**Subject:** Machine Learning Implementation in TBricks – Future Plans and Initial Inquiry

Dear TBricks Project Team,

I hope this message finds you well. I wanted to share some thoughts and ideas about utilizing Machine Learning within TBricks, even though I fully understand that these ideas are not part of the current project scope (not for phase one, and likely not for phases two or three either). However, I would like to give you a heads-up about my vision and gather preliminary feedback on the feasibility of implementing these ideas in the future.

Here’s a high-level outline of what I have in mind:

### **1. Future Machine Learning Integration**

I am interested in incorporating Machine Learning capabilities into TBricks to enhance our strategies and improve market predictions. While I understand this is a long-term goal, I believe it is worth exploring early to ensure we are prepared for such an implementation when the time comes.

### **2. Three Proposed Applications**

#### **App 1: Market Data Listener and Storage App**

* This app will focus on selected stocks.
* It will create a **listener** to capture changes in the **order book** of those stocks.
* Whenever there is an update to the order book, the app will stream the data into a database for storage.
* For the database:
  + My personal preference is **TimeScaleDB**, which is an extension of PostgreSQL specifically designed for time-series data storage.
  + However, I am open to your suggestions if you have other ideas or recommendations.

#### **App 2: Training App**

* This app will operate **after market close** and will:
  1. Read the data stored in the database by the first app.
  2. Create features (as specified) from the stored data.
  3. Use those features, together with machine learning algorithms, to predict the **market's fair value**.
* For machine learning algorithms:
  1. We can either integrate third-party software or implement the algorithms ourselves, depending on what is more feasible and efficient.

#### **App 3: Real-Time Forecasting App**

* After training the model in App 2, the third app will:
  1. Act as a **real-time listener** for market data on the selected stocks.
  2. Load the trained model created in App 2.
  3. Use the live market data to forecast **stock price movements** and provide actionable insights.

### **3. Feedback Request**

At this stage, I am simply looking to understand the feasibility of implementing these ideas within TBricks. Specifically, I would like to know:

* Whether TBricks can support such integrations, including third-party software installations and database connections.
* Any potential limitations or challenges that we might face when attempting to implement these types of applications in the future.
* Recommendations or best practices from your side for achieving such goals.

I look forward to hearing your thoughts and insights. Please let me know if you'd like to discuss this further or if additional details are required.

Best regards,  
[Your Name]