

Low-Level Design Document

Endpoint Specifications

POST /predict

- **Input:** JSON list of recent closing prices
- **Output:** Line chart of predicted next 30 closing prices

POST /feedback

- **Input:** JSON object like { "satisfied": true }
- **Output:** Confirmation message after sending feedback to the developer's email.

Model Details

- **Framework:** PyTorch
- **File:** models/best_model.pth
- **File:** models/scalar.pkl
- **Prediction Flow:**
 1. Load model.
 2. Normalise input data.
 3. Reshape for LSTM input.
 4. Predict 30 future points.

Files & Modules

- app/model.py: Loads model and runs prediction
- app/schemas.py: Defines input/output Pydantic schemas
- app/main.py: FastAPI app with endpoints
- streamlit_app.py: UI layer for prediction and feedback