Design Document
Methods and Tools in SW Development
https://github.com/rushmaparajuli39/Methods-Tools-Group5

I. Group Information

Group Number: 5

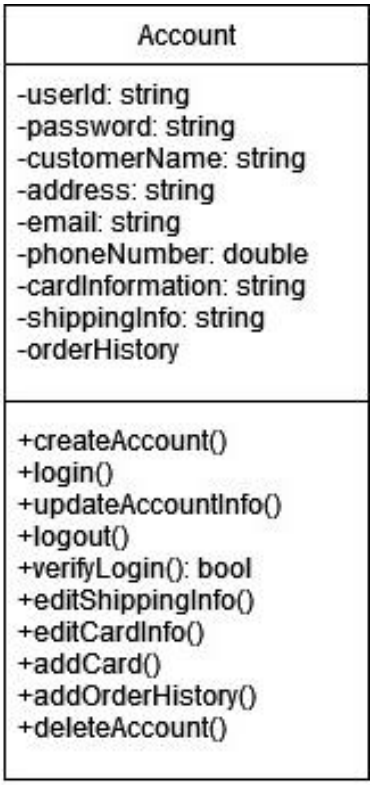
Group Member names/netIDs:

- Rushma Parajuli
    - rp1349
- Khem B Dhami
    - kbd167
- Safal Niraula
    - sd1663
- Bikash Hamal
    - kbh346

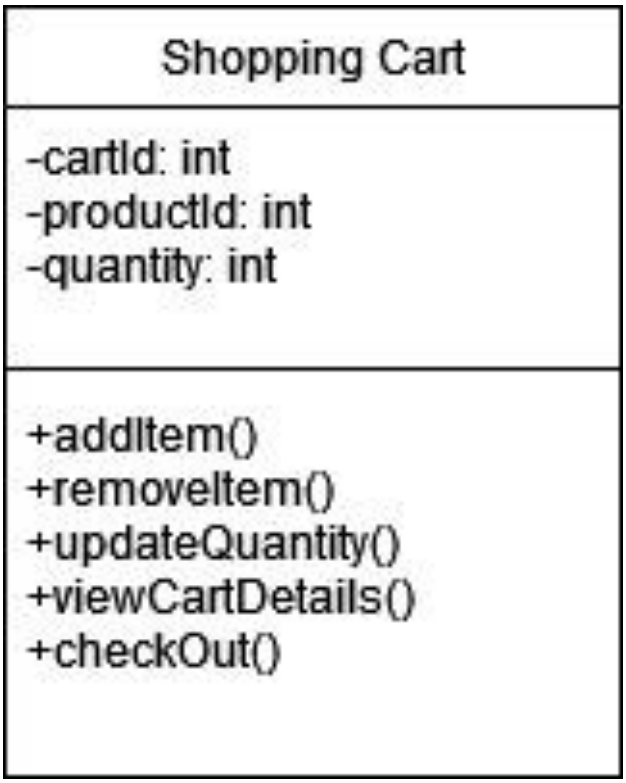
What classes are you going to have? Explain why.

- We are going to have four different classes: namely, Account, Shopping Cart, Inventory, and Item Categories. These four different classes provide us detailed data/functions that we will be using into the project.

II. Detailed Class Diagrams



- +createAccount()
  – allows user to create an account
- +login()
  – lets user to login
- +updateAccountInfo()
  – allows user to update account information
- +logout()
  – lets user to logout
- +verifyLogin(): bool
  – to verify login information
- +editShippingInfo()
  – allows user to edit shipping information
- +editCardInfo()
  – allows user to edit payment information
- +addCard()
  – lets user to add another/different card
- +addOrderHistory()
  – helps add order to user’s order history
- +deleteAccount()
  – lets user to delete their account



- +addItem()

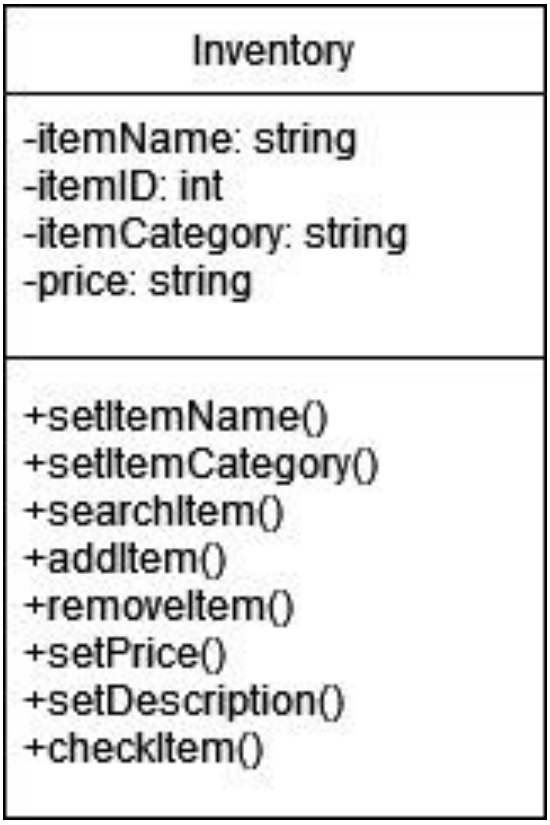
  – allows user to add items to cart
- +removeItem()

  – lets user to remove item from cart
- +updateQuantity()

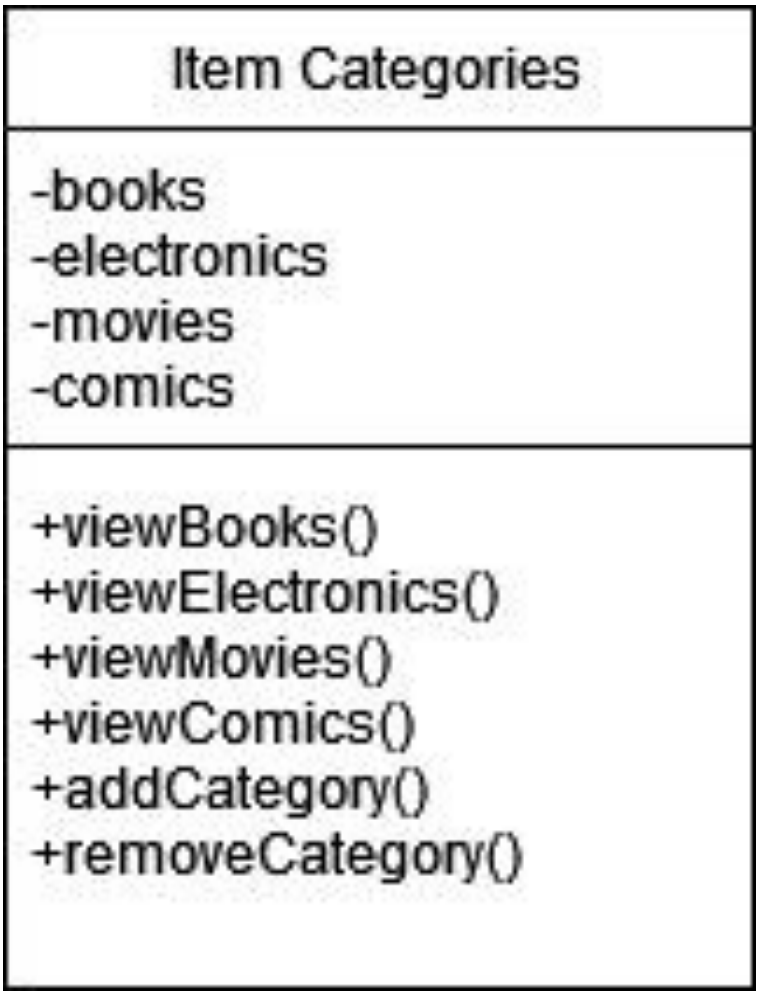
  – allows user to update number of items they want
- +viewCartDetails()

  – lets user to view cart details
- +checkOut()

  – lets user to move to checkout function



- +setItemName()
  – helps set up item name
- +setItemCategory()
  – helps categorize item
- +searchItem()
  – search item in the inventory
- +addItem()
  – add more items to the inventory
- +removeItem()
  – remove items from the inventory
- +setPrice()
  – helps set up price for the item
- +setDescription()
  – provides description for the item
- +checkItem()
  – shows if the item is available or not



- +viewBooks()
  – views items in Books category
- +viewElectronics()
  – views items in Electronics category
- +viewMovies()
  – views items in Movies category
- +viewComics()
  – views items in Comics category
- +addCategory()
  – helps adding new category
- +removeCategory()
  – helps removing an existing category

III. Menu Information

Before login:

- Login
- Create Account
- Exit Program

After login:

- Item-Categories
    - Books
    - Electronics
    - Movies
    - Comics
- Items
    - Price
    - Name
    - Description
- Cart Information
    - Go back
    - View Cart
    - Remove Item from Cart
    - View Cart Details
    - Check Out
- Account
    - Update Account
    - Update Shipping Information
    - Update Payment Information
- Exit Program

Does your menu cover all requirements given? If not, explain why certain requirements don't have a distinct menu option?

- No, our menu does not cover requirements for viewing order history. We are going to use method "addOrderHistory()" and create functions to view the user's order history. Also, users cannot directly view the databases. User will interact with database by retrieving price or stocks using getters and updating stocks using setters.

IV. Information Storage

How is your group storing information?

- We will be using mySQL.

Include one of these lines of questioning based on your storage schema:

- If a database, what kind of database?
- We will be using Relational Databases (RDBMS).
    - How many database tables will you have?
        - Four

What information are you going to store in each (table / file depending on schema)?

- *Users*
    - *First name*
    - *Last name*
    - *Username*
    - *Password*
    - *Email*
    - *Phone*
    - *Shipping Information*
    - *Payment Information*
    - *Order History*
- *Categories*
    - *Books*
    - *Electronics*
    - *Movies*
    - *Comics*
- *Item*
    - *Name*
    - *Price*
    - *Description*
    - *Category*

- *Cart*
    - *Item ID*
    - *Total*
    - *Item Quantity*
    - *Check Out*