

Learn-a-thon 3.0

Software Requirement Specification

for

Finance Tracker

version: 1.0.2

by

Team ProCastinators

Md. Sakib Hossain

Shat-El Shahriar Khan

Md. Redwan Bhuiyan Rafio

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Chapter 1

Revision History

Date	Version	Activity
09/01/2025	1.0.0	Initial draft
22/01/2025	1.0.1	Add entity relationship diagram, update ownership and administrative policy of financial groups
30/01/2025	1.0.2	Add wallet, add approval system for group transactions

Chapter 2

Introduction

2.1 Purpose

This document provides a detailed description of the requirements for the Finance Tracker application. It outlines the functional and non-functional requirements and system constraints necessary for developers and stakeholders.

2.2 Scope

Finance Tracker is a comprehensive financial management application designed to help users track personal finances and manage collaborative financial activities. The application aims at the following objectives:

- Provide an organized way to track income and expenses.
- Offer visibility into financial habits through analytics.
- Enable collaborative financial activities, such as group expense.

Chapter 3

Overall Description

3.1 Product Perspective

Finance Tracker is a standalone application that will be accessible through web platforms.

3.2 User Classes and Characteristics

- **Individual Users:** Manage personal finances, gain insight into financial habits.
- **Group Users:** Collaborate on financial activities such as shared expenses.
- **Group Admins:** Manage groups and financial activities.

3.3 Operating Environment

- Web browsers

Chapter 4

Functional Requirements

4.1 Personal Finance Management

4.1.1 Income & Expense Tracking

- Users can add/edit/delete transaction entries for income and expenses.
- Each transaction is recorded under a specific category.
- Each transaction is made from a specific wallet.
- Each transaction should have amount, short note, date and time.
- Users can search, filter and sort transactions.

4.1.2 Category Management

- Users can use default categories of the application for transactions.
- Users can modify or delete default categories.
- Users can restore default categories.
- Users can create new categories.

4.1.3 Wallet Management

- Users can have multiple wallets
- Users can create, update and delete wallets.
- Each wallet has specific type (e.g cash, MFS, card etc), currency and balance
- Users can transfer funds from one wallet to another

4.1.4 Notifications and Reminders

- Users can set reminders for recurring expenses.
- The system notifies the users summary of financial activity periodically.
- Users can modify notification preferences.

4.1.5 Analytics and Reports

- Users can view category-wise income and expense breakdown.
- Users can view income and expense trend over time.

4.2 Collaborative Financial Activities**4.2.1 Loan Management**

- Users can request loan to other users.
- Users can accept loan request made by other users.
- Users can repay loan or request borrower for repayment.
- Users can create loan entry for people not registered in the system.

4.2.2 Group Management

- Users can create groups for collaborative financial activities.
- The user who creates the group will become the owner after creation.
- Each group must have exactly one owner.
- Group owner cannot leave the group without transferring ownership.
- Group owner will have all administrative privileges of the admin, including assigning and removing admin.
- Admins can invite members to the group the group and remove members from the group.

4.2.3 Financial Activities of Group

- Admins can create and modify categories
- Members can add transactions for expenses.
- Transactions need to be approved by admins.
- A member can delete or modify transaction created by himself until it is approved.
- Admins can modify or delete any transaction

- The system tracks individual contribution.
- The system allows splitting expenses among selected members.

Chapter 5

Non-Functional Requirements

- **Security:** All financial data must be encrypted and stored securely.
- **Performance:** The system should handle multiple concurrent users without performance degradation.
- **Usability:** The application should have an intuitive, user-friendly and mobile-responsive interface.
- **Scalability:** The application should support an increasing number of users and financial records.

Chapter 6

Entity Relationship Diagram

