

UML Class Diagram Descriptions

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- User: An abstract superclass that describes all other types of user accounts
 - setUsername(): Sets the name of the user
 - setUserType(): Sets the user type of the account
 - setUserID(): Sets the ID of the user
 - setCredits(): Sets the amount of credits that the account holds
 - getUsername(): Returns the username of the account as a string
 - getUserType(): Returns the type of user as a string
 - getUserID(): Returns the ID of the user as an integer
 - getCredits(): Returns the amount of credits the account holds as a double
- Admin: A subclass of user that has the most privileges of any other user type
 - createUser(): Allows an admin to create new users
 - deleteUser(): Allows an admin to delete pre-existing users
 - addCredit(): Allows an admin to add credit to another user in the system
 - refund(): Allows an admin to issue credit from a buyer's account to a seller's account
 - bid(): Allows an admin to place a bid on an item
 - advertise(): Allows an admin to put an item up for auction
- FullStandard: A subclass of user that can both bid and sell
 - bid(): Allows user to place a bid on an item
 - advertise(): Allows user to put an item up for auction
- BuyStandard: A subclass of user that can only bid
 - bid(): Allows user to place a bid on an item
- SellStandard: A subclass of user that can only sell
 - advertise(): Allows user to put an item up for auction
- Menu: The class in which users will enter in commands that correspond with their privileges
 - login(): Presents the login screen to the user
 - logout(): Logs the user out of their account
 - addCredit(): Allows a user to add credits to their account or another account if they have the required privileges
 - bid(): Allows a user to place a bid on an item
 - advertise(): Allows a user to put an item up for auction
 - createUser(): Allows a user to create new users
 - deleteUser(): Allows a user to delete pre-existing users
 - refund(): Allows a user to issue credit from a buyer's account to a seller's account
 - printMenu(): Displays all options available to the user based on their account privileges
- Item: The class that holds all information regarding any item in the system
 - setItemName(): Sets the name of the item
 - setItemID(): Sets the ID of the item
 - setDescription(): Sets the description of the item
 - setCurrentBid(): Set the current bid price of the item
 - setBidEndDate(): Sets the end of the bid date for the item
 - getItemName(): Returns the name of the item as a string
 - getItemID(): Returns the ID of an item as an integer
 - getDescription(): Returns the description of an item as a string

- `getCurrentBid()`: Returns the current highest bid on an item as a double
 - `getBidEndDate()`: Returns the date the bid will end as `time_t`
- `DailyTransactionFileManager`: Manages and updates the data stored in the Daily Transaction File
 - `isLoggedOut()`: Returns a boolean that is used to determine if the user is logged out
- `CurrentUserAccountsFileManager`: Manages and updates the data stored in the Current User Accounts File
 - `login()`: Processes a login request from the menu and determines if the user exists
 - `findUser()`: Finding existing user in Current User Accounts File
- `AvailableItemsFileManager`: Manages and updates the data stored in the Available Items File
 - `addItem()`: Adds item to Available Items file