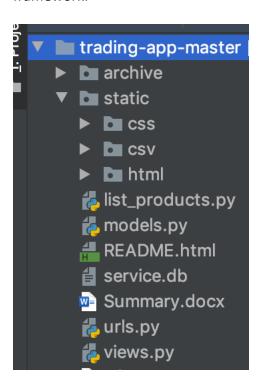
Introduction

The assignment is to create an online trading application. So as per the readme.rst file provided by the client, the code contains a lot of code smells and design flaws. The files service.py and lib.py are meant to be refactored.

Primary changes that were made

1. Service.py file has been refactored as per the Models, Views, Template (MVT) framework.



**The above pattern is not completely followed in this assignment, but enough justice has been done to replicate as much as the above within this short timeline. For example, CSS can be created as external CSS, but internal CSS is followed.

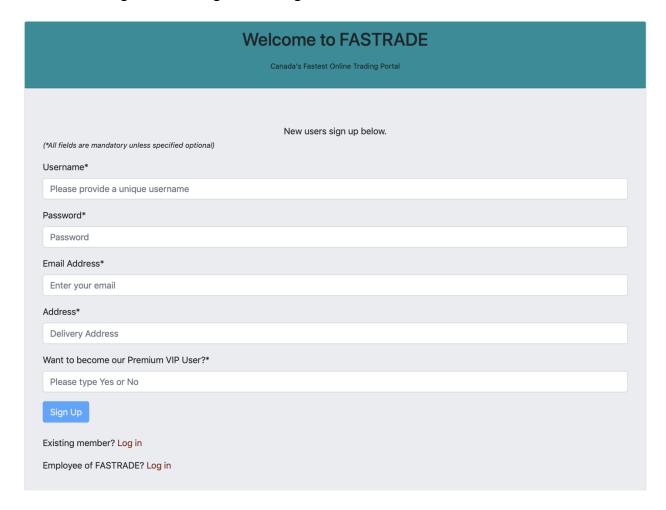
The file names are changed.

- 3. The static folder contains all the CSS, csv, HTML static files.
- 4. Asynchronous async/await & aiohttp design.
- 5. Lib.py file has been removed and replaced with list products.py file.
- 6. Extra inbuilt libraries that were imported CSV, os, urllib.parse
- 7. README file has been added for a step by step implementation of the code

User sign-up Page

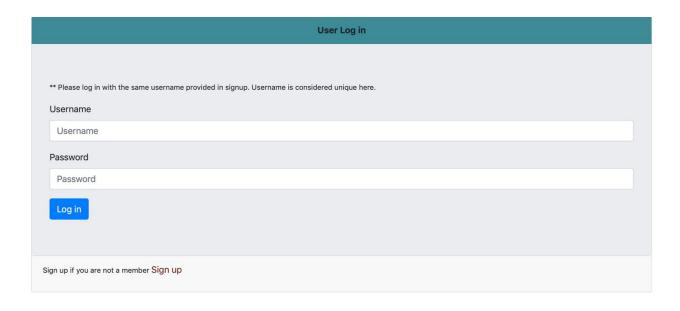
Sign-up by filling all the mandatory information requested below.

- Provide a unique username as you like.
- Click Sign Up & you will be prompted with a successful sign-up message.
- Click Existing member? Log in link to sign in.



User sign-in page

- Sign in with the same username provided in the sign-up page.
- Usernames and passwords are not validated from the database.

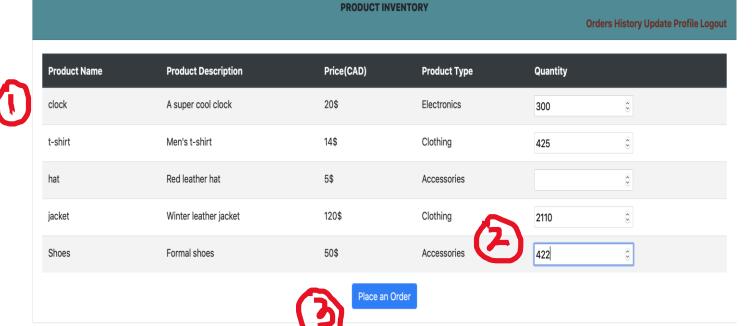


Order Inventory page

1) Identify the product you want to order.

Welcome Harper please check the products available and place an order

- 2) Enter the number of quantities you need for each product.
- 3) Place an order.



Order placement page

- Unique order id is placed for you.
- **TBD** is a future enhancement.
- Click Check your order status / Check the current Order status.

Hi Harper we have received your order placement. Please click Order status link for confirmation.

ORDER PLACEMENT

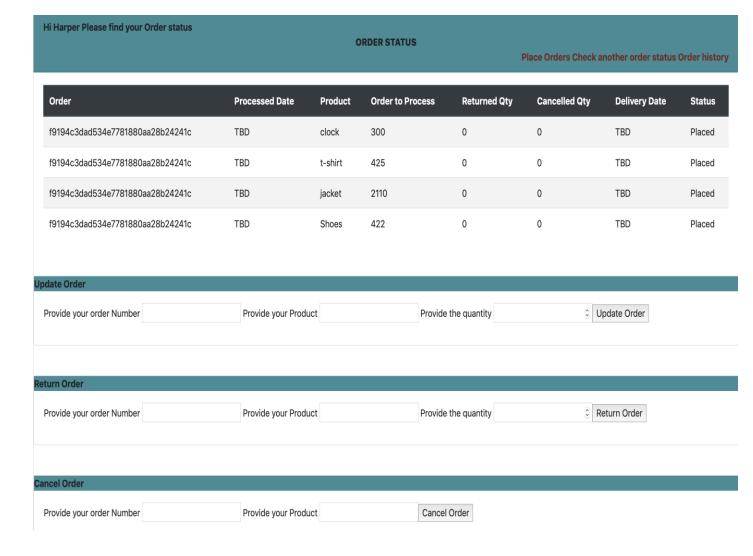
Place Orders Orders History Check current Order status

Order Id	Delivery Date	Delivery Type	Check your status
f9194c3dad534e7781880aa28b24241c	TBD	TBD	Check your order status

Order Status page

The order status page gives you the overall order information – it's the current status.

- You can perform CRUD operation for the orders from here.
- The order status page consists of Update Order/ Return Order/ Cancel Order.
- For Update and Return Order, you can perform the action for specific products instead of the entire order.
- To cancel, you can cancel an entire order.



Update Order

- You can update the order concerning specific products in the Update Order section.
- Click Update Order after specifying the order number, the product and the quantity of the product to update

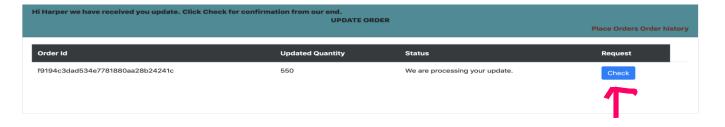
ORDER STATUS

Place Orders Check another order status Order history

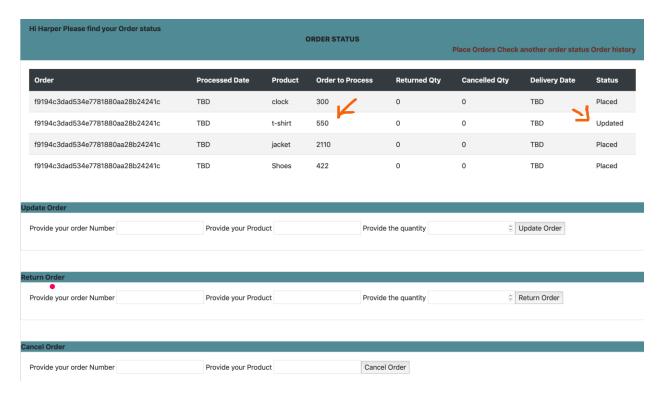
Order	Processed Date	Product	Order to Process	Returned Qty	Cancelled Qty	Delivery Date	Status
f9194c3dad534e7781880aa28b24241c	TBD	clock	300	0	0	TBD	Placed
f9194c3dad534e7781880aa28b24241c	TBD	t-shirt	425	0	0	TBD	Placed
f9194c3dad534e7781880aa28b24241c	TBD	jacket	2110	0	0	TBD	Placed
f9194c3dad534e7781880aa28b24241c	TBD	Shoes	422	0	0	TBD	Placed

Provide your order Number f9194c3dad534e7781880z Provide your Product t-shirt Provide the quantity 550 Update Order Return Order Provide your order Number Provide your Product Provide the quantity Seturn Order Provide your order Number Provide your Product Provide the quantity Cancel Order Provide your order Number Provide your Product Cancel Order

• Click Check for confirmation.

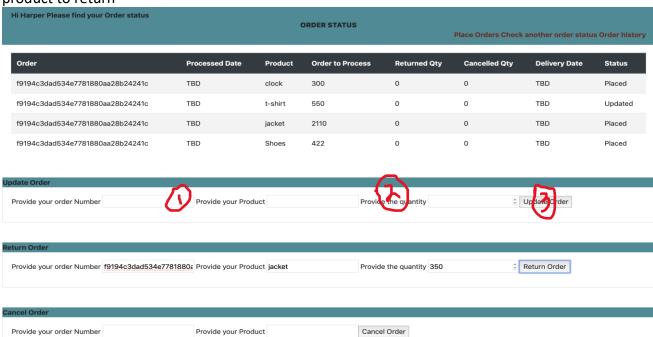


• You receive the updated order information.

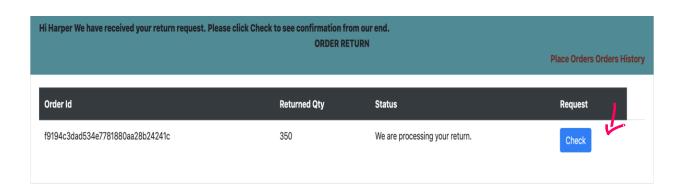


Return Order

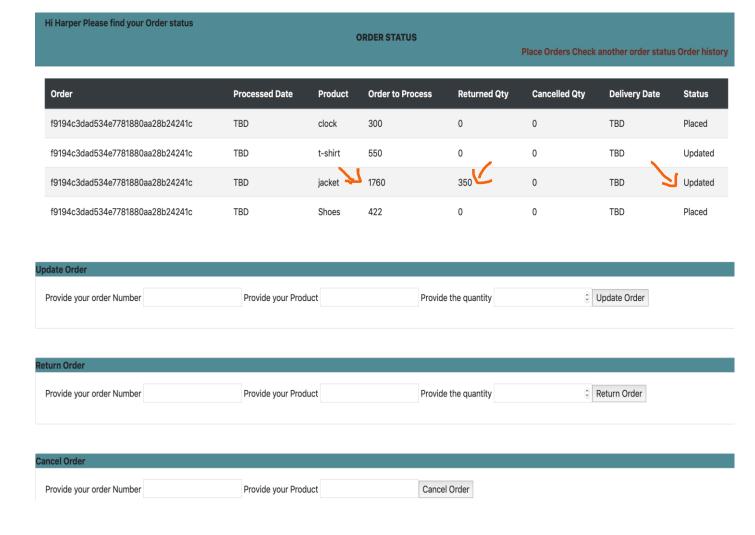
- You can return the order concerning specific products in the Return Order section.
- Click Return Order after specifying the order number, the product and the quantity of the product to return



• Click Check for confirmation.

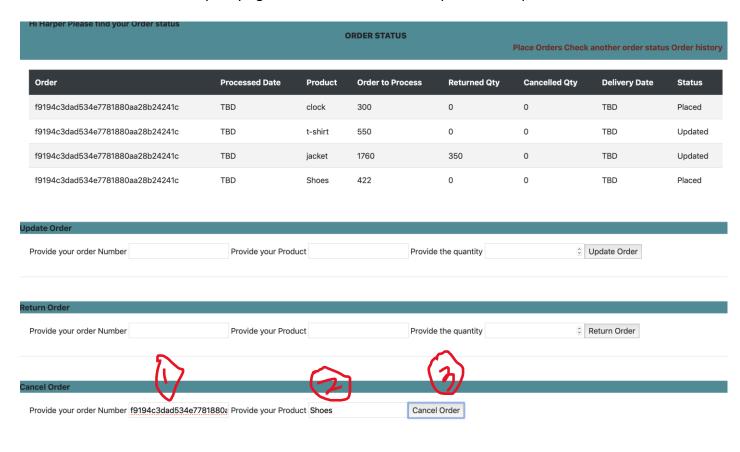


• You receive the returned order information.

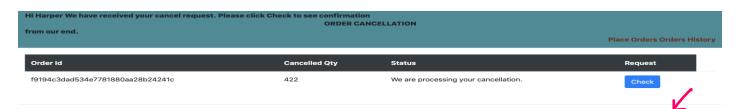


Cancel Order

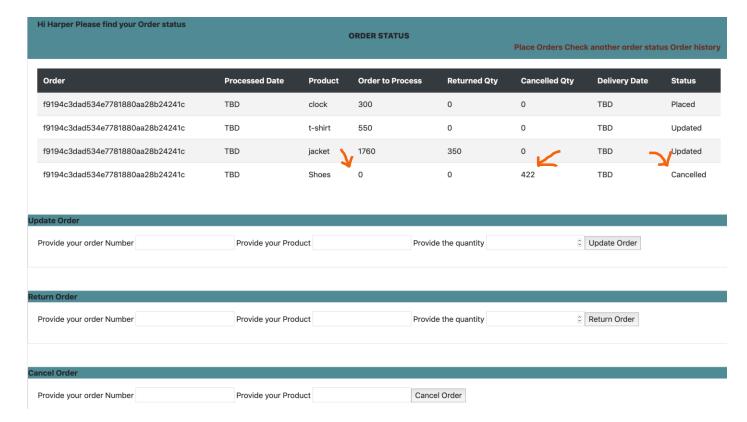
- You can cancel the entire order in the Cancel Order section.
- Click Cancel Order after specifying the order number and the product to update



• Click Check for confirmation.



• You receive the cancelled order information.



Order history

- Order history page contains the list of all the orders that the user has order and its current status etc.
- Order to track the order you can now provide the order number and track anytime.

Hi Harper please see your Order history		ORDER HISTORY			
					Place Orders Logout
Order	Product	Ordered Qty	Returned Qty	Cancelled Qty	Status
1cb54718a9d5431e899374e4925912b7	clock	0	0	1500	Cancelled
1cb54718a9d5431e899374e4925912b7	t-shirt	10	0	0	Placed
1cb54718a9d5431e899374e4925912b7	hat	1256	0	0	Placed
f9194c3dad534e7781880aa28b24241c	clock	300	0	0	Placed
f9194c3dad534e7781880aa28b24241c	t-shirt	550	0	0	Updated
f9194c3dad534e7781880aa28b24241c	jacket	1760	350	0	Updated
f9194c3dad534e7781880aa28b24241c	Shoes	0	0	422	Cancelled
Frack your Order					
Provide your order Number Track Ord	er				

Update Profile

- Update your profile by giving the necessary information requested.
- Since username is unique, it cannot be changed.



Employee sign-in Page

- Select the team you wanted to sign in.
- An employee can belong to any of the below teams Sales Team, VIP Assistance, Emergency Team, Returns Team, Large Orders Team, Products Team, Delivery Team, Refunds Team
- Provide the username and password. Usernames and passwords are not validated.
- Provide any username to access each team and see its notifications.



Sales Team

Hi Garry please find the below	notification	
	SALES ORDER NOTIFICATION TEAM	
		Logout

Order	Username	Product	Qty Ordered	Qty Returned	Qty Cancelled	Status	VIP User	Destination
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	clock	30	0	0	Placed	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	t-shirt	26	16	0	Updated	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	hat	0	0	12	Cancelled	VIP No	N4 4 Burrard avenue Vancouver British Columbia
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	0	1500	Cancelled	VIP Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	t-shirt	10	0	0	Placed	VIP Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	hat	1256	0	0	Placed	VIP Yes	No 6 Dunsmuir Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	1480	120	0	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	t-shirt	31	0	0	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	hat	149	0	0	Placed	VIP no	No 5 Jonathan jury Street
00eefe3a03414275b598633acee76605	Henry	clock	1321	0	0	Placed	VIP off	No 6, hensford street
00eefe3a03414275b598633acee76605	Henry	t-shirt	0	0	523	Cancelled	VIP off	No 6, hensford street

VIP Assistance Team

Hi Garry please find the below notification	VIP ORDERS ASSISTANCE TEAM Logi							
Order	Username	Product	Qty Ordered	Qty Returned	Qty Cancelled	Status	VIP User	Destination
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	0	1500	Cancelled	Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	t-shirt	10	0	0	Placed	Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	hat	1256	0	0	Placed	Yes	No 6 Dunsmuir Street
ba0bdcffaeb94e299ed23019300c0f63	Daniel	clock	124	0	0	Placed	Yes	No 4 Frankie street Alberta
ba0bdcffaeb94e299ed23019300c0f63	Daniel	t-shirt	2322	0	0	Placed	Yes	No 4 Frankie street Alberta
ba0bdcffaeb94e299ed23019300c0f63	Daniel	hat	212	0	0	Placed	Yes	No 4 Frankie street Alberta
a4f705d7c89040aea9e289fe31ebe160	Jamie	clock	12	0	0	Placed	Yes	No 4 James Street
a4f705d7c89040aea9e289fe31ebe160	Jamie	t-shirt	0	0	6745	Cancelled	Yes	No 4 James Street
a4f705d7c89040aea9e289fe31ebe160	Jamie	hat	2132	0	0	Placed	Yes	No 4 James Street
f9194c3dad534e7781880aa28b24241c	Harper	clock	300	0	0	Placed	Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	t-shirt	550	0	0	Updated	Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	jacket	1760	350	0	Updated	Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	Shoes	0	0	422	Cancelled	Yes	No 6 Dunsmuir Street

Emergency Team

Hi Garry please find the below notification

			EMERGENCY	EMERGENCY NOTIFICATION TEAM Logo					
Order	Username	Product	Qty Ordered	Qty Returned	Qty Cancelled	Status	VIP User	Destination	
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	0	1500	Cancelled	VIP Yes	No 6 Dunsmuir Street	
1cb54718a9d5431e899374e4925912b7	Harper	hat	1256	0	0	Placed	VIP Yes	No 6 Dunsmuir Street	
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	1480	120	0	Updated	VIP no	No 5 Jonathan jury Street	
00eefe3a03414275b598633acee76605	Henry	clock	1321	0	0	Placed	VIP off	No 6, hensford street	
00eefe3a03414275b598633acee76605	Henry	hat	1287	0	0	Placed	VIP off	No 6, hensford street	
ba0bdcffaeb94e299ed23019300c0f63	Daniel	t-shirt	2322	0	0	Placed	VIP Yes	No 4 Frankie street Alberta	
a4f705d7c89040aea9e289fe31ebe160	Jamie	t-shirt	0	0	6745	Cancelled	VIP Yes	No 4 James Street	
a4f705d7c89040aea9e289fe31ebe160	Jamie	hat	2132	0	0	Placed	VIP Yes	No 4 James Street	
f9194c3dad534e7781880aa28b24241c	Harper	jacket	1760	350	0	Updated	VIP Yes	No 6 Dunsmuir Street	

Large Orders Team

Hi Garry please find the below notification LARGE ORDER NOTIFICATION TEAM	
	Logout

Order	Username	Product	Qty Ordered	Qty Returned	Qty Cancelled	Status	VIP User	Destination
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	0	1500	Cancelled	VIP Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	hat	1256	0	0	Placed	VIP Yes	No 6 Dunsmuir Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	1480	120	0	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	hat	149	0	0	Placed	VIP no	No 5 Jonathan jury Street
00eefe3a03414275b598633acee76605	Henry	clock	1321	0	0	Placed	VIP off	No 6, hensford street
00eefe3a03414275b598633acee76605	Henry	t-shirt	0	0	523	Cancelled	VIP off	No 6, hensford street
00eefe3a03414275b598633acee76605	Henry	hat	1287	0	0	Placed	VIP off	No 6, hensford street
ba0bdcffaeb94e299ed23019300c0f63	Daniel	clock	124	0	0	Placed	VIP Yes	No 4 Frankie street Alberta
ba0bdcffaeb94e299ed23019300c0f63	Daniel	t-shirt	2322	0	0	Placed	VIP Yes	No 4 Frankie street Alberta
ba0bdcffaeb94e299ed23019300c0f63	Daniel	hat	212	0	0	Placed	VIP Yes	No 4 Frankie street Alberta
a4f705d7c89040aea9e289fe31ebe160	Jamie	t-shirt	0	0	6745	Cancelled	VIP Yes	No 4 James Street
a4f705d7c89040aea9e289fe31ebe160	Jamie	hat	2132	0	0	Placed	VIP Yes	No 4 James Street
f9194c3dad534e7781880aa28b24241c	Harper	clock	300	0	0	Placed	VIP Yes	No 6 Dunsmuir Street

Returns Team

Hi Garry please find the below notification
RETURN ORDERS NOTIFICATION TEAM
Logout

Order	Username	Product	Returned Qty	Status	User	Destination
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	t-shirt	16	Updated	VIP No	N4 4 Burrard avenue Vancouver British Columbia
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	120	Updated	VIP no	No 5 Jonathan jury Street
f9194c3dad534e7781880aa28b24241c	Harper	jacket	350	Updated	VIP Yes	No 6 Dunsmuir Street

Refund Team

Hi Garry please find the below notification RETURN ORDERS NOTIFICATION TEAM Logout

Order	Username	Product	Returned Qty	Status	User	Destination
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	t-shirt	16	Updated	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	hat	0	Cancelled	VIP No	N4 4 Burrard avenue Vancouver British Columbia
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	Cancelled	VIP Yes	No 6 Dunsmuir Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	120	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	t-shirt	0	Updated	VIP no	No 5 Jonathan jury Street
00eefe3a03414275b598633acee76605	Henry	t-shirt	0	Cancelled	VIP off	No 6, hensford street
a4f705d7c89040aea9e289fe31ebe160	Jamie	t-shirt	0	Cancelled	VIP Yes	No 4 James Street
f9194c3dad534e7781880aa28b24241c	Harper	t-shirt	0	Updated	VIP Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	jacket	350	Updated	VIP Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	Shoes	0	Cancelled	VIP Yes	No 6 Dunsmuir Street

Products Team

Hi Garry please find the below notification	
PRODUCT MANAGEMENT TEAM	
Li contraction de la	Logout

Order	Username	Product	Quantity	Status	User	Destination
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	t-shirt	26	Updated	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	hat	0	Cancelled	VIP No	N4 4 Burrard avenue Vancouver British Columbia
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	Cancelled	VIP Yes	No 6 Dunsmuir Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	1480	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	t-shirt	31	Updated	VIP no	No 5 Jonathan jury Street
00eefe3a03414275b598633acee76605	Henry	t-shirt	0	Cancelled	VIP off	No 6, hensford street
a4f705d7c89040aea9e289fe31ebe160	Jamie	t-shirt	0	Cancelled	VIP Yes	No 4 James Street
f9194c3dad534e7781880aa28b24241c	Harper	t-shirt	550	Updated	VIP Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	jacket	1760	Updated	VIP Yes	No 6 Dunsmuir Street
f9194c3dad534e7781880aa28b24241c	Harper	Shoes	0	Cancelled	VIP Yes	No 6 Dunsmuir Street

Delivery Team

Hi Garry please find the below notification	ORDER DELIVERY NOTIFICATION TEAM
	Logout

Order	Username	Product	Qty Ordered	Qty Returned	Qty Cancelled	Status	VIP User	Destination
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	clock	30	0	0	Placed	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	t-shirt	26	16	0	Updated	VIP No	N4 4 Burrard avenue Vancouver British Columbia
b32b194bfe524313b66a2e7bf3e8a7bc	Goldman	hat	0	0	12	Cancelled	VIP No	N4 4 Burrard avenue Vancouver British Columbia
1cb54718a9d5431e899374e4925912b7	Harper	clock	0	0	1500	Cancelled	VIP Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	t-shirt	10	0	0	Placed	VIP Yes	No 6 Dunsmuir Street
1cb54718a9d5431e899374e4925912b7	Harper	hat	1256	0	0	Placed	VIP Yes	No 6 Dunsmuir Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	clock	1480	120	0	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	t-shirt	31	0	0	Updated	VIP no	No 5 Jonathan jury Street
dd9aa8fb16c44d83bf32b2506bc1a735	Jonathan	hat	149	0	0	Placed	VIP no	No 5 Jonathan jury Street
00eefe3a03414275b598633acee76605	Henry	clock	1321	0	0	Placed	VIP off	No 6, hensford street
00eefe3a03414275b598633acee76605	Henry	t-shirt	0	0	523	Cancelled	VIP off	No 6, hensford street

Exception Handling

ORDER STATUS Place Orders Check another order status Order								
Order	Processed Date	Product	Order to Process	Returned Qty	Cancelled Qty	Delivery Date	Status	
ba0bdcffaeb94e299ed23019300c0f63	TBD	clock	0	125	0	TBD	Returned	
ba0bdcffaeb94e299ed23019300c0f63	TBD	t-shirt	2322	0	0	TBD	Placed	
ba0bdcffaeb94e299ed23019300c0f63	TBD	hat	212	0	0	TBD	Placed	

odate Order					
Provide your order Number	Provide your Product		Provide the quantity		
eturn Order			V		
etulii Oldei					
Provide your order Number ba0bdcffaeb94e299ed23	Provide your Product	clock	Provide the quantity	10	© Return Order



Exception. You cannot return as you have zero order placed.

Future Enhancements

- Username validation and password encryption.
- Session validation enabling user login and logout.
- Use Django Rest API for backend & Reactjs for frontend.
- Use Docker containerization.
- Move to the AWS cloud.

Please read the README file that I have created in the folder to know more about the execution, in scope, out of scope contents.

Conclusion

This application is an open ended.

- 1) We can add more design and functional requirements.
- 2) We can add more user testing.
- 3) Python concurrency to speed up the application.
- 4) Introduce multi-threading concepts.
- 5) Use Django as backend and PostgreSQL as a database.
- 6) Browsable JSON REST API.

If given an opportunity & enough time, I can assure you that the above can be implemented. I will try to implement a part of this using Django in my next presentation session.