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package javapract;
import java.util.ArrayList;
import java.util.Collections;
import java.util.Scanner;



public class P1S4P1 {
        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 slen = arr.length;
    for (String s : arr) {
      System.out.println(s);
    }
    ArrayList<Integer> expenses = new ArrayList<>();
    expenses.add(1000);
    expenses.add(2300);
    expenses.add(45000);
    expenses.add(32000);
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        expenses.add(110);


        System.out.println("\nEnter your choice:\t");
        Scanner sc = new Scanner(System.in);
        int options = sc.nextInt();
        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");
                optionsSelection();
                break;
            case 3:
                System.out.println("You are about to 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;
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        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) {
    Scanner sc = new Scanner(System.in);
    int leng = arrayList.size();
    System.out.println("Enter the expense you need to search:\t");
    int searchItem = sc.nextInt();
    if (arrayList.contains(searchItem)) {
        System.out.println("Expense found: " + searchItem);
    } else {
        System.out.println("Expense not found");
    }
```

```
    }

    private static void sortExpenses(ArrayList<Integer> arrayList) {
        Collections.sort(arrayList);
        System.out.println("Expenses sorted in ascending order: " + arrayList);
    }
}
```