

CS3343 Lions3 (Group 3)



[Check Out Github Repository](#)

commit activity 190/year

contributors 6

Stars 1

Forks 2

Motivation

One of the most famous personal finance quotes by Warren Buffett is:

Do Not Save What Is Left After Spending, Spend What Is Left After Saving

It clearly points out the importance of financial management. During this era, there are multiple ways to spend and earn money, and there are even more types of currency. We aim to build a simple application to record the daily expense and income, furthermore, we will help customers to manage their finance by offering a saving plan or provide an overview of what they have spent.

Features

Lions3 is a fastforward and user friendly finance management system, it has following features:

- Personal Finance Management System
 - Record Finance
 - View Finance
 - Plan Finance
- Corporation Accounting System
 - Accounting Cycle
 - Inventory Management

Installation & Run

Lions3 requires [Java SE](#) and [Java SE Development Kit](#) to run. This software recommend users install Java SE Runtime Environment version ≥ 8 (JRE8), lower version is not guarantee to work.

To chechk JRE version on your local machine, please turn on your cmd/ terminal and run

```
$ java -version
```

To run the program, please make sure there are three file in your environment

1. testCorporate.txt (A txt file which including multiple corpporation-level user input)
2. testPersonal.txt (individual user input file)
3. execute.sh (execute.bat for windows user, for executing lions3.jar)
4. lions3.jar (File to run java code)

! ! > is for windows user/ \$ is for unix-like user/ # is the output text

Start Executing

```
$ sh execute.sh  
> execute
```

you will see a confirmation text to ask you if you want to go on further, press **ENTER** to proceed

Choose Personal or Corporation

```
# Welcome To Lions3 Finance Management System!  
# Please select the accounting system to use ([P] personal/ [C] corporate/ [E] exit):  
$ P # If you want to user personal finance management system  
$ C # If you want to user corporation finance management system
```

Personal

After the user choose personal, the terminal will pop up the avaiable function and shortcut for user to select.

**for more detail of these functions, please check out the User Guideline below*

```
# Please specify which function you will like to use:  
$ T  
  
# Please input the file path name:  
$ testPersonal.txt
```

Corporation

If the user chooses to use the corporation accounting system by typing [C] in the previous step, the system will then prompt the user to decide whether to use the CLI (command-line interface) or directly input the commands via a textfile.

```
# Please select whether to use our cli (command line interface) service or to directly  
input the commands via a text file of testcases: ([CLI] cli / [T] textfile)
```

```

$ CLI # if you would like to use the command-line interface to interact with the
system
$ T # if you are to input the commands directly via a text file

# Please enter the filename of the text file:
$ testCorporate.txt

```

Error? if normal start up can't run the jar projecr, please run to initial the java project

```
java -jar lions3.jar
```

User GuideLine

Personal Finance Management System

Command	Execution Name	Parameters	Description
T	Input text file	file name	It will read the .txt file with comman in it.
HOME	Back To Home	NULL	Back to home page UI.
AA	Add Account	(Account Type, ID, balance, debt, interest, withdraw date)	This is a function to add a variety of accounts and record inside the accounts list of the user. There are four types of account which will also be differentiated inside this function.
AP	Add Plan	(Plan Type, Name, Start date, End date, Goal Amount, Interest Rate, Debt Owner, Description)	The plan has three different types and each type has its corresponding parameters. This function will create a plan based on the type specified by the user and added to the plan list.
RC	Record Transaction	(Transaction Type, amount, Account ID, Plan ID, Description, Date, Category)	This function is for the user to add transactions and recorded them in the user transaction history. Every transaction can specify the account and the plan which the user want to recorded in.
LA	List All Account	NULL	list all the accounts for this user
LP	List All Plan	NULL	list all the plans for this user
LT	List Transactions	NULL	list all the transactions for this user

VEA	View Expense By Account	NULL	The user can view the expense by each account
VEC	View Expense By Category	NULL	The user can view the expense by each category
VEM	View Expense By Member	NULL	The user can view the expense by each member
VP	View Plan Detail	Plan ID	The user can view a single plan detail, and the content of the detail will be changed refer to the plan type.
CAS	Saving Plan Get Average Saving	NULL	It's a utility function to calculate the average saving amount of giving duration of time

TestCorporation.txt (all commands are case-insensitive)

Command	Execution Name	Parameters	Example
REC	record transaction	date (dd/mm/yyyy), account to debit, account to credit, amount, description	REC 21/11/2020 Cash Cash 10000 Borrow money from the bank
ALL	view all available accounts	n/a	
B	purchase inventory	unit cost, # units, account to credit/pay with	B 5 50 29/11/2020 Cash
S	sell inventory	unit price, # units to sell, date (dd/mm/yyyy), account to debit, cost method [FIFO/LIFO]	S 8 30 30/11/2020 Cash LIFO
CLS	perform closing entries	date (dd/mm/yyyy)	CLS 30/11/2020
J	view journal	n/a	
TL	view the T-ledger of an account	account name	TL Service-Revenue
BS	view balance sheet	n/a	
ST	view storage	n/a	

Q	return to homepage	n/a	
HELP	view all commands	n/a	

Techs

Lions3 using following techniques and software for development.

Tech	Link	Description
GitHub	https://github.com/	code hosting platform
Git	https://git-scm.com/	version control
Google Drive	https://www.google.com.hk/drive/about.html	Cloud Storage
Eclipse	https://www.eclipse.org/downloads/	Java IDE
Gitkraken	https://www.gitkraken.com/	Git GUI
JUnit	https://junit.org/junit5/	Java testing
Bugzilla	https://www.bugzilla.org/	Bugs reporting