

API Endpoint Documentation

1. User

Login

- **Method:** POST
- **URL:** http://localhost:8080/api/auth/login
- **Headers:**
 - Authorization: Bearer token (optional, disabled in the example)
 - Content-Type: application/json
- **Request Body:**

json

```
{  
  "username": "john_doe",  
  "password": "secure123"  
}
```

- **Description:** Authenticates a user and returns a JWT token.

2. Transactions

Create Transaction

- **Method:** POST
- **URL:** http://localhost:8080/api/transactions?targetCurrency=LKR
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Request Body:**

json

```
{
```

```
"userId": "testuser",  
"category": "Groceries",  
"amount": 50.00,  
"currency": "USD",  
"type": "INCOME",  
"date": "2025-03-10T00:00:00",  
"description": "Supermarket shopping"  
}
```

- **Description:** Creates a new transaction with optional currency conversion.

Filter Transactions by Category

- **Method:** GET
- **URL:** <http://localhost:8080/api/transactions/testscscuser?category=Food>
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves transactions filtered by category.

Search Transactions by Date Range

- **Method:** GET
- **URL:** <http://localhost:8080/api/transactions/testscscuser?startDate=2025-02-01T00:00:00&endDate=2025-02-24T23:59:59>
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves transactions within a specified date range.

Get User Transactions

- **Method:** GET

- **URL:** http://localhost:8080/api/transactions/testscscuser
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves all transactions for a specific user.

Fetch Transactions by Type

- **Method:** GET
- **URL:** http://localhost:8080/api/transactions/testscscuser?type=EXPENSE
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves transactions filtered by type (e.g., EXPENSE).

Fetch Transactions by Type and Category

- **Method:** GET
- **URL:** http://localhost:8080/api/transactions/testscscuser?category=Food&type=EXPENSE
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves transactions filtered by both type and category.

Sort Transactions by Date (Newest First)

- **Method:** GET
- **URL:** http://localhost:8080/api/transactions/testscscuser?page=0&size=10&sort=date,desc
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json

- **Description:** Retrieves transactions sorted by date in descending order.

Get First Page of Transactions

- **Method:** GET
- **URL:** `http://localhost:8080/api/transactions/testscscuser?page=0&size=10`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves the first page of transactions with pagination.

Get Next Page of Transactions

- **Method:** GET
- **URL:** `http://localhost:8080/api/transactions/testscscuser?page=1&size=10`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves the next page of transactions with pagination.

3. Summary

Fetch Transaction Summary

- **Method:** GET
- **URL:** `http://localhost:8080/api/transactions/testscscuser/summary`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves a summary of transactions for a user.

Monthly Expense Reports for Users

- **Method:** GET

- **URL:** http://localhost:8080/api/transactions/testscscuser/monthly-report
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves monthly expense reports for a user.

Trend Analysis for Users

- **Method:** GET
- **URL:** http://localhost:8080/api/transactions/testscscuser/expense-trends
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves expense trend analysis for a user.

Income vs. Expense Comparison & Reports

- **Method:** GET
- **URL:** http://localhost:8080/api/transactions/testscscuser/income-expense-trends
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves income vs. expense comparison reports.

4. Financial Summary Reports Generation

PDF Generation

- **Method:** GET
- **URL:** http://localhost:8080/api/reports/testscscuser/monthly-report
- **Headers:**
 - Authorization: Bearer token

- Content-Type: application/json
- **Description:** Generates a PDF report for monthly transactions.

CSV Report Generation

- **Method:** GET
- **URL:** http://localhost:8080/api/reports/testscscuser/monthly-report/csv
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Generates a CSV report for monthly transactions.

5. Budget Management

Set Budget

- **Method:** POST
- **URL:** http://localhost:8080/api/budgets/testuser?category=Food&limitAmount=500
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Request Body:**

json

Copy

```
{  
  "userId": "testuser",  
  "category": "Food",  
  "limitAmount": 500,  
  "month": 3,  
  "year": 2025
```

}

- **Description:** Sets a budget for a specific category.

Get Budget

- **Method:** GET
- **URL:** http://localhost:8080/api/budgets/testuser
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves the budget for a user.

Get Budget Adjustment Suggestions

- **Method:** GET
- **URL:** http://localhost:8080/api/budgets/testuser/recommendations?category=Food
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves budget adjustment suggestions for a specific category.

Notify Service

- **Method:** GET
- **URL:** http://localhost:8080/api/budgets/testuser/status?category=Food&spentAmount=400&email=viduranirmal@gmail.com
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Sends a notification about budget status.

Budget Adjustment

- **Method:** GET

- **URL:** http://localhost:8080/api/budgets/testuser/adjustment?category=Food
 - **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
 - **Description:** Adjusts the budget for a specific category.
-

6. Recurring Transactions

Create a Recurring Transaction

- **Method:** POST
- **URL:** http://localhost:8080/api/transactions/recurring
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Request Body:**

json

Copy

```
{  
  "userId": "testscscuser",  
  "category": "Subscription",  
  "amount": 40.00,  
  "type": "EXPENSE",  
  "date": "2025-03-10T00:00:00",  
  "description": "Youtube Monthly Subscription",  
  "recurring": true,  
  "recurrencePattern": "MONTHLY",  
  "endDate": "2025-12-31T00:00:00"
```


}

- **Description:** Creates a recurring transaction.

Get All Recurring Transactions for a User

- **Method:** GET
- **URL:** `http://localhost:8080/api/transactions/recurring/testscscuser`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves all recurring transactions for a user.

Stop a Recurring Transaction

- **Method:** PUT
- **URL:** `http://localhost:8080/api/transactions/recurring/67c8445ebb1e160afdc99b7e/stop`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Stops a recurring transaction.

7. Goals and Savings Tracking

Create Goal

- **Method:** POST
- **URL:** `http://localhost:8080/api/goals`
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Request Body:**

json

Copy

```
{  
  "userId": "testscscuser",  
  "goalName": "Save for Car",  
  "targetAmount": 10000,  
  "category": "Car"  
}
```

- **Description:** Creates a new savings goal.

Update Savings Progress

- **Method:** PUT
- **URL:** <http://localhost:8080/api/goals/67c9eb9994d67f1a3aeba3dc/save?amount=500>
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Updates the savings progress for a goal.

Get User Goals

- **Method:** GET
- **URL:** <http://localhost:8080/api/goals/testscscuser>
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Retrieves all goals for a user.

Pause a Goal

- **Method:** PUT

- **URL:** http://localhost:8080/api/goals/67c9eb9994d67f1a3aeba3dc/pause
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Pauses a savings goal.

Resume a Goal

- **Method:** PUT
- **URL:** http://localhost:8080/api/goals/67c9eb9994d67f1a3aeba3dc/resume
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Resumes a paused savings goal.

2. Admin

Admin Log

- **Method:** POST
- **URL:** http://localhost:8080/api/auth/login
- **Description:** Admin log.

Get All Users

- **Method:** PUT
- **URL:** http://localhost:8080/api/admin/users
- **Headers:**
 - Authorization: Bearer token
 - Content-Type: application/json
- **Description:** Get All User Details.

Update User Roles

- **Method:** PUT
- **URL:** <http://localhost:8080/api/admin/users/67b77a266d83686d152ec4df/role?role=ADMIN>

Headers:

- **Authorization:** Bearer token
 - **Content-Type:** application/json
- **Description:** Update Users.

Delete User

- **Method:** DELETE
- **URL:** <http://localhost:8080/api/admin/users/67b77a266d83686d152ec4df>

Headers:

- **Authorization:** Bearer token
 - **Content-Type:** application/json
- **Description:** Delete Users.

Overreview

- **Method:** Get
- **URL:** <http://localhost:8080/api/admin/overview>
- **Headers:**
 - **Authorization:** Bearer token
 - **Content-Type:** application/json
- **Description:** Get Overview

