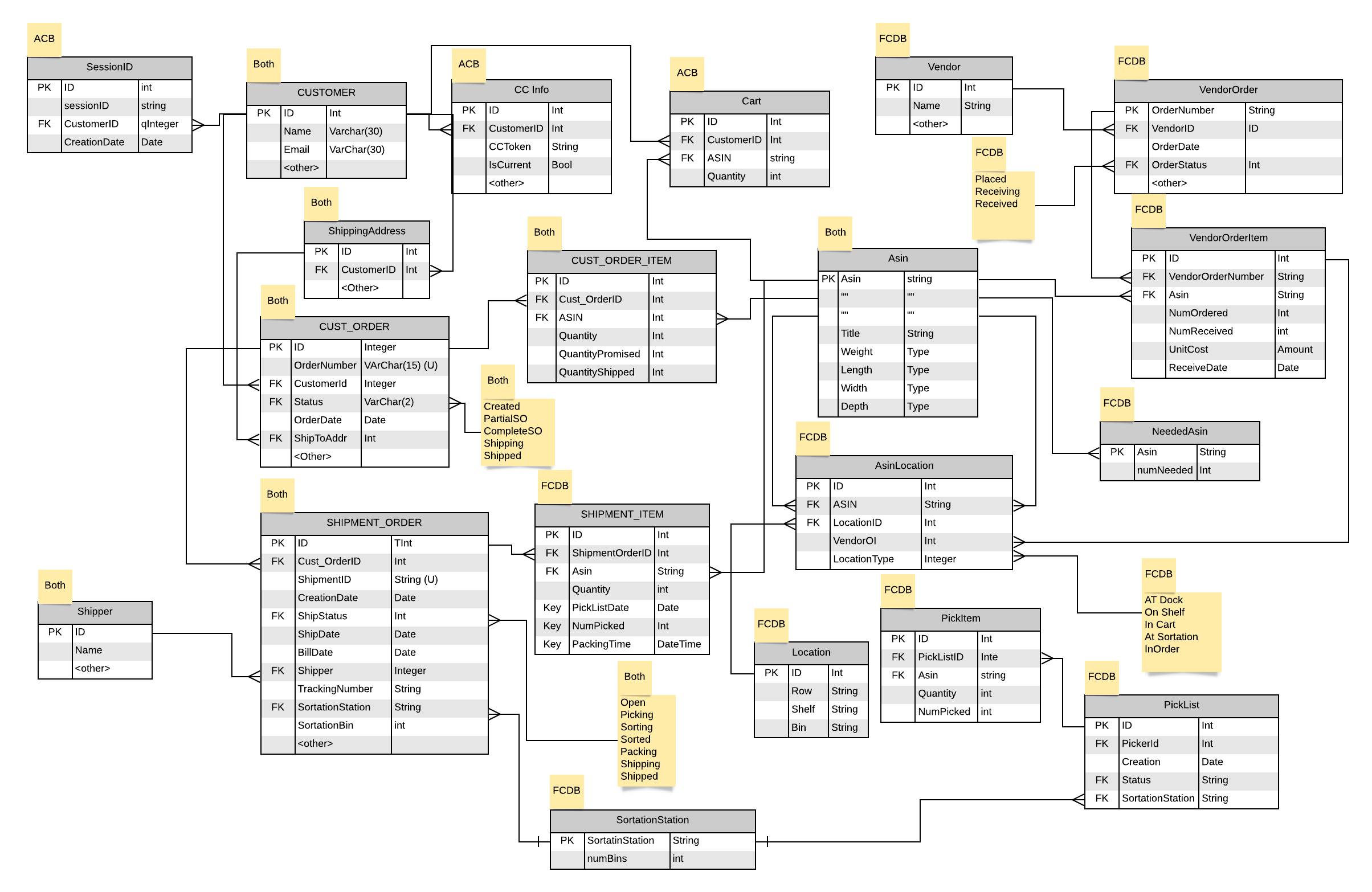
**Project 5 Group 5**

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**Business Problem**

Amazon Database is getting overloaded and it needs to be fixed before it dies. Also, there is latency in different fulfillment centers that caused the system to be slow.

**Schema**



**Solution**

Making copies on some tables in ACB to create FCDB that only uses tables required for the fulfillment center functions. Reduce the workload and risk of crashing by dividing the difference update job to difference FCDB. We will use replication to update the tables that are shared between both databases.

Customer:

* Create ACB -> FCDB

Shipping Address:

* Create ACB ->FCDB

Cust\_Order:

* Create ACB -> FCDB
* Status update FCDB -> ACB
* ACB may change Status from Created to Canceled.

Cust\_Order\_Item:

* Create ACB -> FCDB
* Quantity shipped update FCDB -> ACB

Asin:

* Create FCDB ->ACB

AsinLocation:

* Create FCDB ->ACB

Shipping\_Order:

* Create ACB -> FCDB
* Status, shipper, sortstation, sortstationbin, shipDate updated FCDB ->ACB

Shipping\_Item:

* Create FCDB->ACB
* Quantity update ACB ->FCDB

Shipping Address:

* Create ACB->FCDB

Shipper:

* Create FCDB

Use cases after changes(What database is use and what tables is include)

1. Customer logging on
   * Database: ACB
   * Table:SessionID Customer
2. searching and putting items in cart
   * Database: ACB
   * Table:SessionID Customer Cart
3. Creating the Customer Order<process on ACB>
   * Database: ACB
   * Table: Asin SessionID Customer Cart ShippingAddress CUST\_ORDER CUST\_ORDER\_ITEM
4. Creating a Shipment Order<change the update by FCDB base on the status>
   * Database: FCDB
   * Table:Shipment\_Order SHIPMENT\_ITEM cust\_order custoreritem asin asin\_location, sortationstation
5. Shipment Overview
   * Database: FCDB
   * Table:Shipment\_Order SHIPMENT\_ITEM cust\_order custoreritem asin asin\_location
6. Pick List and Picking<change>
   * Database: FCDB
   * Table:Shimpent\_order SHIPMENT\_ITEM location asin\_location location picklist PickItem SortationStation
7. Assembling the order
   * Database: FCDB
   * Table:Shimpent\_order SHIPMENT\_ITEM picklist pickitem sortationstation
8. Shipping
   * Database: FCDB
   * Table: Shimpent\_order SHIPMENT\_ITEM shipper
9. Deciding what to buy
   * Database:FCDB
   * Table: AsinLocation NeededAsin VenderOrderItem CustomerOrder\_Item
10. Ordering
    * Database:FCDB
    * Table: Vendor VendorOrder VendorOrderItem NeededAsin
11. Receiving inventory into the FC and putting it on shelves
    * Database:FCDB
    * Table: VendorOrder VendorOrderItem asin asin\_location location
12. Browse my orders
    * Database:ACB
    * Table: SessionID customer cust\_order cus\_order\_item SHIPMENT\_ITEM Shipper shipment\_order