

Finance Tracker – Project Documentation

Finance Tracker is a basic PHP-based web application that helps users manage their personal finances by recording income and expenses. This document explains **how the application works**, its structure, and how the code components interact with each other.

How It Works (Overview)

The Finance Tracker allows users to:

- Add income and expense transactions
- View a running balance, total income, and total expenses
- Delete specific transactions
- Store all data locally in a JSON file

The application is built using:

- **PHP** for backend logic and file handling
 - **HTML & CSS** for the frontend and layout
 - **JSON file** as a simple data storage system
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Main Components Explained

index.php – The Main Interface

This is the main file loaded when you open the app in a browser. It:

- Loads transaction data from the JSON file
- Displays the current balance, income, and expense summary
- Shows the list of transactions
- Provides a form to add new transactions

includes/functions.php – Core Functions

Contains reusable PHP functions such as:

- `getTransactions()` – Reads and returns data from the JSON file
- `saveTransactions()` – Saves the updated data back to the JSON file
- `calculateTotals()` – Calculates total income, expenses, and balance

This file is included in both `index.php` and other PHP scripts to keep logic organized.

includes/add_transaction.php – Adding Transactions

Handles form submissions when a user adds a new transaction:

- Validates and sanitizes input (description and amount)
- Loads the existing transaction data
- Appends the new transaction
- Saves everything back to the JSON file
- Redirects the user back to the main page

includes/delete_transaction.php – Deleting Transactions

Triggered when a user clicks the "×" button next to a transaction:

- Gets the transaction ID from the URL

- Loads and filters out the transaction from the JSON file
- Saves the updated list
- Redirects back to [index.php](#)

data/transactions.json – Data Storage

This is where all transactions are stored:

- Structured as a JSON array of objects
- Automatically created when the first transaction is added
- Example:

json

CopyEdit

```
[
  {
    "id": 1,
    "description": "Salary",
    "amount": 1000
  },
  {
    "id": 2,
    "description": "Groceries",
    "amount": -150
  }
]
```

css/style.css – Styling the App

Handles the look and feel:

- Responsive layout for mobile and desktop
- Styles for the transaction list, balance summary, and form

- Visual feedback for income (green) and expenses (red)
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How Transactions Are Processed

Adding a Transaction:

1. User fills in the form
2. Data is sent to `add_transaction.php`
3. Data is validated, added to JSON file
4. Page redirects back to `index.php` and displays updated info

Deleting a Transaction:

1. User clicks the delete (×) button
 2. Browser sends a GET request with the transaction ID
 3. `delete_transaction.php` removes it from the JSON file
 4. User is redirected back to `index.php` with the updated list
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Why Use JSON Instead of a Database?

JSON is simple and works well for small apps or demos:

- Easy to read and edit manually
- No need to install/configure a database
- Great for beginners learning file-based data storage

However, for larger or multi-user apps, a database like MySQL would be better for performance and data integrity.

Screenshots::

The image displays two screenshots of a web application titled "Finance Tracker".

Top Screenshot:

- Header:** Finance Tracker
- Summary Cards:**
 - Your Balance: \$0.00
 - Income: \$0.00
 - Expense: \$0.00
- Add New Transaction:**
 - Description: Enter description...
 - Amount: Enter amount...
 - * Negative for expense, positive for income
 - Button: Add Transaction
- Transaction History:** (Empty)

Bottom Screenshot:

- Summary Cards:**
 - Your Balance: \$3,800.00
 - Income: \$6,000.00
 - Expense: \$2,200.00
- Add New Transaction:** (Same form as above)
- Transaction History:**

↓ Rent	-\$2,200.00
↑ Salary	\$6,000.00

GitHub Url : <https://github.com/brahmaputraS/finance-tracking>