INTERVIEW

PROJECT ENABLER

Business Case

INVENTORY ACCURACY

Glovo has more than 100 MFC (Micro Fulfillment Centers) across multiple countries and cities. Using these stores, customers can access more than 2000 SKUs (products) to be delivered to their homes in less than 30 minutes.

To keep this promise, one basic need is to have a proper inventory accuracy in each store, so we can guarantee the best user experience (offering only available products when the order is going to be placed by the customer).

Your task is to build the logic and (basic) reporting system behind the process to keep track of each inventory check performed in each store (to monitor the stock reported in the system vs the physical one in the store).

Some context for the exercise:

- Each store has a Warehouse Management System (WMS), that has the list of products (SKU) at any given time, their stock on hand and a record of all stock movements.
- The picking and packing process to prepare an order at each store are manual, therefore errors may happen (regarding quantities or products) and the stock on hand of a product could become inaccurate.
- Once the WMS indicates stock=0 for a product, it disappears from the customer app so the customer will not be able to order it anymore.
- Once an inventory check is done in the store, so all units of a product are counted and reported in the WMS, a new inventory movement record is created. This record includes the product ID & Name, the stock on hand before and after the inventory, the date (and you can assume any other information that may be relevant for your exercise).

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Part A

Indicate the main metrics that you would have to maintain around the inventory process in each store and explain why they are relevant and how they will be calculated. Remember, you are building a tool to check how each store is handling the inventory accuracy (not to do the actual inventory).

Part B

Assume you have access to any information you need from the WMS. Build a basic python script to generate the main metrics to keep track of each inventory check. Each of the chosen metrics should be visible at store level and for different time periods (daily, weekly, monthly).

Part C

Create a file with sample data that helps you to validate the script you built on part 2. Finally, the metrics that were calculated should be recorded in a Google Sheet to be reviewed (Please use enough sample data to get meaningful reports).

Good luck on the interview!