**package** project4;

**import** java.util.ArrayList;

**import** java.util.Collections;

**import** java.util.Scanner;

**public** **class** Main {

**private** **static** ArrayList<Integer> *expenses* = **new** ArrayList<>();

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

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

}

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");

*reviewExpenses*();

*optionsSelection*();

**break**;

**case** 2:

*addExpense*();

*optionsSelection*();

**break**;

**case** 3:

*deleteExpenses*();

*optionsSelection*();

**break**;

**case** 4:

*sortExpenses*();

*optionsSelection*();

**break**;

**case** 5:

*searchExpenses*();

*optionsSelection*();

**break**;

**case** 6:

*closeApp*();

**break**;

**default**:

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

*optionsSelection*();

**break**;

}

}

**private** **static** **void** reviewExpenses() {

**if** (*expenses*.isEmpty()) {

System.***out***.println("No expenses found.\n");

} **else** {

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

}

}

**private** **static** **void** addExpense() {

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

Scanner sc = **new** Scanner(System.***in***);

**int** value = sc.nextInt();

*expenses*.add(value);

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

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

}

**private** **static** **void** deleteExpenses() {

**if** (*expenses*.isEmpty()) {

System.***out***.println("No expenses to delete.\n");

**return**;

}

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

Scanner sc = **new** Scanner(System.***in***);

**int** con\_choice = sc.nextInt();

**if** (con\_choice == 3) {

*expenses*.clear();

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

} **else** {

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

}

}

**private** **static** **void** searchExpenses() {

**if** (*expenses*.isEmpty()) {

System.***out***.println("No expenses found.\n");

**return**;

}

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

Scanner sc = **new** Scanner(System.***in***);

**int** expenseToSearch = sc.nextInt();

**if** (*expenses*.contains(expenseToSearch)) {

System.***out***.println("Expense found in the list!\n");

} **else** {

System.***out***.println("Expense not found in the list.\n");

}

}

**private** **static** **void** sortExpenses() {

**if** (*expenses*.isEmpty()) {

System.***out***.println("No expenses found.\n");

**return**;

}

Collections.*sort*(*expenses*);

System.***out***.println("Expenses sorted in ascending order: " + *expenses* + "\n");

}

**private** **static** **void** closeApp() {

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

}

}