

## **Project Roadmap**

### **Objective**

- Build an AI-driven platform powered by a large language model (LLM) to forecast market trends, execute trades using pre-defined, highly efficient algorithmic trading strategies, and manage multiple user accounts simultaneously, all while being scalable to support an expanding user base.
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### **1. Tech Stack**

- **Programming Language:** Python, reactJS
  - **Tools:**
    - **Machine Learning:** PyTorch, Scikit-learn
    - **LLM-based translation:** OpenAI's GPT API
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### **2. Data Source(s)**

**Cryptocurrency Exchanges APIs:** Binance API, Coinbase Pro API, Bitfinex API and Kraken API

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### **3. Implementation Overview**

- Developed and fine-tuned the following five predefined algorithmic trading approaches:
    - **Mean Reversion:** Detects market conditions where assets are overbought or oversold.
    - **Momentum Trading:** Takes advantage of market trends to maximize profits.
    - **Arbitrage:** Leverages price differences across multiple exchanges.
    - **Dollar-Cost Averaging (DCA):** Regularly invests a fixed amount to reduce market timing risks.
    - **High-Frequency Trading (HFT):** Executes a large volume of trades at lightning-fast speeds.
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#### 4. Security and Privacy:

-Implemented robust security measures to protect user data and funds.

-Adhered to industry best practices for data encryption and secure API key management.