Database design

In the project Where Did All the Money Go I will need to use a relational-type database. I will use MySQL since it is open source (free) and I have some familiarity with it.

The database should be relational since there are many one to many and many to many (array) type connections. Array type connections are by nature many to many.

The table outlines are as follows:

Users: Here is where user data would be stored. The user ID will reference the user’s data.

Accounts: Each user will have several accounts they are managing, hence the justification for the application. Each account can have a type (bank account, brokerage account, loan, mortgage) and each needs to be brough in over an API call or a CSV.

Graphs: Users can create graphs which can be normalized. Each graph represents one or more accounts.

Budget: The budget table contains arrays of income and outgo type objects which are defined in tables of their own (many to many). The budget table will tabulate the expense/income by type, amount and frequency to come up with a surplus/deficit.

Dashboard: Each user has a dashboard that can display a number of graphs and budgets upon login.

Diagram

Description automatically generated