User Manual

Group28

01 Configuration&Execution

Program Sync:

https://github.com/NiHaoWoJiaoYYC/EBU6304-Group28.git

Due to we develop this program by different platform(MacOS&Win), we recommand execute this program on MacOS. Some function will have bug on windows.

Frontend:

src/main/java/org/bupt/persosnalfinance/PersonalFinanceAppLauncher.java

Backend:

1.src/main/java/org/bupt/persosnalfinance/PersosnalFinanceApplication.java

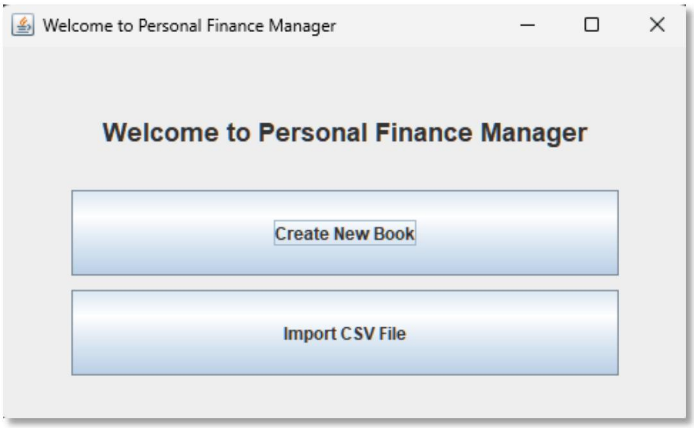
2.Maven

MVN Backend Execution

```
mvn spring-boot:run
```

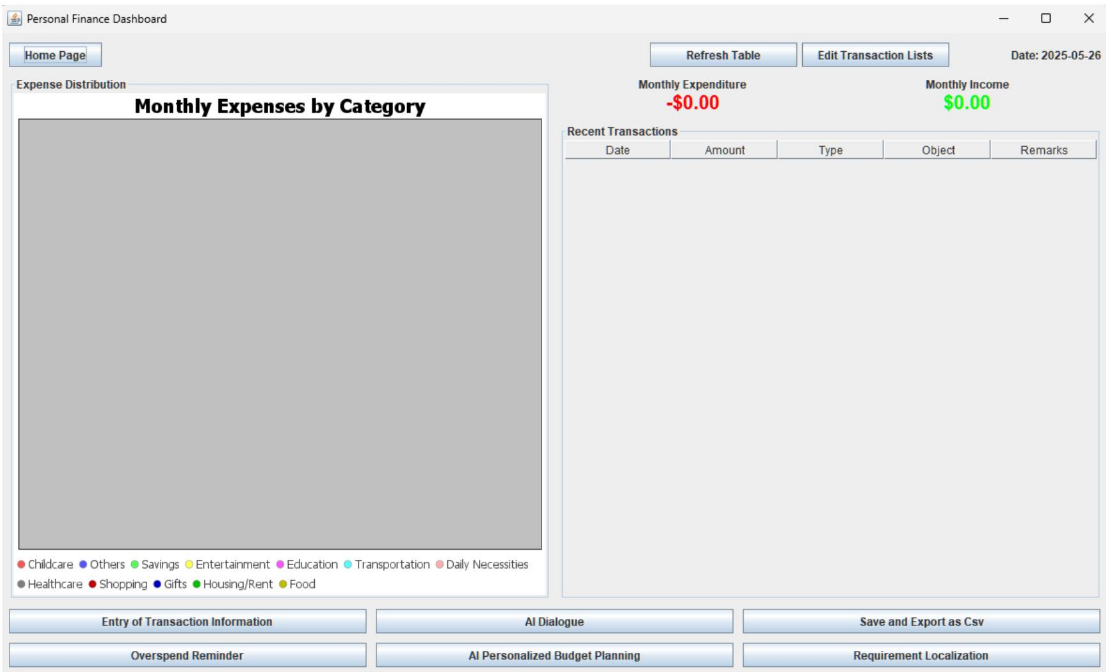
02 Transaction Records Uploading

1.Homepage



First, User should **import CSV** file or **Create New Book** here.

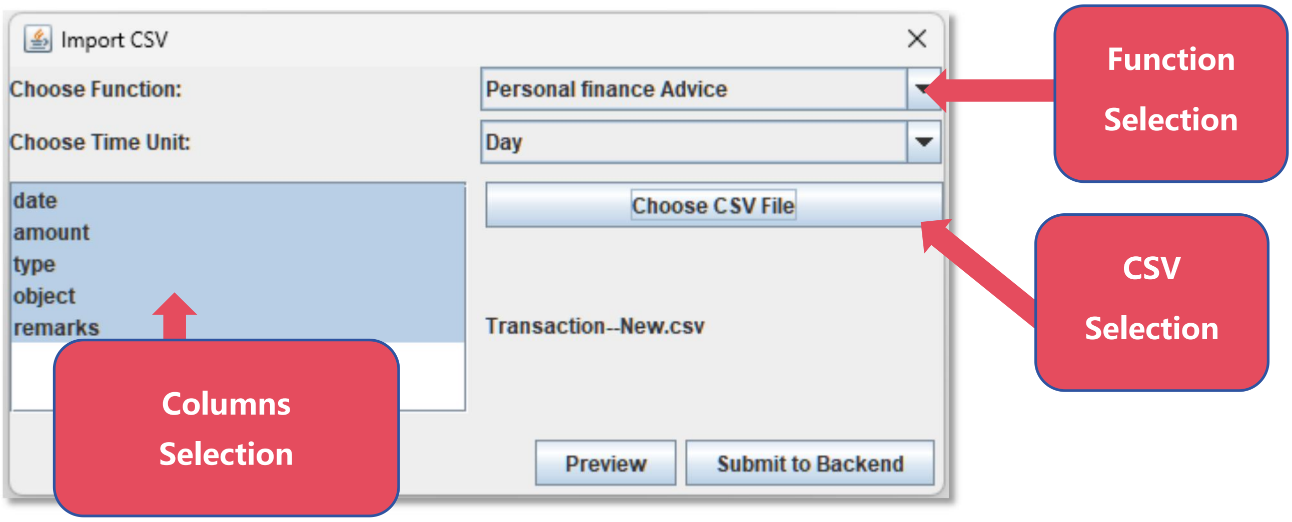
If User create a new book, it will jump to **dashboard** and create a blank book to modify.



All the data will be loaded into json to make it sustainable

Under src/main/data

2.Import CSV File

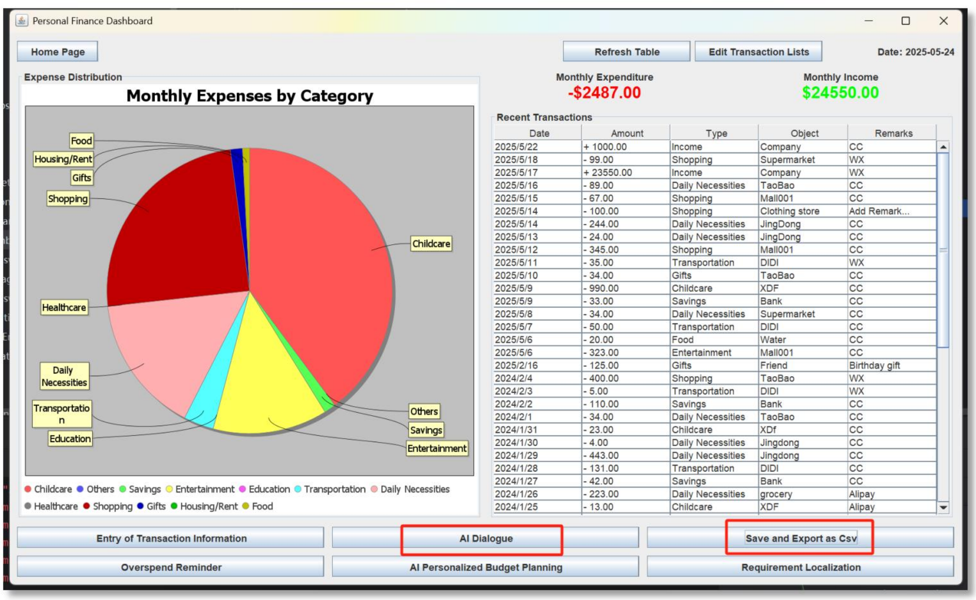


Users can upload their CSV file here and select columns **(these five columns are must to analysis, any absence of these columns will lead to warnings)**. If columns didn’ t meet the need of functions it will warning too.

User can click **homepage button** in dashboard to upload different .csv.

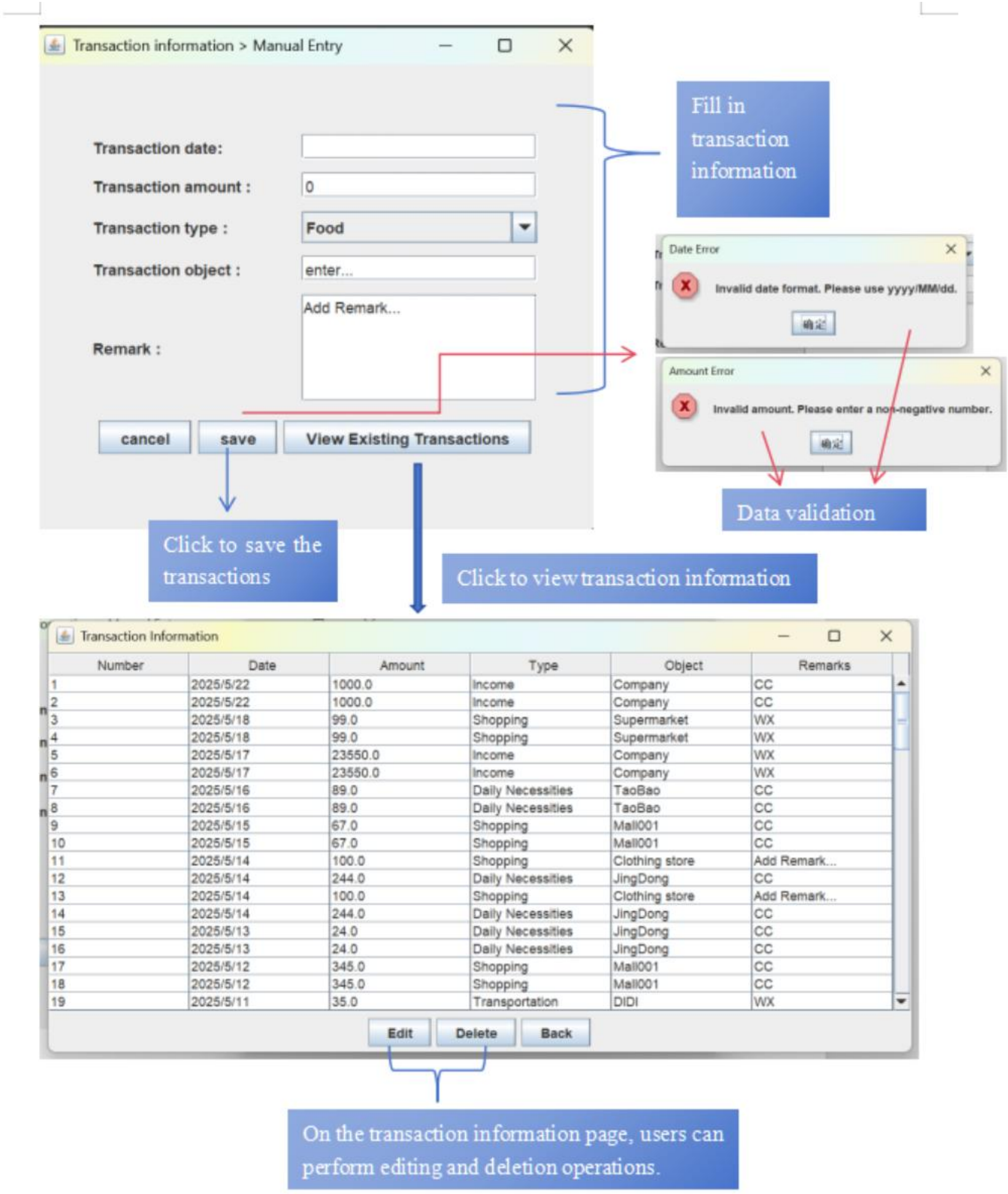
And transaction records can be classified by AI into 13 categories.

3.DashBoard



Here’ s an entry of 7 functions here. It’ s provide users with pie chart and records list to view.

4.Add & Modification Records

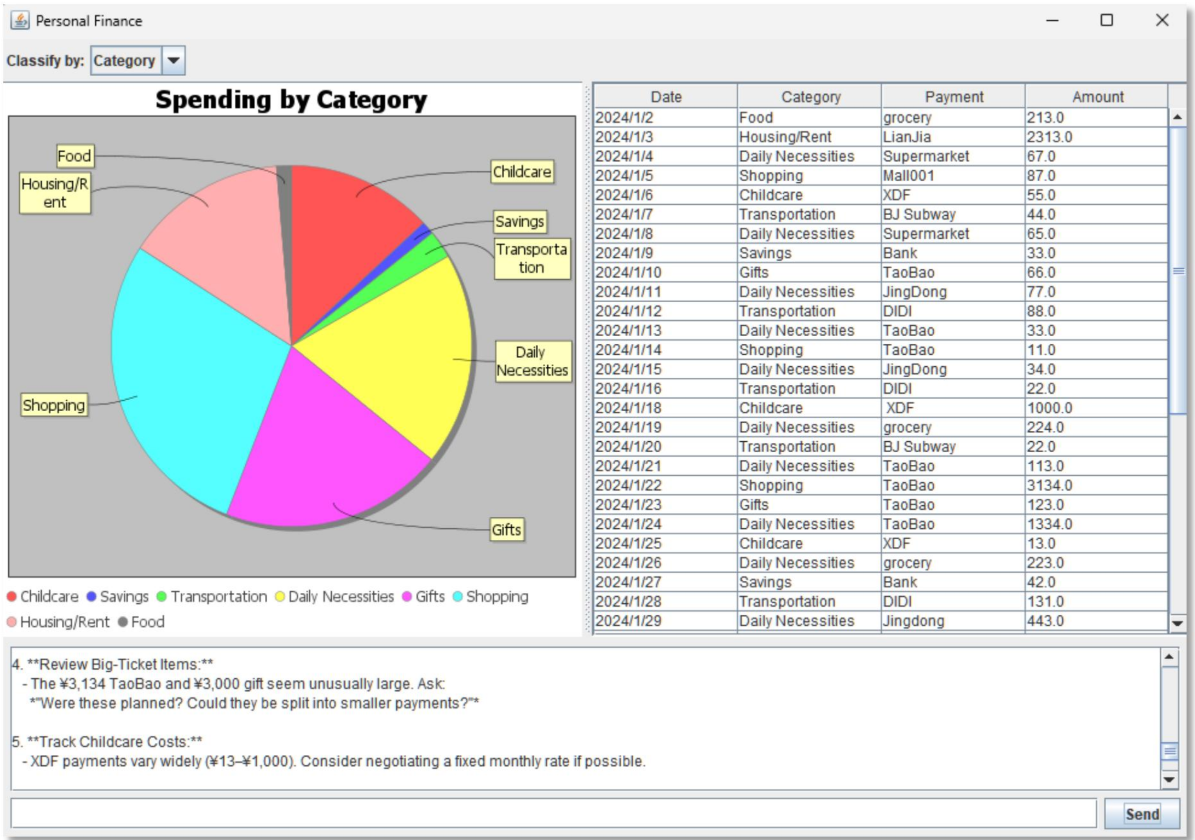


By clicking the “Entry of Transaction Information” ,User can add basic transaction information here. Then save and view.

By clicking the button “ Edit Transaction List” on the top of the panel, user can edit the content of records and delete the records.

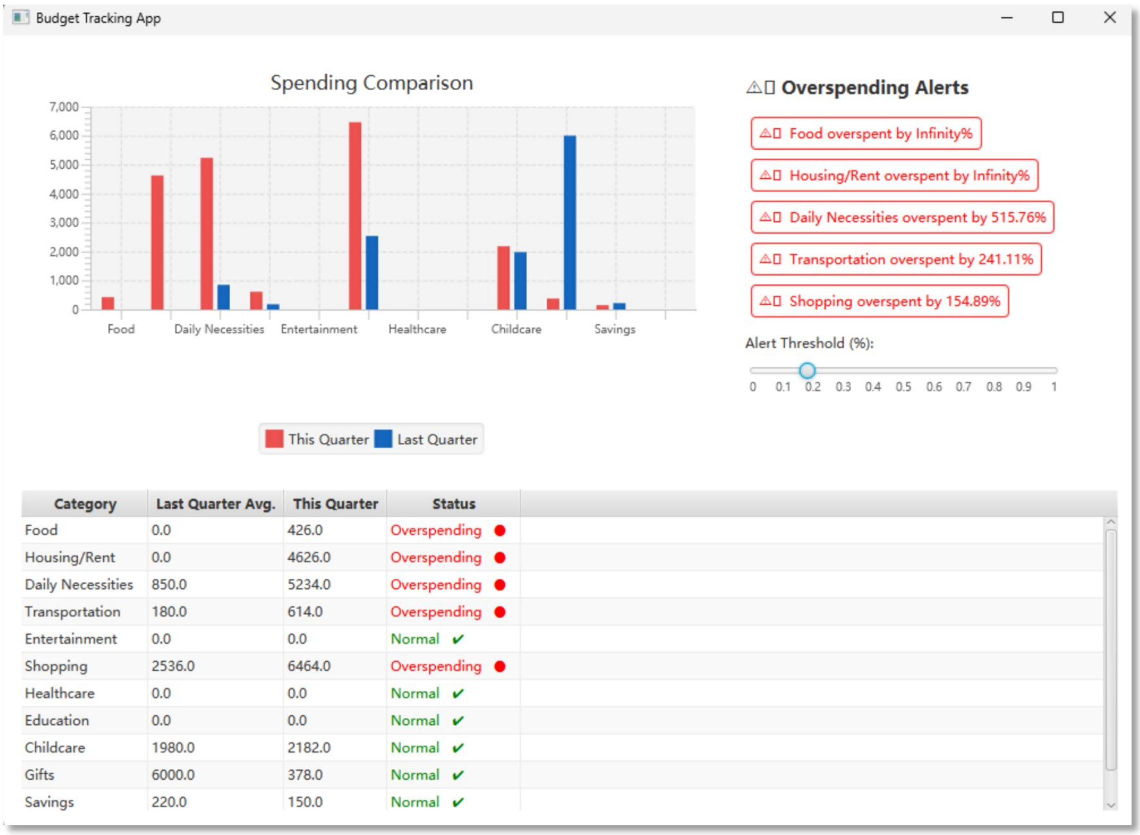
03 Finance Management

1. AI Dialogue



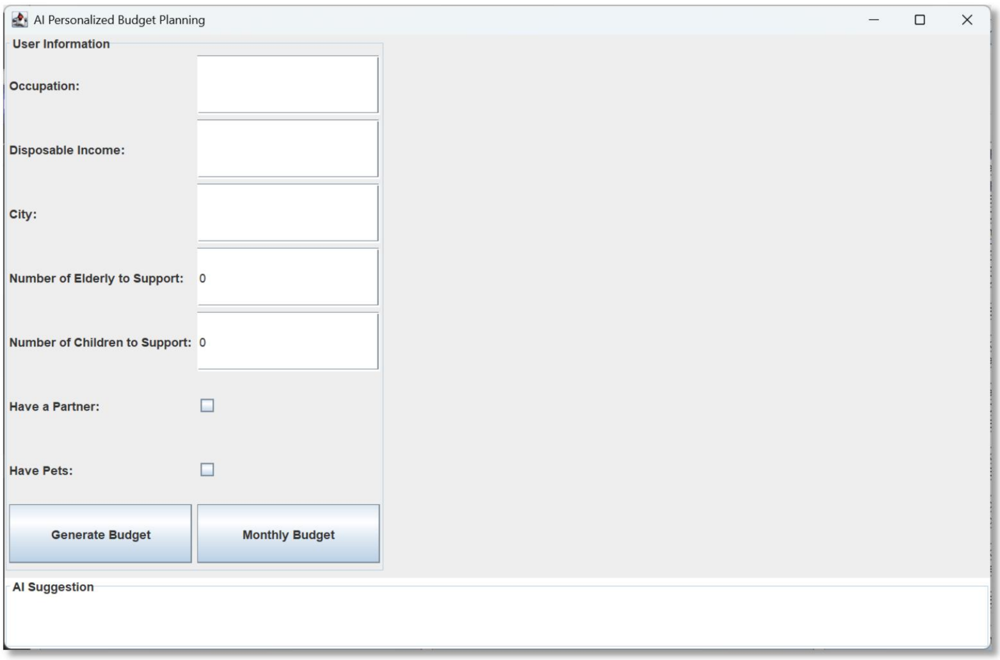
Firstly, user can view the data through different columns to classify the records. Second, user can ask the personal finance agent for advice,click send to ask whatever you want (wait for seconds for app to connect llm api)

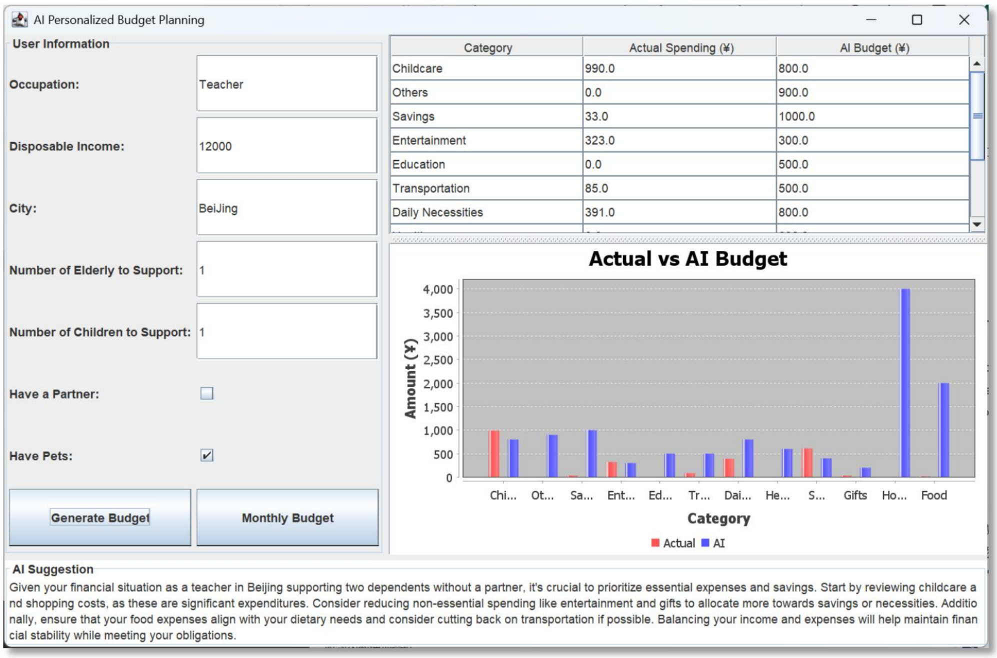
2.OverSpend Reminder



User can access the different categories alerts here by comparing the transaction information this quarter and last quarter.Users can view different types expenditure’ s status(Overspending/normal) and setting different alert thresholds by dragging the button.

3.AI Personalized Budget Planning





1. User Information Entry

Fill in ‘Occupation’, ‘Disposable Income’, ‘City’, ‘Number of Elderly to Support’, “Number of Children to Support”, ‘Have a Partner’, and “Have Pets”. AI generates a personalised budget based on user information and multi-destination spending history (Generate Budget).

Call BudgetAIService, based on the above user information and historical consumption data, automatically generates a recommended monthly budget for 12 categories, and at the same time displays a chart comparing this month's actual expenditure with the AI budget.

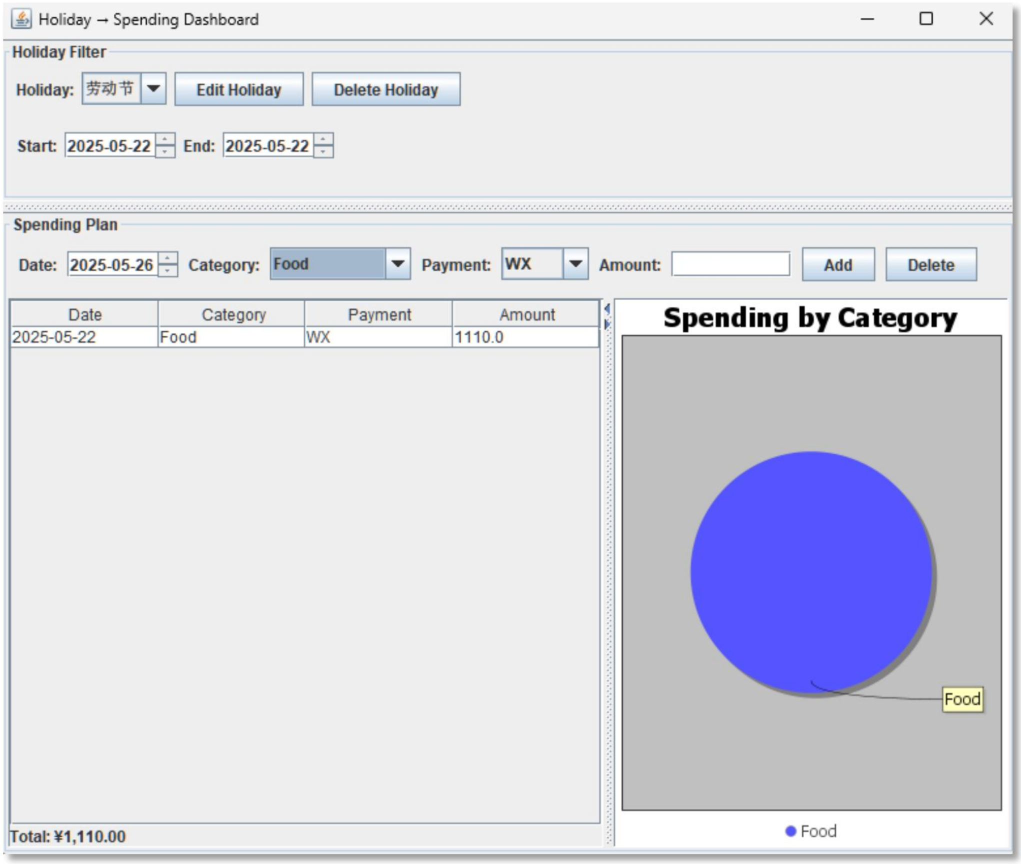
2.Monthly Budget

A separate window pops up, loading and displaying the disposable income and various categories of budget and actual expenditure generated in the previous step and saved in current_budget.json. Support directly in the form to modify the ‘disposable income’ and any category of the budget, after modification, the system will automatically adjust the proportion of other categories of the budget and saved to JSON.

3.AI Suggestion

According to the actual expenditure and user information of this month, call the AI service to output a text suggestion to help users balance income and expenditure and optimise expenses.

4.Localization



Page UI Overview:

1. Top Section: Holiday List

• Displays statutory holidays fetched via API interfaces

• Allows users to create custom personal holidays with customizable names and date ranges

• Supports editing and deletion for all holiday entries

2. Bottom Section: Split-Pane Layout

[Left Panel] Budget Planning

• Enables creation of multiple holiday spending budgets

• Supports adding/removing expense items (e.g., dining, transportation, accommodation)

• Implements automatic persistence via localStorage to ensure long-term data retention

[Right Panel] Data Visualization

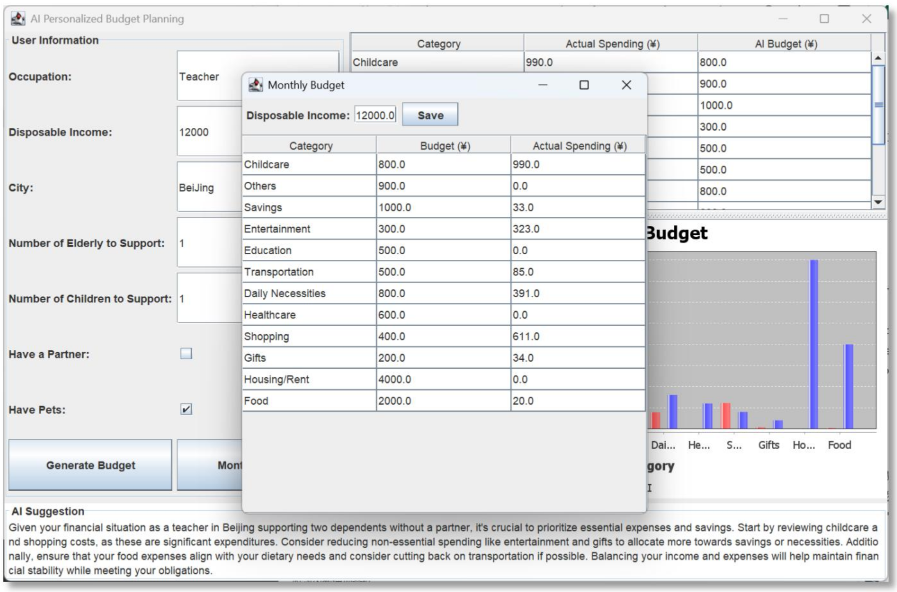
• Generates dynamic pie charts reflecting budget allocations

• Visually represents expense category proportions through color-coded segments

• Supports filtering specific expense categories by clicking on chart legends

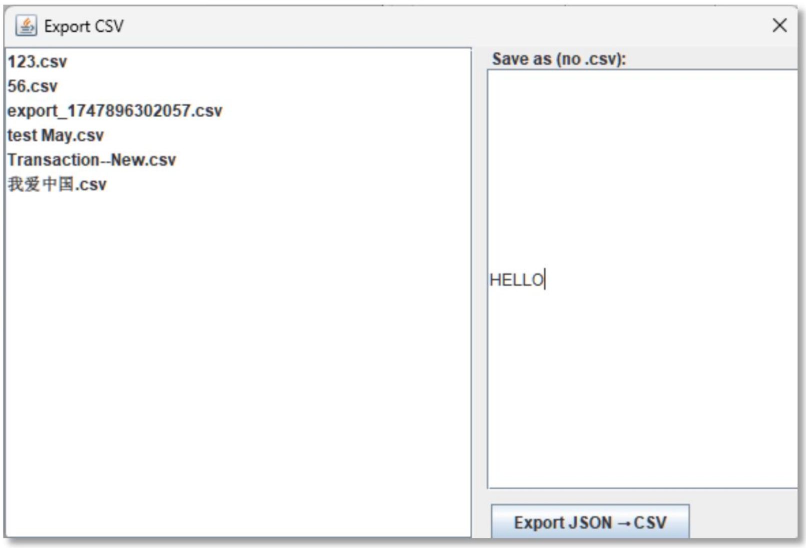
04 Records & Budget Saving

1. Budget



User can save the modified budget to json.

2. Export CSV



User can view all the CSV file here and edit the file name on the left side, then export the json as CSV. Please note that once you exit the backend the json will be covered by new csv uploaded next time,so save it when you finish.