

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	31 January 2026
Team ID	LTVIP2026TMIDS61777
Project Name	Gemini Pro Financial Decoder
Maximum Marks	4 Marks

Functional Requirements

Following are the functional requirements of the proposed solution.

FR No: FR-1

Functional Requirement (Epic): Financial File Upload

Sub Requirement (Story / Sub-Task):

- User can upload financial documents in CSV or XLSX format.
- System validates the file type before processing.
- System displays an error message for unsupported formats.

FR No: FR-2

Functional Requirement (Epic): Data Processing

Sub Requirement (Story / Sub-Task):

- System reads uploaded file using Pandas.
- System converts data into structured format.
- System validates that required financial columns are present.

FR No: FR-3

Functional Requirement (Epic): Dashboard Metrics Calculation

Sub Requirement (Story / Sub-Task):

- System calculates total gross sales.
- System calculates total units sold.
- System calculates average sale price.
- System displays metrics clearly on the dashboard.

FR No: FR-4

Functional Requirement (Epic): AI Financial Insight Generation

Sub Requirement (Story / Sub-Task):

- User can click a button to generate AI insights.
- System formats financial data into a structured prompt.
- System sends request to Google Gemini AI.
- System receives and displays structured financial summary.

FR No: FR-5

Functional Requirement (Epic): Data Visualization

Sub Requirement (Story / Sub-Task):

- System generates sales by country chart.
- System generates sales by product chart.
- Charts update dynamically based on uploaded data.

FR No: FR-6

Functional Requirement (Epic): Output Display

Sub Requirement (Story / Sub-Task):

- User can view uploaded data in table format.
 - User can view AI-generated financial insights.
 - User can view visual charts on the same interface.
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Non-Functional Requirements

Following are the non-functional requirements of the proposed solution.

NFR No: NFR-1

Non-Functional Requirement: Usability

Description: The application should have a simple, intuitive, and user-friendly web interface for easy financial data analysis.

NFR No: NFR-2

Non-Functional Requirement: Security

Description: The Gemini API key must be securely stored using environment variables and should not be hardcoded in the application.

NFR No: NFR-3

Non-Functional Requirement: Reliability

Description: The system should consistently generate accurate financial summaries and visualizations without errors.

NFR No: NFR-4

Non-Functional Requirement: Performance

Description: The system should process uploaded files and generate AI insights with minimal delay.

NFR No: NFR-5

Non-Functional Requirement: Availability

Description: The application should be accessible whenever the Streamlit server is running and properly configured.

NFR No: NFR-6

Non-Functional Requirement: Scalability

Description: The system should support future enhancements such as multi-year financial comparison, financial ratio analysis, PDF report generation, and advanced analytics.