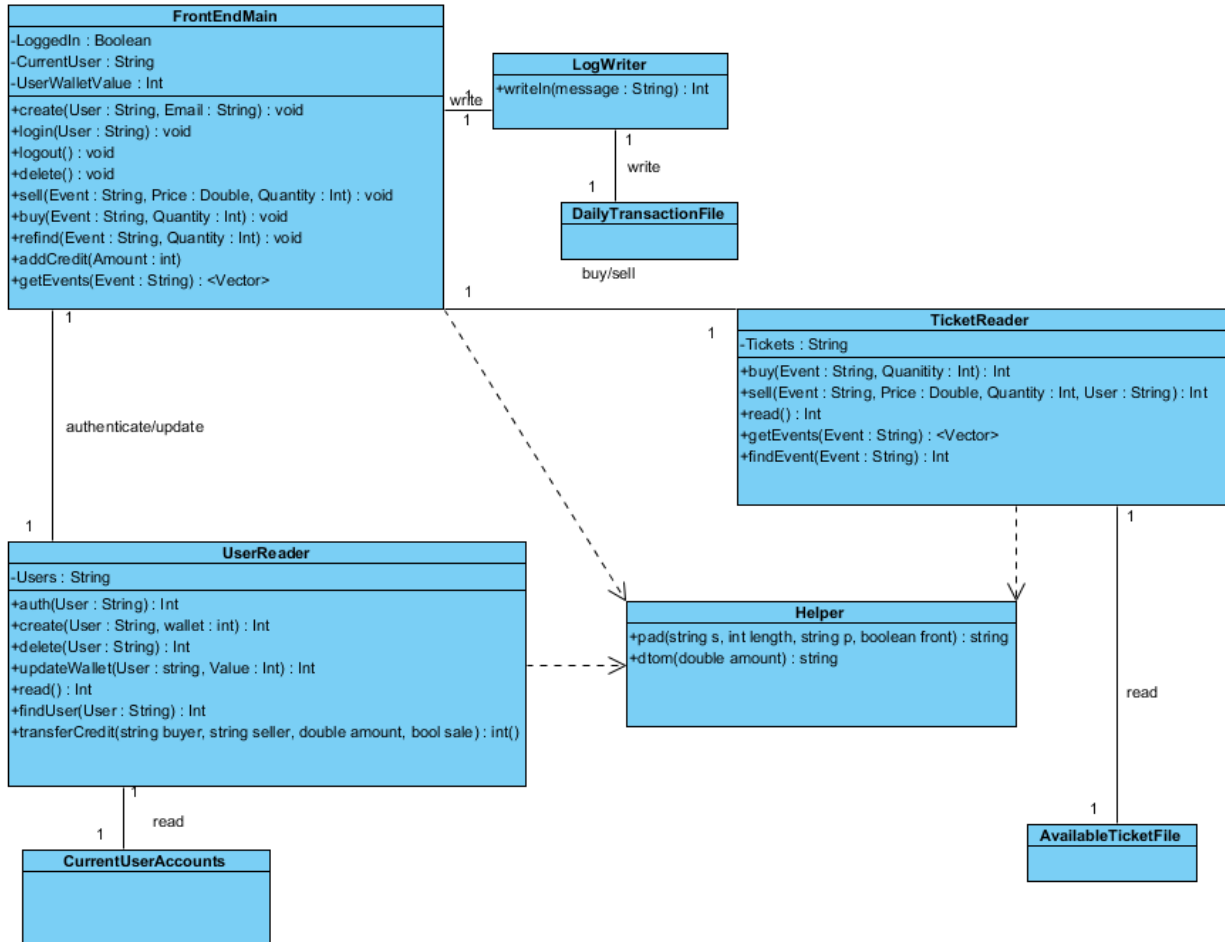Ticket Sales Project
Phase 2
Team Name Working

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Class Diagram

FrontEndMain

-LoggedIn : Boolean
-CurrentUser : String
-UserWalletValue : Int

+create(User : String, Email : String) : void
+login(User : String) : void
+logout() : void
+delete() : void
+sell(Event : String, Price : Double, Quantity : Int) : void
+buy(Event : String, Quantity : Int) : void
+refind(Event : String, Quantity : Int) : void
+addCredit(Amount : int)
+getEvents(Event : String) : <Vector>

LogWriter

+writeln(message : String) : Int

write
1

write
1

1

DailyTransactionFile

buy/sell

1

TicketReader

-Tickets : String

+buy(Event : String, Quanitity : Int) : Int
+sell(Event : String, Price : Double, Quantity : Int, User : String) : Int
+read() : Int
+getEvents(Event : String) : <Vector>
+findEvent(Event : String) : Int

1

1

authenticate/update

1

UserReader

-Users : String

+auth(User : String) : Int
+create(User : String, wallet : int) : Int
+delete(User : String) : Int
+updateWallet(User : string, Value : Int) : Int
+read() : Int
+findUser(User : String) : Int
+transferCredit(string buyer, string seller, double amount, bool sale) : int()

Helper

+pad(string s, int length, string p, boolean front) : string
+dtom(double amount) : string

read

1

read

1

1

AvailableTicketFile

read
1

1

CurrentUserAccounts

Description

   In the FrontEndMain class, the user cannot perform any operation or transaction and will need to be logged in so the method login allows them to login. After they are logged in, they can select operations to be performed assuming they have the authorization. The logout method would log the user out of the system. The create method would create a new user account and directs it to the UserReader class and the delete method deletes an account and also directs it to the UserReader class. The sell and buy method is for the ticket sales and will be directed to the TicketReader class but not before the getEvent method used to display the events name. The refund and addCredit method will be directed to the UserReader class. The addCredit and the refund is related to the updateWallet method.

   Certain operations can only be performed by accounts with privileges and to do that the UserReader class would search the CurrentUserAccounts database using the read and findUser class. The auth method and see whether or not the user has the authorization to perform the operation. If they do not have the authorization to do it, it would let the user know that they are not allowed to do that. The create, delete, and updateWallet method/operations needs valid information from the user in order to perform correctly and successfully. The information will then be written to the LogWriter to update the database.

   When the user selects the buy or sell operation, assuming they have the authorization to do it, the user would be prompted to enter information of the event that they want to see. The TicketReaderWriter class would then check AvailableTicketFile database using the read method and see whether the information entered is valid, if it is not, it would tell the user that the information entered is either incorrect or not enough tickets. The buy and sell method stores the information into the LogWriter so that it updates the system afterwards. The getEvents method is used when the user selects the buy operation and what it does is that it lists all the events that are for sale. It's not the same as the findEvents method because findEvents is for finding specific event name.

   The LogWriter class has a method called WriteIn where it would write to the DailyTransactionFile database after every operation that has been successfully completed.

   Every class except for the logWriter class is dependent on the Helper class. To format the strings to the correct length, instead of multiple copies of it, the Pad method does the work. The other method, dtom, takes the decimal or double into money format.

   When it comes to transfering money whether from buyer to seller through the buy function or seller to buy through the refund function, there needs to be a function to transfer the money between accounts and that function is in the UserReader class and its called transferCredit.