Coding Task
Data Scientist Position

Context

Your job is to create a recommendation system for Ta;ngo, a live-streaming platform. The goal is to suggest 6 good pricing options to users. Each suggestion includes a price (e.g., $5) and a Value for Money (VFM) score (e.g., 130), indicating what the user gets for that price.

Task: Create a Recommendation System Using User Behavior
Objective: Build a system that recommends 6 offers (price and VFM) to users, focusing on what users like.

1. Data

This dataset contains the transaction between 2024-01-15 and 2024-02-15 and has the following information:

- User ID
- Timestamp of the transaction
- USD spent
- Coins received
- Value For Money: $VFM = \frac{Coins}{USD}$

2. Recommendation Logic

Develop a recommendation algorithm that leverages implicit feedback to select 6 price points for each user. The algorithm should aim to maximize the relevance of the recommendations based on the observed user behaviors.
Consider using techniques suitable for implicit feedback scenarios, such as collaborative filtering, matrix factorization techniques, or deep learning approaches.

3. Model Evaluation

Split the dataset into training and testing sets to validate the effectiveness of your recommendation system.
Since explicit ratings are not available, choose appropriate evaluation metrics for implicit feedback, such as AUC, precision@k, recall@k, or mean percentile rank, where k=6.

Deliverable

A **Jupyter notebook** that includes:

- The process of collecting the dataset.
- The implementation of the recommendation system, with detailed commentary on the choices made and the steps involved.
- The evaluation section showing how the model was tested and its performance metrics.
- Any additional analyses or enhancements to the recommendation system.

Instructions

- Keep your solution easy to understand.
- Clarify why you chose specific methods for your recommendation system.
- Explain your thought process.
- Submit your Jupyter notebook when done.

Best of luck!