

Personalized Financial Analysis - Project Summary

☑ Problem Statement

Most individuals track their income and expenses manually or not at all, leading to:

- Poor visibility into where money is spent.
- Difficulty identifying unnecessary expenses or savings opportunities.
- No structured insights about spending behavior, cash flow, or monthly trends.
- Lack of visual tools to make financial decisions effectively.

👉 The problem:

“People lack a simple, personalized, and visual tool to analyze their financial transactions and understand their spending habits clearly.”

☑ Solution Provided by the Project

I developed a Personalized Financial Analysis tool using Python, Pandas, and Matplotlib, which:

✅ Core Features:

1. Reads and cleans bank statement data (CSV).
2. Categorizes transactions into income and spending automatically.
3. Calculates key metrics: total income, spending, net savings.
4. Performs monthly and category-wise analysis.
5. Generates 4 essential visualizations:
 - Income vs Spending
 - Spending by Category (bar and pie)
 - Monthly trends
 - 30-day rolling average of spending
6. Combines all charts into one dashboard-style figure.
7. Optional upload functionality via Streamlit (UI-based version).

This helps any user (even non-technical) to get clear financial insights from their raw bank statements.

☑ Before vs. After Comparison

	Before This Project	After This Project
🔍 Transaction View	Raw CSV files, hard to interpret manually	Cleaned, categorized, and analyzed automatically
📊 Insights	No visualizations; users need to calculate manually	Automated plots for income, expenses, trends, and categories
💡 Decision Making	No visibility into where to cut spending	Clear insights on overspending categories and months
📅 Trend Tracking	No monthly or daily patterns visible	Monthly totals + 30-day rolling average for better financial planning
👤 User Experience	Manual effort; error-prone	Personalized, clean, and automatic summary of financial health

“The problem I solved was helping individuals who don’t have a clear picture of their personal finances. Most people just have raw bank CSV files, which are difficult to analyze. I built a tool that cleans this data, categorizes it, analyzes it, and visually presents insights like income vs spending, monthly trends, and spending categories. This helps users make smarter financial decisions in seconds — something that would take hours manually.”