

IMPLEMENTATION OF THE AUTONOMOUS AGENTS.

This can be run on Command Prompt or on Netbeans or any Java Application.

To run on Command Prompt (cmd) – extract file and on **cmd** type java Agents, the program will start.

For NetBeans, simply import files and run. Customer and Retailer interface has 3 clients and sellers. See below implementation steps:

When the program starts running, a random customer agent submits a purchase request with a variety of criteria/requirements and a randomly chosen value for each criterion. I've identified three clients for my project: **customers1, customer2, and customer3**, which together make up the customer interface.

When a request is made, the broker agent gets it, considers the order, and then starts the transaction by getting in touch with the suitable/relevant retailer(s) to get their offers on the request. I have identified **seller1, seller2 and seller3** for my project. From the retailer interface, you may also view bids and products.

Retailers have the option to randomly accept or reject the offer. The offers are then sent back to the broker agent, who looks for the best offer once all retailers have submitted theirs (i.e., the lowest price offer etc).

The customer is then given the broker agent's best offer recommendation and given the option to buy or not. Most times the cost will influence the choice. Only when the offered price is accepted and falls within the price category is the purchase made. **See below Screenshots.**

```
Customer Interface
Enter Customer ID to continue
CUSTOMER1
Select a Product Id to Bid
Id Product Price Retailer
1. Product1 10.0 seller1
2. Product2 12.0 seller2
3. Product3 15.0 seller3
3
Enter quantity you intend to purchase
15
Enter enter intended price
14
You are about to bid on :
Product3 15.0 seller3
Enter yes or no to continue
yes
Your order has been submitted succesfully
Welcome
Select an Action
1. Customer
2. Retailer
2
Retailer Interface
Enter Seller ID to continue
seller1
Select an Action
1. View Bids
2. View Products
2
```

```
Retailer Interface
Enter Seller ID to continue
seller2
Select an Action
1. View Bids
2. View Products
2
Id Product Price Retailer
1. Product2 12.0 seller2
Enter BACK to go back
back
Select an Action
1. View Bids
2. View Products
1
Avalable Bids :
Id Product Price BidPrice
1. Product2 12.0 10.0
Select a bid id to continue
1
Enter yes/no to accept or deny bid
yes
Response Saved Succesfully
```