Hadi Finance

Senior Software Engineer Take home Technical test

Hadi finance has just hit the 50,000 mark of active businesses, thanks to the amazing team at the startup company.

Hadi works with businesses by registering them and creating their accounts on the Hadi platform.
In turn, a business owner whose business is registered on Hadi platform, can go ahead and create user accounts for their businesses' department heads(for example soft drinks department, toiletries department, etc), who are the actual active users of the platform.

In each business, the department heads are responsible for monitoring the status of the inventory, and are required by the business owner to make orders using the Hadi platform each time before the inventory in their department runs out.

**Note that Hadi finance does not sell the actual items, but is just a platform that is used to place these orders

In a typical day from its many businesses, Hadi platform sometimes gets upto **1,000 requests per minute** from different department heads of multiple businesses, all making orders through the platform. Hadi stores this order data in a **Postgres database**.

However, in its future product plan, Hadi Finance plans to start offering a buy now pay later service to its registered businesses, where businesses will be able to make orders for inventory, and can pay for it later.

To achieve this, the Hadi platform has started logging transaction data into **MongoDB**. Hadi logs the following data of a transaction/order: **businessID, amount, date, status**
The platform intends to later use this data to calculate the credit score of a business, to determine how much credit a business can access, using the following formulae:

Total transactions or order amount / (Number of transactions * 100)

Also, the government tax authority has introduced a new law, which requires Hadi platform to make POST requests to an API it has provided for each order Hadi platform receives, so that it can log this data for tax purposes.The government tax authority STRICTLY dictates that the details of each order must be passed to its API.

However, the API can be slow sometimes, and as such responses can take up to 15 seconds to be returned by the government API.

The API URL is: https://taxman.free.beeceptor.com/log-tax

Expected JSON **request** payload is:
```
{
     "order_id": "dac3549d-aea2-4957-91dc-618f2e2c77f7",
     "platform_code": "022",
     "order_amount": 40000
}
```

Tasks
You are required to achieve the following

1. Curate orders from each businesses' department lead
2. Process and store the order details as described above
3. Provide an API endpoint for a business to get their credit score
4. Provide an API endpoint for a business to fetch the order details (**total number of orders, total amount of orders, total number of orders today, total amount of orders today**)
5. Deploy the solution as a docker image
6. Commit your code to github and add jask-vmi as a collaborator

**Dates and timelines for this take home assignment will be communicated to you