Fix Bugs of the Application : Source Code

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Note: The highlighted part of the code represents the change in code wrt the provided boilerplate code.

```java
import java.util.ArrayList;
import java.util.Collections;
import java.util.Iterator;
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {

        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]);
            // display the all the Strings mentioned in the String array
        }
        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");
```

```java
                    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 sc =new Scanner(System.in);
        int val = sc.nextInt();
        boolean res = arrayList.contains(val);
        if( res == true ){
              System.out.println("Expenditure found!\n");
        }
        else {
              System.out.println("Expenditure not found!\n");
        }
    }

    private static void sortExpenses(ArrayList<Integer> arrayList) {
        int arrlength =  arrayList.size();
        ArrayList<Integer> arrlist = new ArrayList<Integer>();
        Collections.sort(arrayList);
        System.out.println("The sorted expenditures are as follows: \n"+arrayList);
        System.out.println("\n");


    }
}
```