Python Project Proposal

Xpen: Expense Tracker

01286121 Computer Programming

Software Engineering Program

By

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Xpen: Expense Tracker

Introduction

Xpen is a desktop GUI expense tracker application. It allows users to record their income/expenses and intuitively show the information in various ways, including graphs, charts, calendars, and list forms.including graphs, charts,
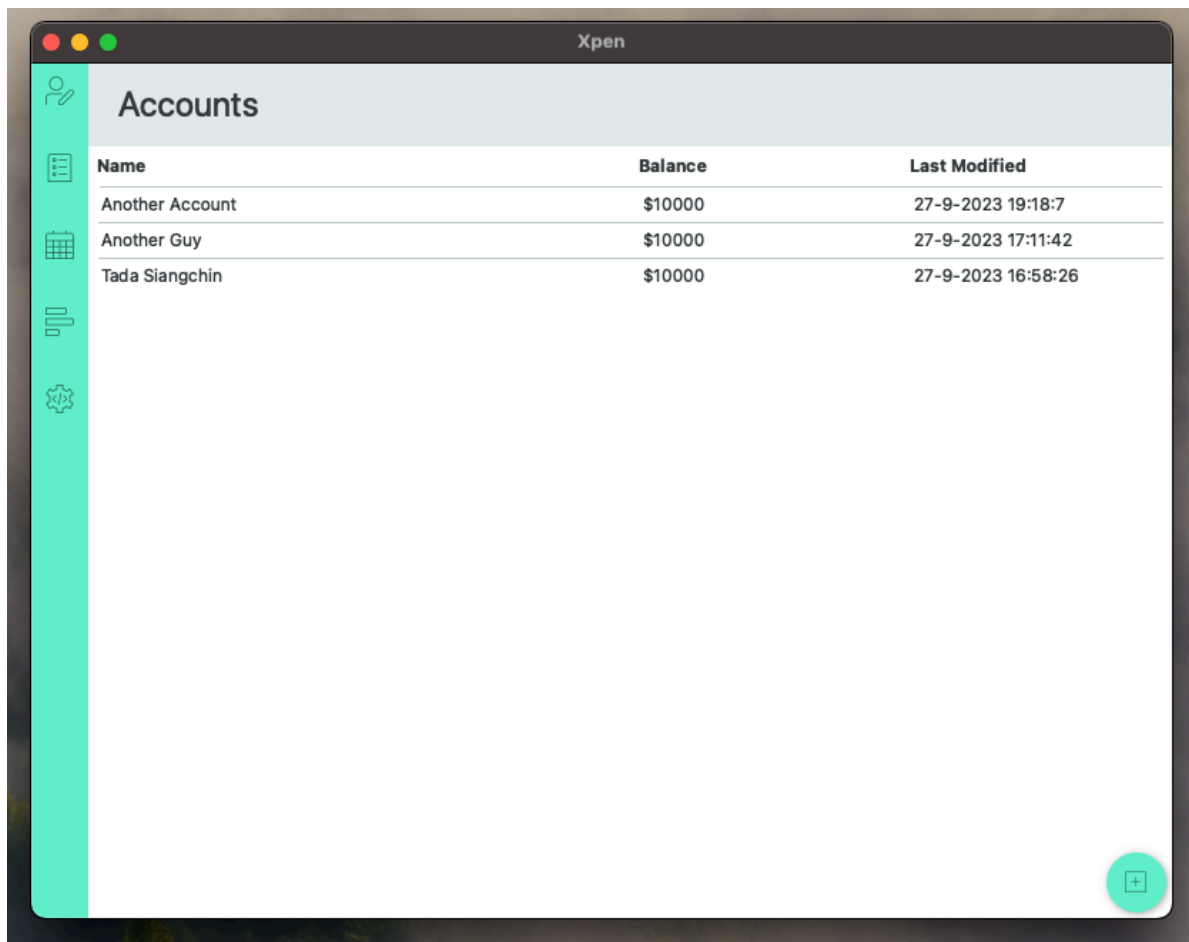
Planned Feature

- Multiple accounts: the application can have multiple accounts stored separately.
- Charts: the information can be displayed as a chart -- giving more insight into the current financial status
- Customization and Preferences: various parts of the application can be customized by the user, such as color schemes, currencies, size, etc.
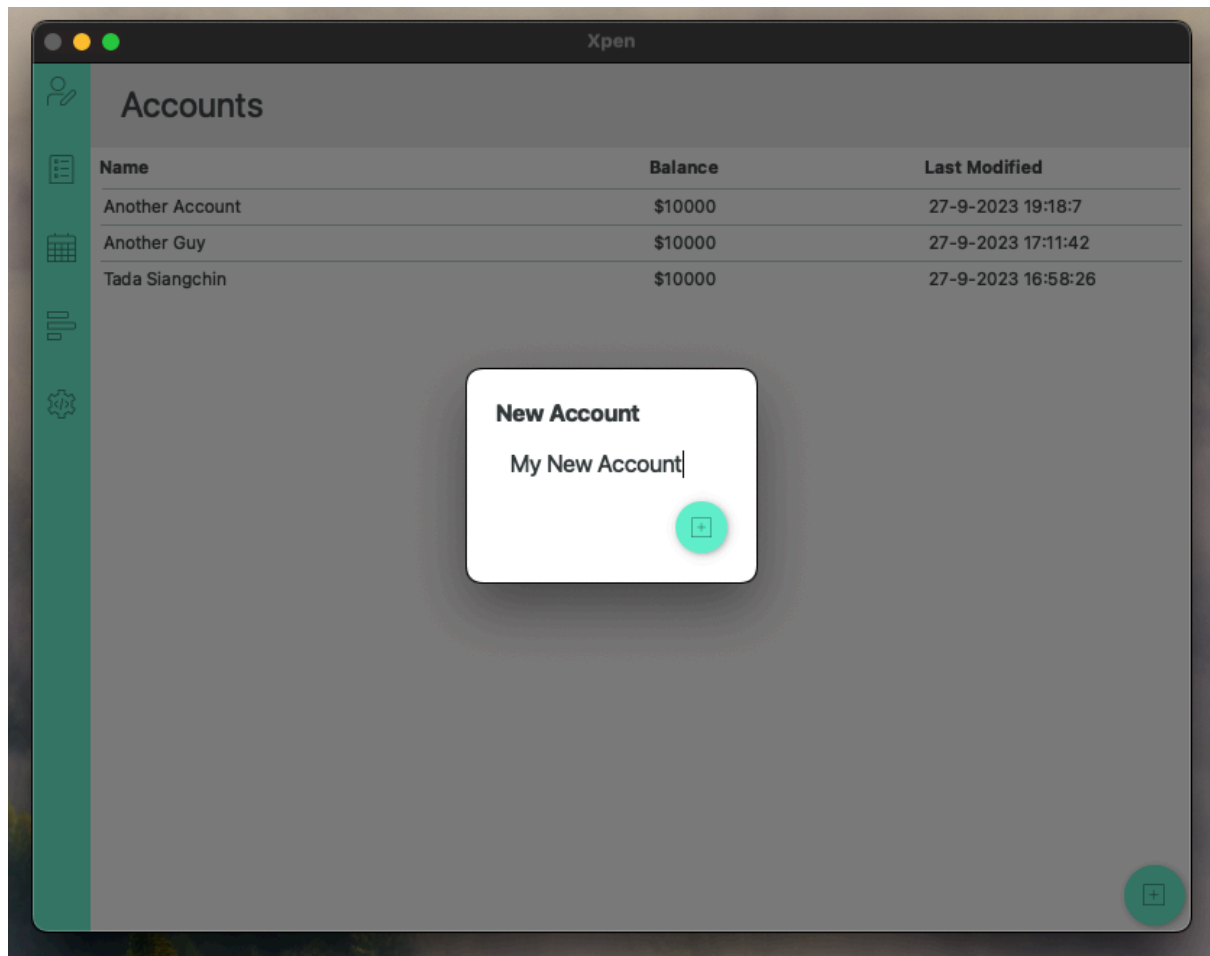
Brief Implementation Overview/Structure

- The GUI library of choice is `PySide6` -- a wrapper over the Qt library.
- The data format used is a JSON file, storing all the income/expense records and user preferences.
- Each account will have a separate folder residing in the application data folder.
- Each record file stores information in the span of up to 1 month. Meaning that, every new month the record will be written into a new file. It would seem that this strikes a nice balance between storing too much data into one file and having too many files around.
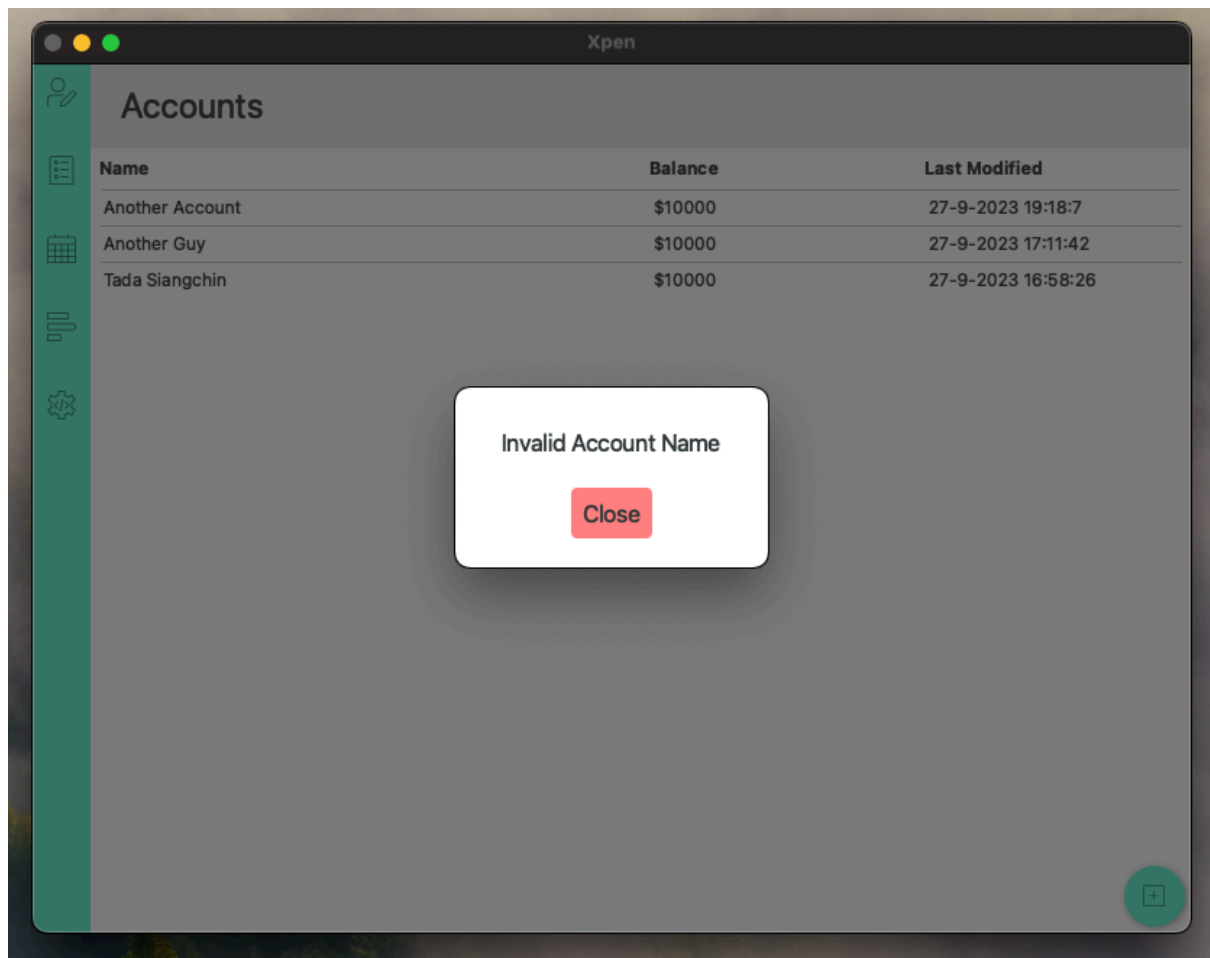
Account Selection Pages

The user will select the accounts they want to use here. Account can be created using the button on bottom-right corner. The user can switch between pages by clicking the menu on the left-hand side of the screen.
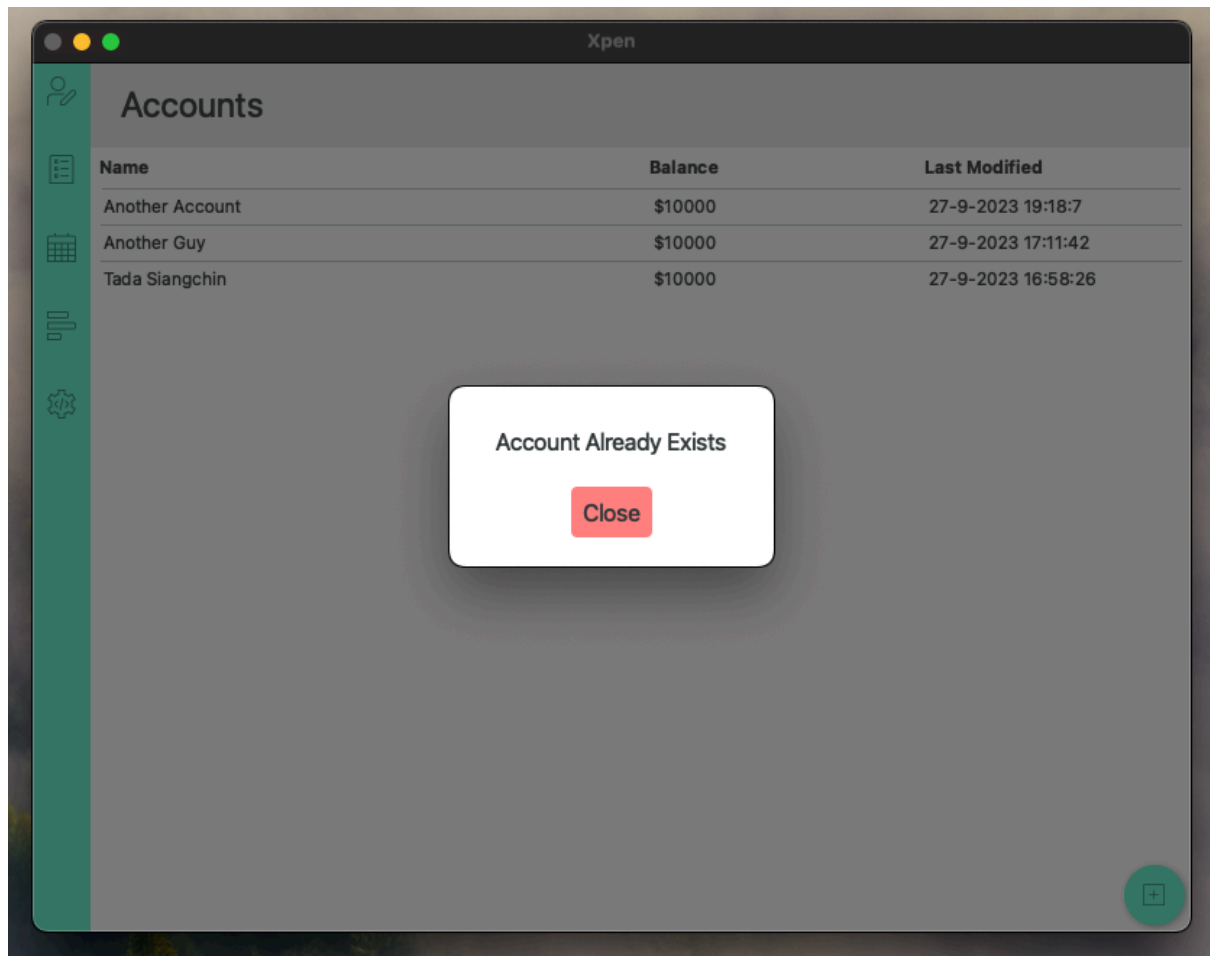
Account Creation Page

After the user clicked create new account button, the popup window will show prompting the user for the new account name.

Invalid Account Name Page

If the user entered an invalid name, a nice window popup displaying the error message will be shown.

Account Duplication Page

As well as the duplicated account name, the popup window will show displaying the error message.