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HW3 Part1 – Design Document: Deliverable 1

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A pdf document that details:

- the interfaces for the classes you choose to use - methods they will have, the methods they will call/use
- the data members that your classes will have

→ User class

◆ Methods:

- Constructor()
- GetUniqueID()
- GetAccountBalance()
- GetName()
- SetName()
- GetPhoneNumber()
- SetPhoneNumber()
- ViewMessageHistory()
- SendNewMessage()

◆ Members:

- UniqueID\_
- Account Balance\_
- Name\_
- Phone number\_
- Address\_
- Message history\_

◆ Seller sub-class

• Methods:

- PostProduct(): Post product for sale
- GetOverview(): Get an overview of their products that have been sold or are yet to be sold
- EditBids(): Open/ close bids on their products

• Members:

- salesList\_: List of products for sale

◆ Buyer sub-class

• Methods:

- PlaceBid(): Place a bid on a product of their choice
- GetOverview(): get an overview of the bids they have placed
- ViewHistory(): view the history of products they have bought

• Members:

- bidList\_ : List of items being bid on

## → Product Class

### ◆ Methods:

- Constructor(Quality,BasePrice,ProductName)
- GetBidHistory()
- GetProductName()
- AddBid()
- GetBasePrice()
- GetListingID()
- GetQuality()
- GetActiveforBid()
- SetActiveforBid()

### ◆ Members:

- ProductName\_
- ListOfBids\_
- BasePrice\_
- ListingID\_
- Quality\_
- bool ActiveForBidding\_

### ◆ Tech Product 1

### ◆ Automotive Product 2

### ◆ Furniture Product 3

### ◆ Recreation Product 4

### ◆ Health Product 5

## → Driver class

### ◆ Methods

- GetInstance()
- GetUserByID()

### ◆ Members

- Users
- ActiveUser
- Products
- Write product/bid to CSV

## • pseudocode for your main function

- Initialize program with csv files
- Main Menu Loop:
  - Choose Buyer/Seller Role
  - If Buyer: Present Buyer Options
  - If Seller: Present Seller Options
  - If Quit: Re-prompt menu
- End run

**2 csv files with initialization data - you can decide the structure and fields in these files.**

- **User information: This would include information about sellers and buyers.**

- <https://docs.google.com/spreadsheets/d/1ibOHCxZoTRjfweEEKcxGJ21301D9IzQH850BCVjpPm4/edit?usp=sharing>

- **Product/Bid information: Consider this to be historical data. Plan to have product information, buyer information and seller information at the least. This file will help with features where the seller can look at historical data to decide a price for their product. You do not have to normalize this data.**

- <https://docs.google.com/spreadsheets/d/1k8Cf6QXQSZpIN2LWcFW-R9J2elej2xw160MozYuvApl/edit?usp=sharing>