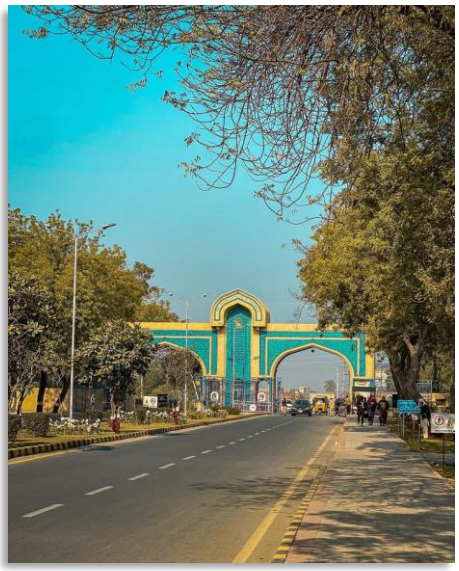

PROJECT PROPOSAL

Finance Tracker

THE ISLAMIA UNIVERSITY OF BAHAWALPUR

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Finance/Expense Tracking Program

Introduction

The **IUB Student Finance/Expense Tracker** project is designed to help university students manage their finances effectively by providing a digital and organized way to track income and expenditures. Students often face challenges in budgeting and monitoring their spending, which this system aims to solve by offering a simple, automated solution built using **Python**.

Problem Statement

University students frequently struggle with financial management due to limited income and various expenses (tuition, hostel, books, food, etc.). Relying on mental math or scattered notes is often inaccurate and leads to poor budgeting and financial stress. A dedicated, digital tool is needed to offer a clear overview of their financial health.

Objectives

General Objective:

To develop a **fast, accurate, and user-friendly** personal finance tracking system.

Specific Objectives:

- To digitally log and categorize all income and expense transactions.

- To enable users to view their **current balance**.
- To generate simple, summarized **financial reports** (e.g., monthly spending by category).
- To secure and organize financial data for easy access and review.

Proposed System

The Student Finance/Expense Tracker will be a standalone Python application that allows the student user to input and manage their financial data.

Features Include:

- **Transaction Entry:** Users can input the date, amount, description, and category (e.g., 'Food,' 'Tuition,' 'Income') for each transaction.
- **Balance Calculation:** The system will automatically calculate and display the user's running balance.
- **Report Generation:** The system will generate basic reports, such as a breakdown of total spending per category over a specific period.
- **Data Storage:** Financial records will be stored in a structured file format (e.g., a CSV file or simple text file) for persistence.

Methodology

The development of the system will follow these structured steps:

1. **Requirement Collection:** Define specific student financial needs and required categories.
2. **System Designing:** Plan the overall structure, including data fields (date, amount, category, etc.) and application flow.
3. **CLI User Experience (UX) Designing:** Focuses on designing **command structure** and **clear, functional text output** rather than graphical elements.
4. **Coding (Backend):** Implement core logic in **Python**, focusing on functions for adding, viewing, and summarizing data.
5. **Database Creation:** Create a persistent data structure (e.g., using Python's built-in file handling to save a CSV/text file).
6. **Testing & Debugging:** Rigorously test transaction entry, balance calculation, and report generation for accuracy.

Software Requirements

Software Requirements:

- **Programming Language:** Python 3.14
- **Development Environment:** VS Code or PyCharm.

Hardware Requirements:

- Any personal computer or laptop capable of running a standard Python environment.

Project Team

- M. Umair Mehboob ‘F25BSEEN1M01198’
- M. Saqib Zahid ‘F25BSEEN1M01186’
- M. Junaid ‘F25BSEEN1M01191’

Expected Output

- A fully functional digital expense tracking application written in Python.
- Organized and accurate records of all financial transactions.
- Auto-generated spending summaries by category.

Conclusion

- This project is a practical application of the concepts learned in the **Programming Fundamentals** course. It will deliver a much-needed tool for students to transition from manual to automated financial tracking, ultimately saving time, reducing errors, and promoting responsible financial management. The project will be completed with full dedication to meeting all outlined objectives.