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Paytm Insider Assignment

20 June 2020

1. Write a DB query to find list of customers whose age is 30+

```
select order_id, item_description from (select order_id,item_description,  
ROW_NUMBER() over (order by item_price desc) as ROW_NUMBER  
from shipping_order_item) xyz where ROW_NUMBER = 8;
```

This Query will fetch the order_id w.r.t 8th largest price Price.

2. Consider, Admin panel is not working. But OPS people need those orders along with awb no. and courier name, which got stuck in Manifestation state. Write a database query to fetch such records. Can you get these results without using DB query? If so, explain how?

```
select order_id,awb,Tracker_status,courier_partner from Tracker where  
Tracker_status='MFG';
```

This Query will fetch the order_id, aws, Tracker and Courier Partner whose Tracker_Status is stuck at Manifested State,

3. Suppose cron job has failed 3 times and Admin panel is down due to some Front End issue. All the orders are being stuck in Print state and business is getting impacted as orders are not getting shipped. What will you do as a Tech ops person?. Share your approach from API point of view. Support your solution with DB query also.

In Order to Deal with this Scenario We have to Come Up with a Module, that can be used by Ops Team whenever some issue arrives at Front-End Level.

1. Hit an GET Request - `v1/ecom/admin/displayManifest`, this will yield all the orders that is needed to be manifested.
2. Upon receiving the Orders ID, ops team can filter all the orders that they need manifestation, once decided.

3. Hit an POST Request - `v1/ecom/admin/manifest` , this API will submit the orders for Manifestation.
4. For the Conformation of the Manifestation we can check the Database Table - **Archived_soi** , that will be holding all the order's that was not manifested. And we always can fetch out all the orders that was not manifested using query - `Select order_id from Archived_soi where is_enabled=1;`
5. If some order is still enable for manifestation, that repeat the 3 step with found orders.

4. One of the customers has complained that he has cancelled the order from his app. But still it has been delivered to him. How can you cross check if that's a false complaint or not? As a tech ops, share your all findings.

** Lets OrderId - #1223330*

```
select case when exists ( select tracker.tracker_status,
shipping_order_item.status from tracker,shipping_order_item where
Tracker.order_id=1223330 and shipping_order_item.status='CLD' and
tracker.tracker_status='FFD' ) then cast (1 AS BIT) else cast(0 AS BIT)
end;
```

This Query will return 1, if the customer's complaint is True, else this will return 0.

5. Write a DB query to find list of customers whose age is 30+

```
Select * from Customer where ((year(getdate())-year(dob))) > 30;
```

This Query will fetch all the Customers whose Age is 30 +

6. Write a DB query to find customer ids with their status and tracker status.

```
select customer.cust_id,shipping_order_item.status,
tracker.Tracker_status from customer, tracker, Shipping_order_item where
customer.order_id = tracker.order_id AND
tracker.order_id=shipping_order_item.order_id;
```

Using JOIN -

```
select cust.cust_id,soi.status,trc.Tracker_status from customer cust inner  
join shipping_order_item soi on cust.order_id=soi.order_id inner join  
tracker trc on soi.order_id=trc.order_id;
```

This Query will fetch all the Customer ID with Shipping Status and Tracker Status.

7. Initially, all records in archived_soi table are created with is_enabled=1. After certain days, some records are having is_enabled=1 and some as 0. You were asked to disable order id 567 but by mistake, you skipped **where** clause and ran only this query: **update archived_soi set is_enabled=0;** What would be the impact of the above query? What will you do to revert this impact?

Impact of Query - *Update archived_soi set is_enabled=0;* will set is_enabled field to 0, for each tuple inside the table, and that is huge problem. Since we will no longer be able to find the orders that is not manifested after 3 tries.

Reverse the Impact -

Since, Item in Archived_soi has failed for 3 attempts for manifestations, so the status of the Order in the Table shipping_order_item needs to be PRT for all these items. This status changes when OPS personnel promote the order for Manifestations, in that case Status changes to MFG.

```
update archived_soi set is_enabled= case when  
(shipping_order_item.status='PRT') then 1 else 0 end from  
shipping_order_item where  
archived_soi.order_id=shipping_order_item.order_id;
```

Best Practice -

BEGIN

Update archived_soi set is_enabled=0;

Is Your Action Was correct, then COMMIT, else ROLLBACK.

COMMIT | ROLLBACK.

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