Idea (internal/concept stuff)

Frontend/Backend part

Smart contracts part

# **Our project is basically an Online shopping site, such as Amazon, Flipkart, etc., with their database being replaced by Blockchain.**

The website will have different access levels (customers, manager, manufacturers, ….., distributors, etc.), and each access level has a different user interface.

1. There will be many Manufacturers, Land transporters, Port authorities, Shipments, Distributors, who provide for or have tie ups with the Manager (website admin). Hence, the Manager will have a bunch of addresses for each of those entities.

\* Address is their address in the blockchain network.

2. There will be many Products (each with a unique PID) offered by the Manager(admin->website), each of which come from the different Manufacturers (whose addresses we have).

MySQL Database-

**Products:** ProductID |Name | Description | Manufacturer | Manufacture\_Location | MRP

3. There will be many Customers (Consumers/Retailers) who can login (sign up) to the website=> they will choose(order/buy) products in the website. When an order is placed, the CustomerID (cid) of the customer, ProductID (pid) and Quantity of the product will be inserted into a new table.

**Users:** Username | Email | Password | User\_role

**Customers:** CustomerID | Username

**Orders:** CustomerID | ProductID | Quantity | OrderID {orderID will be null until manager accepts}

Customer interface of the website will have 2 tabs : **Place Order | Check Order Status**

**Place Order:** Shows a table of products for shopping, with a quantity setter, and place-order button.

(when button is clicked a row is inserted into **Orders** table)

Immediately after a has customer placed an order, the status will be **Pending** (waiting for the manager to set the order and order flow)

4. Once a Customer places an order on the website.

Manager interface of the website has 1 tab: **Accept & Create Order**

Call setOrder() and setflowoforder() functions from Manager.sol

Based on the time of order of a product and location of Customer, a particular manufacturer for the product will be selected by the Manager, and based on the location of manufacture and other external factors, the Manager will select the remaining set of entities for that product order. This gives each of those products a set of addresses (flow of order). This set of addresses is the addresses of the entities who are involved in the flow of the product from the Manufacturer to the end-product-holder.

The order of the entities is always as such:

Manufacturer -> Export Land Transport -> Export Customs -> Export Port Authority -> Shipping -> Import port Authority -> Import customs -> Import Land Transport -> Distributor

\*It's not necessary for all the entities to be involved in all the orders, so for those not involved the address given will be equivalent to 0 (in address datatype of solidity).

5. Manufacturer logs in –

There will be 2 tabs: **Add Product | Update Order status**

manufactured() function is called.

\***Update order status page shows response by calling** currentStatusOfOrder().

6. All other entities will have one tab:

**Update Order status**

**Respective functions from their smart contracts will be called to update**

Examples

Manager :

[tabanna917@gmail.com](mailto:tabanna917@gmail.com)  
efgh5678

Customer:

[damon56@yahoo.com](mailto:damon56@yahoo.com)  
brother

Manufacturer:

[rebecca09@gmail.com](mailto:rebecca09@gmail.com)  
abcd1234

Distributor:

[dave90@gmail.com](mailto:dave90@gmail.com)  
shazam