

LOW LEVEL DESIGN & PIPELINE ARCHITECTURE

Step 1: Data Loading

The dataset is loaded from CSV using Pandas.

Step 2: Data Preprocessing

Missing values are checked and numerical features are standardized.

Step 3: Feature Engineering

Volatility and liquidity ratio features are created.

Step 4: Model Training

Random Forest Regressor is trained using an 80-20 train-test split.

Step 5: Model Evaluation

Performance is evaluated using MAE, RMSE, and R^2 score.

Pipeline Flow:

Raw Data → Clean Data → Feature Engineering → Scaling →
Model Training → Evaluation