

RealTicker – AI-Powered Stock Trend Analysis Dashboard

RealTicker is a web-based stock analysis application that combines market snapshots with AI-assisted historical trend analysis. The goal is to help users understand stock behavior clearly using structured, human-logical reasoning.

Key Features

- Market snapshot (price, change %, volume)
- User-selectable analysis period (1, 3, 6 months)
- AI-assisted historical trend analysis
- Clear trend, risk, and action explanations
- Educational disclaimer (not financial advice)

Architecture Overview

Frontend (React) → Backend (FastAPI) → AI Model (FLAN-T5 Base)

Analysis Logic

Trend is calculated from historical price movement, not daily change.

Risk is calculated using price volatility.

Suggested actions depend on trend + risk combination.

LLM Used

Model: google/flan-t5-base (Hugging Face)

Used for structured explanation support, not decision override.

Tech Stack

Backend: Python, FastAPI, Transformers

Frontend: React.js, Fetch API

Setup Steps

1. Setup backend virtual environment
2. Install dependencies
3. Run FastAPI using Unicorn
4. Install frontend dependencies and start React app

Disclaimer

This application is for educational purposes only and does not provide financial advice.