

1. The contains 2 packages models , split and models
2. Models contains two .java files expense manager class and a user class  
User class in basic implementation of user(id & name) and expense manager handle all the important operations like adding expense to system , showing balance for all or for a particular person .
3. Models also contain a package split in which there are 4 .java files
  1. A split class - contains basic information that who had paid , how much amount and list of users who were involved in expense
  2. Equal split class - perform the operations if bill is to be divided equal and store the amount upto 2 decimal points.
  3. Percent split class - perform the operations if bill is to be divided percent and store the amount upto 2 decimal points
  4. Exact split class - perform the operations if bill is to be divided in a exact way and store the amount upto 2 decimal points
4. The SPLIT package contain splitwise class in which main function is being called

TO RUN THE PROGRAM COMPILE THESE .JAVA FILE AND RUN THE "SPLITWISE CLASS"  
AFTER RUNNING THE FILE YOU CAN GIVE INPUT

1. To add any expense to system follows the following syntax  
`<EXPENSE>single space<user who paid the bill>single space<amount paid>single space<no. Of .users in which the bill to be splitted > single space <list of users with whom bill must be splitted>single space<type of expense> (note if expense type is equal split then stop here otherwise))single space< list of percent or amount wrt to users >`

Sample :

If user1 paid 300\$ that to be splitted between 3 users u1, u2 , u3 equally then follow this

`EXPENSE u1 300 3 u1 u2 u3 EQUAL`

If user2 paid 300\$ That to be splitted between 3 users u1 , u2 , u4 in way that user 1 pay 200\$ user2 pays 75 and user2 25 then

`EXPENSE u2 300 3 u1 u2 u4 EXACT 200 75 25`

If user1 paid 300\$ That to be splitted between 3 users u1 , u2 , u4 in way that user pays 20 percent user2 pays 50 percent and user 4 pays 30 then

`EXPENSE u1 300 3 u1 u2 u4 PERCENT 20 50 30`

2. To show all balances of user give the command "SHOW" or "SHOW ALL"  
This will print all the records stored in system .
3. To show balance of particles user give the command "SHOW userid"

This will print the amount which user owes will all other users

4. In the input /output format given in problem statement no user addition command was not give so initially we have added 4 users

“u1” , “u2” , “u3” ,”u4” .

more users can be added in the system through “SPLITWISE CLASS” .

#### FOR OPTIONAL GUI COMPONENT

Can simply be accessed by downloading the apk file attached .

Implemented using flutter and java .

Download file and run it in android system .