

Mero Khutruke - A Web-Based Personal Finance Manager

Darshan Shakya, Sanjiv Rai, Santosh Rai

Central Campus of Technology
Dharan, Sunsari

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Introduction

- In today's world of digitization and exponential advancement in the field of technology, the field of personal finance management has improved remarkably and everyone is familiar with it [1].
- Personal finance management refers to the financial choice and tasks of an individual.
- Effective personal finance management plays a pivotal role in the individual's quality of life.



Introduction

Mero Khutruke is a web-based personal finance manager providing following features:-

- Minimize the physical calculations for daily expenditure and track expenses.
- Encourage personal budgeting and improve spending habits.
- Provides pre-defined categories or can create more if required.
- Provides visually appealing charts.
- Create budget limit for the categories depending on the budget.



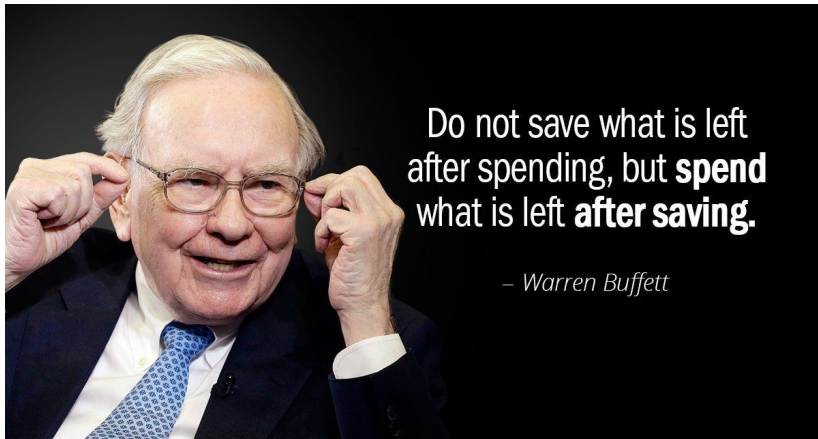
Problem Statement

- Difficulty in maintaining the individual's economic well-being due to multiple source stream.
- Existing systems are often complicated, subscription payment for features, poor user-friendly environment.
- Plenty of inaccurate and unreliable data due to human behavioural errors.
- Lack of awareness of tracking expenses and spending habits.

Objectives

- To track the user's daily expenditure.
- To promote creating a saving goal for an individual.
- To provide a user friendly environment for the end users to manage their personal finances.
- To provide visual representation on the income and expenses.





Study of Existing System

- Know Your Budget is an everyday expense tracker and control application to track costs effortlessly and efficiently [2].
- Money Lover is a simple money tracker that records daily transactions in categories and provides reports on spending patterns [3].
- Controle Finance is a web-based personal finance manager. It tracks the users day to day transactions. The users can import spreadsheet into the application [4].



Requirement Analysis

We will be using the TALL Stack as the main technology for the development of the project. However, flexibility will be applied as the development proceeds.

- Tailwind CSS: Styling the website.
- Alpine.js: Composing behavior directly into the markup
- Livewire: Create reactive interfaces
- Laravel: Backend Framework
- MySQL: Database



Feasibility Study I

- The proposed project is technically feasible as the available technical requirements are fulfilled and every team members are familiar with the tools and methods
- The proposed system is operationally feasible with the minimum requirement of browser, internet and little knowledge of computer system.
- As the project is for educational purpose and don't expect any returns. So, the proposed system is economically feasible with minimum costs.
- The following project will take us approximately 12 weeks to complete which is within the scope of the final year project.



Feasibility Study II

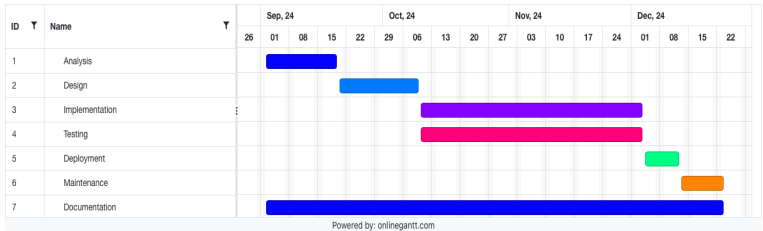


Figure: Schedule of the project

High-Level Design of System

Methodology of the proposed system

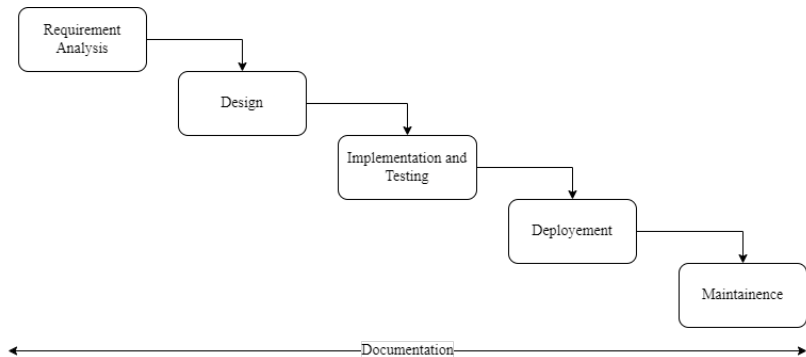


Figure: Waterfall Model

High-Level Design of System

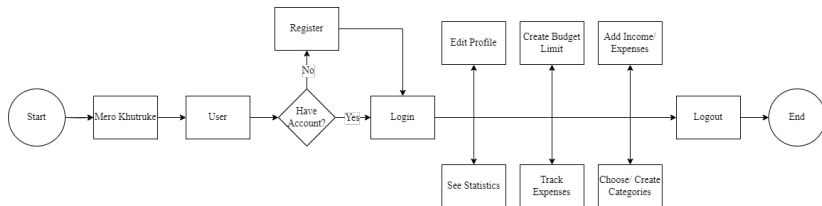


Figure: System Flowchart

High-Level Design of System

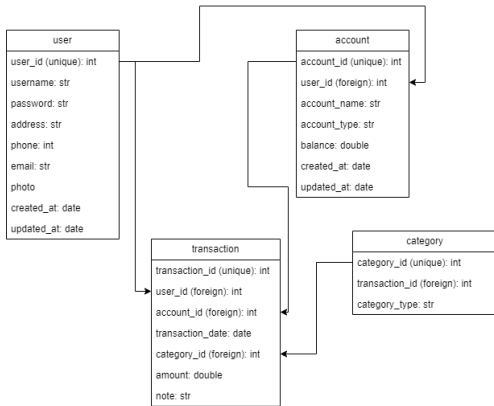


Figure: System UML Diagram

High-Level Design of System

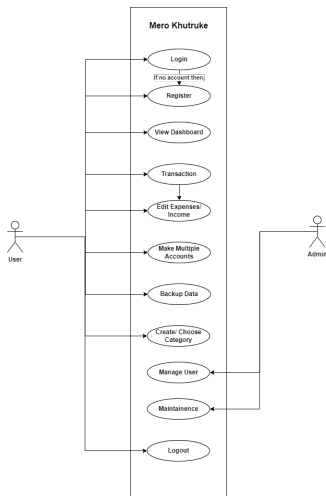


Figure: System Use Case Diagram

High Level Design of System

Description of Algorithms

- Searching Algorithm: Locates a specific item with a collection of data.
- Sorting Algorithm: Rearranges a given array according to a comparison operator.
- Cookie-based Authentication: Generates access tokens, which uniquely identifies user's session.



Expected Outcome

- Users will be able to see detailed information about their daily expenditures.
- Users will be able to lead their budget in a balanced way.
- Each user will be facilitated a friendly environment to manage their personal finances.
- Understanding and managing your income, expenses, investments, and savings to achieve financial stability.



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Thank you!

