Script of Data Modeling part to create initial data structure.

```java
static MongoCollection<Document> col1;
    static MongoCollection<Document> col2;
    static int productid=1;
    static int userid =1;
    static int orderid=1;


    public static void createConnection(String mongoDBURL, String mongoDBName) throws
Exception{
        MongoClient client = getClient(mongoDBURL);
        MongoDatabase db = client.getDatabase(mongoDBName);
        col1 = db.getCollection("Users");
        col2 = db.getCollection("Products");
    }

    public static void main(String[] args) throws Exception {
        final String mongoDBURL = "None";
        final String mongoDBName = "ITEM";

        createConnection(mongoDBURL,mongoDBName);

        Fairy fairy = Fairy.create();

        //int i=1;
        while(userid<1001){
            Person person =fairy.person();
            //BaseProducer name = fairy.baseProducer();
            String username = "user"+userid;
            String password = "password"+userid;
            String firstname =person.getFirstName();
            String lastname = person.getLastName();
            boolean val = createAccount(username,password,firstname,lastname);
            if(val){
                userid++;
            }
```

```java
    }


    while(productid<1001){

        TextProducer text = fairy.textProducer();
        String name = "prod"+productid;
        String description = text.sentence();
        BaseProducer cost = fairy.baseProducer();
        int price = cost.randomBetween(1,100);
        int initialStock = cost.randomBetween(1,1000);
        boolean val = addProduct(productid, name, description,price,initialStock);
        if(val){
            productid++;
        }
    }


    int k=0;
    while(k<20){
        int j=1;
        while(j<1001){
            //int p=j;
            BaseProducer bint = fairy.baseProducer();
            int id = bint.randomBetween(1,1000);
            String username1 = "user"+id;
            String password1 = "password"+id;
            BaseProducer intval = fairy.baseProducer();
            int prodid = j;
            float rating = intval.randomBetween(0,10);
            TextProducer text1 = fairy.textProducer();
            String reviewText = text1.sentence();
            boolean val = postReview(username1,password1, prodid, rating, reviewText);
            if(val){
                j++;
            }
        }
        k++;
    }


    while(orderid<10001){
        BaseProducer bord = fairy.baseProducer();
        int id = bord.randomBetween(1,1000);
```

```java
        String username2 = "user"+id;
        String password2 = "password"+id;

        Map<Integer,Integer> listOfProductsAndQuantities = new HashMap<>();
        while(listOfProductsAndQuantities.size()<10){
            int prodid = bord.randomBetween(1,1000);
            int quant = bord.randomBetween(1,50);
            listOfProductsAndQuantities.put(prodid,quant);
        }
        DateProducer d = fairy.dateProducer();
        LocalDateTime date = d.randomDateInThePast(50);
        boolean val = submitOrder(orderid,true,date.toLocalDate(),username2,password2,
listOfProductsAndQuantities);
        if(val){
            orderid++;
        }
    }
}


private static MongoClient getClient(String mongoDBURL) {
    MongoClient client = null;
    if (mongoDBURL.equals("None"))
        client = new MongoClient();
    else
        client = new MongoClient(new MongoClientURI(mongoDBURL));
    return client;
  }
```