However, we still want to have the date as a column, to have something to sort against.

Rank

I wonder if we should display the calculated rank... I don't think so, cause it's only going to confuse users. Although, technically, it will obfuscate part of the rules system from the user (until we have docs explaining how it works), but ya know. Plus, how do we even represent rank? Like, is it a number we assign to each rule? Or is just an ordering? I guess if it's just an ordering then the 'assigned numbers' are just 1 through N.

Or maybe 'rank' is like a measure of complexity? So that a low 'rank' just indicates a low complexity (i.e. a very general condition) whereas a high 'rank' indicates high complexity (i.e. a very specific condition). In which case, how do we calculate complexity? Number of conditions * number of characters in the condition (e.g. 1 condition with a text input value of 'test' would have a 'rank' of 4, but 2 conditions with text inputs values of 6 and 8 = 2 * (6 + 8) = 28). But then 'ranking' the rules is just putting them in order of complexity.

Sorting

Actually, I've changed my mind about rank sorting. Except, instead of having a dedicated 'Rank' column, we should just call the column where we map conditions → actions as "Rule", and allow sorting on it, where the sorting uses rank.

So when users sort the "Rule" column, the least complex rules will be shown first, etc.

Rule List Item

As far as sorting, I guess we just do the usual date sorting (using dates as headers).

Then, as far as the item itself, I guess we just do conditions → actions again. And again, we can have taller items.

Or should we? Is there a more dense/condensed way we can represent the rule so that we can better display it on mobile? The rules can get quite long, so having a bunch of wrapping, multiple lines, etc isn't exactly the best UX.

We could reduce the "contains" and "matches regex" conditions down. Maybe symbols or just abbreviations? e.g. maybe "con." and "mat."?

I don't know; will need to see it with live rules to see just how drastically we need to shrink things.

Import Overview

We're going to need to introduce the concept of the "Import Overview" page as part of this story. This view would be where users go when clicking on the "Import Transactions" button.

This view would show users primarily two things: a way to go import transactions (i.e. a list of ways to import transactions, which will only include CSV import for now), and a view for managing the import rules (since we don't want to do that inside the import process, apart from being able to add new rules).

I wonder if a tabbed interface would be sufficient for this: one tab for "Import" and one tab for "Rules".

Additionally, since we have only one import option so far, I think it'd be better if we had nice big buttons for the import options, rather than something dinky like a list.

The only thing is that the page will look weird since it doesn't have a date range header or something to pad out space at the top like the Dashboard's summaries or the Transaction's type filters.

OH OH, I got an idea! Instead of using tabs to separate options and rules, the top section can just have the Import option buttons (nice big, clickable buttons), and then the rules can just be listed below them. Better use of space that way.

As far as the scene header, I think it should be "Import from...", then the option buttons. The CSV one should be labelled "CSV file".

Then some white-space, a secondary header labelled "Import Rules", then the list of rules. I think that should work quite nicely.

The table will look kind of wonky on desktop, since it'll be so wide with nothing to pad the sides, but I think that's fine for now. Just gives us more room to play with other options in the future.

Also, don't forget that we need an "Add" button for creating import rules, since we can't do it from the Global Add Button.

Rules in Adjust Transactions

I'm thinking we could use a `CollapsibleSection` for hiding/showing the currently active set of rules, as well as the toggle for applying/not applying the rules, along with the quick action for adding a new rule.

I think the label of the `CollapsibleSection` should be "Active Import Rules".

In terms of page-level positioning, this should be above the Adjustment controls.