# Bank Statement Analysis Bot – Powered by Llama 3

This AI-driven financial assistant is designed for in-depth transaction analysis, providing users with clear, actionable insights from their bank statements. Built using Streamlit for a user-friendly interface, Pandas for efficient data manipulation, and Ollama for powerful AI processing, our bot transforms complex financial data into understandable summaries and reports. Unlocking Financial Insights with AI, it helps users track spending, identify trends, and manage their finances more effectively.





# Manual Bank Statement Analysis Is Time-Consuming

Hours of tedious work are prone to errors. Manual review of transactions takes 5-10 hours per statement. Identifying patterns is difficult.

#### 1 Hours wasted

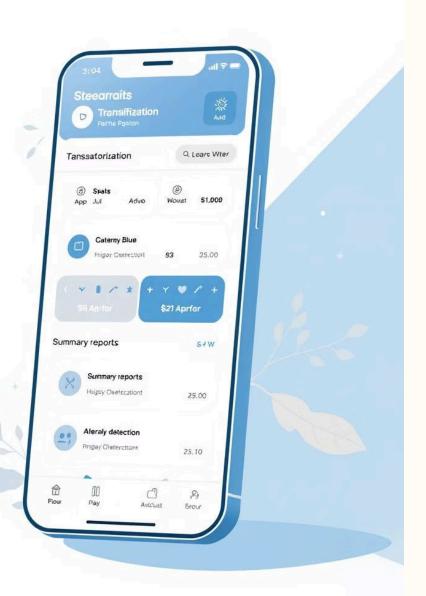
Manual review is tedious, taking 5-10 hours per statement. Employees could be focusing on strategic tasks instead.

#### Subjective

Identifying patterns and anomalies is subjective and difficult. It requires a deep understanding of financial nuances.

#### 3 Error-brone

Data entry is inaccurate. This can lead to incorrect reporting and flawed financial insights.



## Introducing: The Bank Statement Analysis Bot

Automate analysis and gain instant insights with our Bank Statement Analysis Bot. This AI-powered solution intelligently understands and categorizes your transactions, providing clear and actionable financial summaries. It is built with Llama 3 for advanced natural language processing, enabling it to interpret complex financial data with ease.



#### **AI-Powered**

Powered by Llama 3, Streamlit, Pandas, and Ollama, our bot leverages cutting-edge technology for accurate and insightful financial analysis.



#### Insights

Gain insights with transaction categorization, enabling you to track spending habits, identify potential savings, and understand your financial health.



#### **Efficient**

Analyze transaction data automatically, saving you hours of manual review and reducing the risk of errors.



## Key Features & Benefits

Powerful analytics at your fingertips. Get automatic transaction categorization at over 95% accuracy.

# Automatic Transaction Categorization

95%+ accuracy in categorizing transactions, ensuring precise financial tracking and reporting.

#### Customizable Categories

Modify categories to fit your specific needs, allowing for personalized financial analysis and reporting.

## Spending Pattern Identification

Understand where your money goes with detailed visualizations of your spending habits over time.

#### **Budget Variance Analysis**

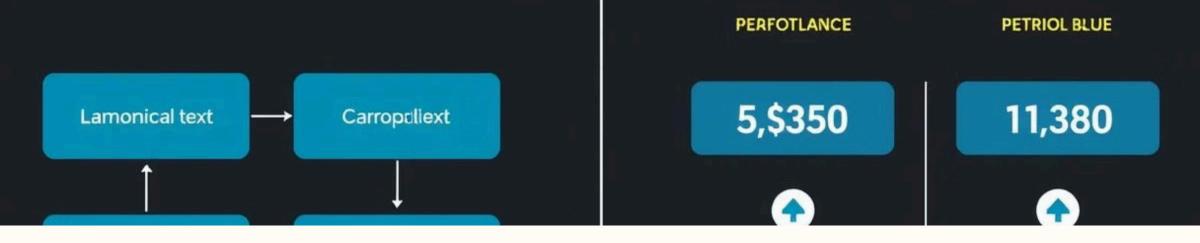
Track your budget vs. actual spending, identifying areas where you can optimize and save money effectively.

#### Anomaly Detection

Identify unusual transactions and potential fraud with our advanced anomaly detection algorithms.

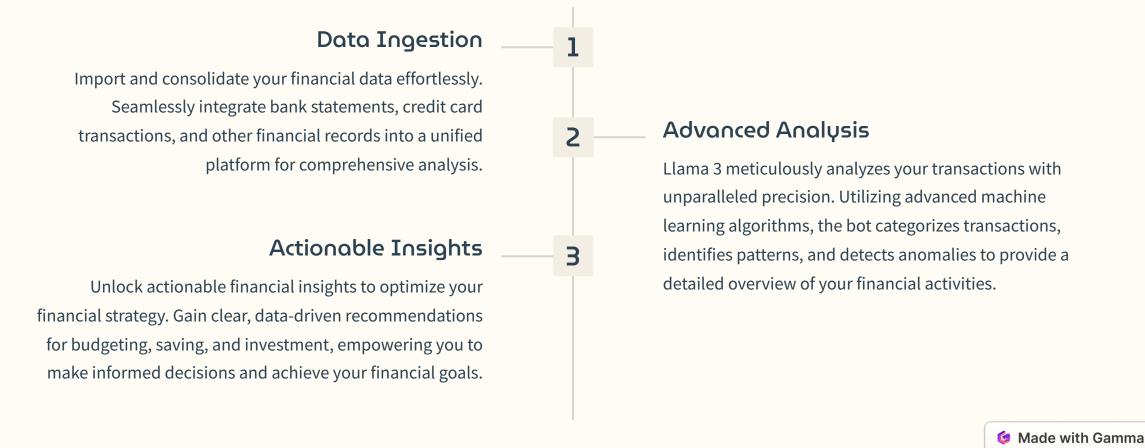
#### Report Generation

Generate detailed PDF and CSV reports for easy sharing and analysis of your financial data.



### Llama 3: The Brain Behind the Bot

Cutting-edge AI for superior financial insight. Our bot harnesses the power of the Llama 3 model, specifically fine-tuned for in-depth financial text analysis and dramatically improved accuracy.



# Tech Stack: Streamlit, Pandas, Ollama

Robust and scalable architecture. Streamlit provides the user interface, and Pandas handles data, with local model deployment ensuring data privacy and security.

#### Streamlit

User interface, Python-based.
Streamlit enables interactive data exploration and visualization, allowing users to easily interact with the Bank Statement Analysis Bot.

#### Pandas

Data manipulation and analysis.

Pandas provides powerful data
structures and analysis tools for
efficient handling of financial data
within the bot.

#### Ollama

Local model deployment, data privacy. Ollama allows the Llama 3 model to run locally, ensuring sensitive financial data remains private and secure, without reliance on external servers.



## Use Cases & Applications

Transforming financial workflows. Track spending and create budgets for personal finance management.

#### Personal Finance

1

Track spending and create budgets, monitor investments, and plan for long-term financial goals with ease. Gain insights into your spending habits and identify opportunities to save money effectively.

#### **Business Accounting**

2

Automate bookkeeping tasks, generate financial reports, and manage cash flow efficiently. Streamline your accounting processes and gain a clear understanding of your business's financial performance.

#### Fraud Detection

3

Identify suspicious transactions and potential fraud with advanced anomaly detection algorithms. Protect your financial assets and prevent fraudulent activities with real-time monitoring and alerts.

