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| Class / Method | Description |
| **BackEnd.java**  TICKETS\_FILE, String  USERS\_FILE, String  TRASNSACTION\_FILE, String | Reads each file and has functions that put the data read into arraylists. It is the “main hub” that contains functions useful for transactions |
| getTicketData(): ArrayList<String> | Reads the available\_tickets.data file and converts the details into an arraylist  **Return ArrayList<String>**: string arraylist that contains information of the tickets from the tickets file |
| getUsersData(): ArrayList<String> | Reads the user\_accounts.data file and converts the details into an arraylist  **Return ArrayList<String>**: string arraylist that contains information of the users from the users file |
| getTransactionData(): ArrayList<String> | Reads the transactions.data file and converts the details into an arraylist  **Return ArrayList<String>**: string arraylist that contains information of the transactions from the tickets file |
| floatToStringFormat(float f,  int constraint): string | Converts a float value to the string and adds trailing zeroes. Used for the transaction log  **f:** float to be converted to the string  **constraint**: indicates number of allocated characters in log format  **Return String:** zeroes concatenated with string format of float value |
| findUser(String target,  ArrayList<String>usersData): int | Finds a user in the arraylist that contains data of each user, by their username  **target:** the username of the account  **usersData:** arraylist containing data of each user, which will be updated  **Return int:** index of the user from the arraylist |
| saveToOutput(ArrayList<String>usersData,  ArrayList<String>ticketData): void | Writes the new arraylists to the new user accounts file and tickets file.  **usersData**: the updated arraylist containing user data. , which will be updated  **ticketData**: updated arraylist containing ticket data, which will be updated |
| **TicketTransaction.java** | Contains transactions that deal with updating the tickets file. |
| updateDelete(String data,  ArrayList<String>usersData,  ArrayList<String>ticketData): void | Removes the selected user from the users data, and any tickets that the user is holding.  **data**: contains transaction data, such as the user to be deleted.  **usersData**: arraylist containing data of the users, which will be updated  **ticketData**: arraylist containing data of the tickets, which will be updated |
| updateSell(String data,  ArrayList<String>ticketData): void | Adds the credits to the seller’s account while subtracting the same amount from the buyer’s account.  **data**: number of credits to be transferred  **ticketData**: arraylist containing data of the tickets, which will be updated |
| updateBuy(String data,  ArrayList<String> usersData,  ArrayList<String> ticketData): void | Subtracts the number of tickets sold from the seller, while adding the total cost to the seller’s account.  **data**: details of the transaction, such as the number of credits  **usersData**: arraylist containing data of the users, which will be updated  **ticketData**: arraylist containing data of the tickets, which will be updated |
| **AccountTransaction.java** | Contains transactions that only deal with user accounts |
| updateAddCredit(String data,  ArrayList<String>usersData: void | Adds an amount of credits to a user’s account.  **data:** the amount of credits to be added  **usersData**: arraylist containing data of the users, which will be updated |
| updateRefund(String data,  ArrayList<String> usersData): void | Removes an amount of credits from the selected seller while adding that same amount to the buyer  **data** amount of credits to be transferred  **usersData:** arraylist containing data of the users, which will be updated |
| updateCreate(String data,  ArrayList<String>usersData): void | Appends a new user to the arraylist of users  **data:** details of the new user to be created  **usersData:** arraylist containing data of the users, which will be updated |