**DOCUMENTATION FOR KRYPTMART (A BLOCKCHAIN ECOMMERCE WEBSITE WITH A SUPPLY CHAIN MANAGEMENT)**

**What is KRYPTMART?**

**KRYPTMART** is a multivendor ecommerce website with a supply chain management that is built on smart contract. It accepts all kinds of product for sales, the kind of products being sold actually depends on the seller or manufacturer that is registered on the platform, its major currency is Ethereum but also accepts ERC 20 tokens like DAI.

**Major Players**

The key individuals of **KRYPTMART** are:

1. Manufacturers
2. Sellers
3. Buyers
4. Delivery Merchants

**Roles of the each Key Player**

1. **Manufacturers:** These are the manufacturers of products being sold in the platform; they can sell their products directly to sellers or buyers who buy in bulk.
2. **Sellers:** These are retailers or wholesalers that sell products gotten from manufacturers in the platform; they sell their products majorly to buyers.
3. **Buyers:** These are the customers of the platform that buys products from sellers or from manufacturers if they want to buy in bulk.
4. **Delivery Merchants:** These are users who majors mainly on the delivery of products from manufacturer to seller and also from seller to buyer or from manufacturer to buyer.

**Why on Ecommerce on Blockchain?**

1. **High level of data security:** Blockchain is a decentralized, distributed ledger technology, that gives the users on the platform the right and responsibility to own and protect their data and it also enforces complex cryptographic methods to carry out data encryption, which makes it impossible for a hacker to decrypt or gain information of a user.
2. **Payment transaction transparency increased:** Blockchain presents a clear picture of the history of transactions that take place on an e-Commerce platform. Every small entry from placing an order, to processing payments, to the delivery of an item can be lodged and preserved on the Blockchain network that can help track the complete journey of an order, can help identify defects/gaps in the process etc. and with Blockchain, issues like money laundering or payment thefts can be completely eliminated.
3. **Improves operational efficiency in Supply chain management:**  Blockchain records each and every event happening in the process on the network, tracking any process is easy. Sellers, buyers, manufacturers can fetch the exact information and calculate delays, initiate easy communication and know what exactly is going on in the process. This helps establish trust and honesty between all the participants. Blockchain also completely gets rid of intermediaries and illegal activities since there is no centralized authority governing the process.
4. **Digital payment enhancement:** Blockchain can also help implement alternative payment methods like cryptocurrencies for transactions, instead of relying on fiat and traditional currency payment options. Multiple reward systems, discounts and offers can be introduced using smart contracts and digital payment options to lure customers to make the e-Commerce platform an attractive marketplace.

**On-boarding process**

1. Visit the platform URL.
2. Explore as a guest or Register to become a registered user.
3. During registration, user can choose to either be a manufacturer, seller, buyer or delivery merchant and also connect cryptowallet.
4. After registration and login, user will be redirected to user dashboard; each dashboard varies depending on what was chosen on (c).
5. As a manufacturer:
6. To sell products, click on sell
7. Fill in the details concerning the product and quantity, MOQ is at least 5
8. Submit details for upload, each product is attached to a unique encrypted id for better tracking.
9. To distribute/deliver product, click on the deliver button, it will be redirected to available delivery merchants on the platform which any can be selected based on choice and rating.
10. A manufacturer can also be a buyer but not a seller/vendor.
11. As a seller/vendor:
12. To sell product, click on sell
13. Fill in the details concerning the product and quantity, MOQ can be 1
14. Submit details for upload, each product is attached to a unique encrypted id for better tracking.
15. To distribute/deliver product, click on the deliver button, it will be redirected to available delivery merchants page on the platform which any can be selected based on choice and rating.
16. A seller can also be a buyer.
17. As a buyer:
18. Visit the homepage to browse product based on categories or visit the product page based on the category chosen.
19. Like a product, click on buy, if registered, it will be redirected to the payment page, if not registered, it will be redirected to the registration page; choose to pay with ether or DAI.
20. Relax while the product is being delivered.
21. A buyer can also use the delivery service without having to sell a product.
22. As a delivery merchant:
23. After registration, get past customers or friends to rate the profile
24. Each past customer or friend has to be registered on the platform to be able to rate.
25. To be on the top delivery merchant ad, a small token has to be paid.

**How revenue is made**

Revenues are made from two major ways:

1. Commission from each product sold or delivered.
2. Tokens paid to be included in weekly top manufacturers, sellers or delivery merchants.

**Pages Needed**

1. Home page
2. Registration page
3. Login page
4. Buyer’s dashboard
5. Seller’s dashboard
6. Manufacturer’s dashboard
7. Delivery merchant’s dashboard
8. Products page
9. Description page
10. Payment page
11. Receipt page
12. Delivery merchant page
13. Supply chain management page
14. Admin dashboard
15. Admin login and registration page