**Source Code of Fix Bugs in the application**

package fixbugapp;

import java.util.ArrayList;

import java.util.Collections;

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

/\*System.out.println("Hello World!");\*/

System.out.println("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.println("\tWelcome to TheDesk \n");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

optionsSelection();

}

private static void optionsSelection() {

String[] arr = {"1. I wish to review my expenditure",

"2. I wish to add my expenditure",

"3. I wish to delete my expenditure",

"4. I wish to sort the expenditures",

"5. I wish to search for a particular expenditure",

"6. Close the application"

};

int[] arr1 = {1,2,3,4,5,6};

int slen = arr1.length;

for(int i=0; i<slen;i++){

System.out.println(arr[i]);

}

//ArrayList<Integer> arrlist = new ArrayList<Integer>();

ArrayList<Integer> expenses = new ArrayList<Integer>();

expenses.add(1000);

expenses.add(2300);

expenses.add(45000);

expenses.add(32000);

expenses.add(110);

//expenses.addAll(arrlist);

System.out.println("\nEnter your choice:\t");

Scanner sc = new Scanner(System.in);

int options = sc.nextInt();

for(int j=1;j<=slen;j++){

if(options==j){

switch (options){

case 1:

System.out.println("Your saved expenses are listed below: \n");

System.out.println(expenses+"\n");

optionsSelection();

break;

case 2:

System.out.println("Enter the value to add your Expense: \n");

int value = sc.nextInt();

expenses.add(value);

System.out.println("Your value is updated\n");

//expenses.addAll(arrlist);

System.out.println(expenses+"\n");

optionsSelection();

break;

case 3:

System.out.println("You are about the delete all your expenses! \nConfirm again by selecting the same option...\n");

int con\_choice = sc.nextInt();

if(con\_choice==options){

expenses.clear();

System.out.println(expenses+"\n");

System.out.println("All your expenses are erased!\n");

} else {

System.out.println("Oops... try again!");

}

optionsSelection();

break;

case 4:

sortExpenses(expenses);

optionsSelection();

break;

case 5:

searchExpenses(expenses);

optionsSelection();

break;

case 6:

closeApp();

break;

default:

System.out.println("You have made an invalid choice!");

break;

}

}

}

}

private static void closeApp() {

System.out.println("Closing your application... \nThank you!");

}

private static void searchExpenses(ArrayList<Integer> arrayList) {

int leng = arrayList.size();

System.out.println("Enter the expense you need to search:\t");

Scanner s =new Scanner(System.in);

int ele =s.nextInt();

int flag=0;

for (int i = 0; i < arrayList.size(); i++) {

if(ele==arrayList.get(i))

{ System.out.println("Expense found at position: "+i);

flag=1;

break;

}

}

if(flag==0)

{

System.out.println("Expense not found");

}

}

private static void sortExpenses(ArrayList<Integer> arrayList) {

int arrlength = arrayList.size();

Collections.sort(arrayList);

System.out.println("Sorted Expenditure");

for(int i=0;i<arrlength;i++)

{

System.out.println(arrayList.get(i));

}

System.out.print("\n");

}

}

GitHub Link:

https://github.com/ashwinbalaji44/Assignment.git