Zepto Recommendation Case Study

Background

We at Zepto are a quick commerce company that wants to help people shop faster and get deliveries as soon as possible. To help our customers shop faster, we have leveraged ML at multiple touchpoints, including powering some of our recommendation engines. Suitable recommendation engines can help customers build more extensive and faster carts.

- Larger carts/orders help with better unit economics since our delivery cost per order is almost fixed.
- Faster carts creation is a sign of superior user experience (maybe not for all)

Exercise

Design a generic recommendation system engine for **Cross Sell** which recommends complementary products to customers based on the existing products in their cart.

- E.g. You are recommending soy sauce along with chilly
- Recommending dahi aligns with the purchase of milk and paneer
- And so on...

Instructions

All three use cases can be scaled up to have real-time inference capability. Considering this, design a Recommendation Engine ML architecture that solves all 3 cases in a consolidated fashion or as three different engines. Discuss:

- Unique insights from EDA
- Specifics of model training

- Results and takeaways
- The various assumptions are being made with the problem statement and the proposed solution.
- Scope for further improvement given more data fields

Attached is the transactional data that contains session ID and product bought

session_id	product_name
`000ed966131fcb96e0efc4ff2b716a3e`	cucumber

Submission Guidelines

Please share a particular document with your pointers, diagrams and other notes. Reach out in case of questions.