

Project Report

Project Name:

College Finance Dashboard

Team name:

CashCrusaders

Team members:

Rohan Kumar Maharana (Team Leader)

Agrim Verma

Maulikk Jain

Faculty Name:

Mr. Akhil

College Name:

Bennett University

Abstract

This project is a Streamlit based personal finance dashboard designed specifically for the student of Bennett University. The system is designed to help the student to track and analyze their daily expenses whilst keeping all the records of the expenses made, while also giving a visual representation of the habit of spendings. A MySQL database handles the storage of the record while Streamlit offers an interactive UI.

Introduction

Student on campus often struggle to manage their expenses due to consistent food, online and other expenses. These kind of spendings often go untracked hence creating a hassle of over spending of what was required to spent for a particular month.

This project is designed to solve to solve this very problem. Students can log their expenses, track it, and analyse their expense pattern.

Objectives

The main objectives of this project is:

- To allow students to log their daily expenses easily with the help of a simple UI.
- To store their logged expenses securely.
- To generate summary/overview of the expenses made per day, per month.
- To make it easy to analyse the expenses for the user with the help of charts and metrics.
- To also make students aware of their most spent category.
- To overall, help the students to stay within a defined budget.

System Overview

The system consists of three major components:

1. User Interface (Streamlit)

- Students enter food, essentials, and other expenses.
- They view totals, category splits, and daily/monthly insights.
- The UI is clean, responsive, and student-friendly.

2. Backend Database (MySQL)

- Five tables store data:
 - expense_records
 - expense_records_food
 - expense_records_essentials
 - expense_records_other_expenses
 - settings
- SQL queries are used to insert and fetch records.

3. Visualization

- Pie charts (matplotlib)
- Monthly metrics (totals, averages, top category)
- Budget progress bar

Flow of the project

User → Streamlit App → MySQL database → Data is processed and store → Dashboard

The user submits the expenses via input fields that are organised category wise. After submission the data is stored into the tables that are made in the MySQL database. The code computes the daily and average expenses made per month and displays them with the help of visual charts.

Implementation Details

Pages

1. Home Page

The user selects the month and year. Right after selection the user, the user can see the overall expenses of the month.

2. Add Expenses Page

Here, the user can add the expenses. The user selects the aspects on where the user has spent the money in accordance to the selected date. On selection of the checkboxes of the aspects, input fields appear where the user has to input all the expenses. Then on clicking, the expenses of that particular date is submitted.

3. Expense Log Page

Here, the user can select the date for which they want to see the expense made on that particular date.

4. Settings Page

The settings page consists of the name, enrolment number, college name and the budget that the user wants to set for the month.

Technologies used

- Python
- Streamlit
- MySQL
- Matplotlib (for visualization)
- Pandas (for tabular display)