Financial Analysis System — One Page Project Summary

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Objective & Overview

This project is a Python–MySQL based Financial Analysis System developed independently to understand how financial analysts store, process, and interpret company-level financial data. The system allows users to input company financial statements, maintain a structured database, and calculate key financial ratios used in real-world analysis.

Methodology & Workflow

Financial data is entered manually or imported via CSV files. Python scripts process and validate inputs before storing them in a MySQL relational database. Stored data is queried to compute profitability, liquidity, and growth ratios, which are displayed through a menu-driven interface.

Case Studies

Nepali Hydropower Startup: Capital-intensive infrastructure model focusing on asset structure and long-term liabilities.
Indian Tech Unicorn: High-growth technology model emphasizing margins and revenue growth.

Metric	Hydropower Startup	Tech Unicorn
Net Profit Margin	18.4%	25.3%
Assets / Liabilities	1.22	1.36
Revenue Growth	6.1%	4.9%

Technology Stack

Python 3.8+, MySQL 8.0+, mysql-connector-python, CSV, datetime. Developed and tested locally using VS Code.

Significance & Learning

The project strengthened my understanding of financial statements while improving my ability to design databases, write modular Python code, and interpret results across different economic contexts.

Future Improvements

Planned enhancements include data validation, visualization dashboards, and expanded multi-year analysis.