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import java.util.*;
import java.util.Scanner;
public class assignment5 {
    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]);
            // 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:

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        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:

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        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
expense=sc.nextInt();
    if (arrayList.contains(expense))
        System.out.println("This expense is present in our system!"); else
        System.out.println("This expense is not present in our system!");
    //Complete the method
}

private static void sortExpenses(ArrayList<Integer> arrayList) {
    int arlength = arrayList.size();
    Collections.sort(arrayList);
    System.out.println("Sorted expenses : " + arrayList);

    //Complete the method. The expenses should be sorted in ascending order.
}
}

```