

Backend developer assignment

Problem statement

Create an app which should sync the shipments for a retailer shop

Technology used

Django
RQ / RabbitMQ / Celery
Rest framework
Mysql

Endpoints

Developer portal - <https://developers.bol.com/>

Rate limits - <https://api.bol.com/retailer/public/ratelimits/formatted/index.html>

Authentication - <https://developers.bol.com/apiv3authentication/>

Shipment - <https://api.bol.com/retailer/public/redoc/v3#tag/Shipments>

List of shipments - <https://api.bol.com/retailer/public/redoc/v3#operation/get-shipments>

Detail of shipment item -

<https://api.bol.com/retailer/public/redoc/v3#operation/get-shipment>

Input

```
client_id = '86b40eb4-ecf5-4c5d-9c20-bd47e85684b8'  
client_secret = 'AU9zaVL0Lhua7C3UpJcdmCkWvVZSDn9fh9JGxpXoP6mZY  
xMRwlBhLQ1sb0VILk7DWsTxM4jKXKZaxWogb0J_NA'
```

Output

1. Rest api to add the client_id and client_secret
2. Rest api to get the list of all shipments

Milestones

You need to write an app where the seller will add his shop, and we will sync all shipments for his shop. You need to store each data item from shipment detail.

1. It should sync the all shipments until API will return an empty response
2. It should sync shipments for both fulfillment method check the API about fulfillment method
3. It should handle the rate limits of API, the app should not make API calls more than rate limits
4. The app should be generic such that if later we need to use for getting orders or returns we don't need to change code, it should just work on some configuration
5. The app should automatically handle the authentication expiration. mean the access token which we will get from authentication API it expires after 5 minutes, so you need to write the code to auto-refresh the access token
6. App code should be clean and proper commented where ever it's required
7. Handling the corner cases or validations which you need to figure out while development
8. Make sure you are making the app scalable and it should handle the large number of shipments sync in a manner where the python thread not need to block.

For eg: if there are 1000 shipments and you sync all in single thread of python then it is waste of whole resources and thread will be get blocked until process is completed or exited

Bonus

1. Test cases for an api
2. Hosted on cloud