

**UML Class diagram description**

Class	Method	Intention
Main		Main class
	void process(String transaction )	The basic process of the data from daily transaction file and classify them with transaction number
Reader		Utility
	Reader(String filename)	Create a new instance of the reader for a specific file
	readUser(String filename)	Specialized reader for user file
	readItem(String filename)	Specialized reader for item file
ProcessAccount	addAccount(String transaction)	Create a new user account at the local level
	deleteAccount(String transaction)	Mark an account for deletion at the local level
	addCredit(String transaction)	Add credits to an account at the local level
	refund(String transaction)	Refund credits between two accounts at the local level
	ProcessAccount()	Default constructor
	ProcessAccount(Map<String, User>)	Constructor with map parameter
ProcessItem	bid(String transaction)	Mark an item to be bid on at the local level
	advertise(String transaction)	Create a new auction at the local level
	ProcessItem(Map<Pair	Constructor with hashmap parameter for items

	<String, String>, Item> Items)	
Writer	Writer(Map<String, User>)	Constructor for writer
	getItem(Map<Pair<String, String>, Item>)	Initializes item hashmap to write to file
	writeUsers()	Writes local changes to user file
	writeItems()	Writes local changes to item file
User	User(String username, String user_type, double credit)	Creates new user instance with all parameters set
	toString()	Get a user in its string format
Item	Item(String item_name, String seller, String buyer, int auction_day, double current_bid)	Creates new item instance with all parameters set
	toString(String cmdLine)	Get an item in its string format

UML Diagram:

