

Fit Zone(---RETIRED---)

Grade settings: Maximum grade: 100

Disable external file upload, paste and drop external content: Yes

Based on: [Fit Zone\(---RETIRED---\)](#)

Run: Yes **Evaluate:** Yes

Automatic grade: Yes

Fit Fortune is a well-known and efficient fitness centre around Dehradun. They wanted to find and count the number of clients based on the packages that they have enrolled. The chief trainer of the fitness centre intimates a software developer to help in their process. You, being the software developer, develop a Java program based on the requirement.

Component Specification: ClientInfo Class

Type (Class)	Attributes	Methods
ClientInfo	private Map<String, String> clientMap	Getter and setter methods for the attribute are included in the code skeleton.

Note: Here the **clientMap**, holds the Key as clientId and Value as packageName.

Requirement 1: Find the count of client Ids based on the given packageName.

Type (Class)	Methods	Responsibilities
ClientInfo	public int findTotalCountOfClientsBasedOnPackageName (String packageName)	This method accepts packageName as an argument. If the packageName matches the packageName present in the Map, it must count the number of client Ids on the given packageName and return the same. Else return -1. Condition: packageName is case-insensitive

Requirement 2: Filter the client Ids based on the packageName.

Type (Class)	Methods	Responsibilities
ClientInfo	public List<String> searchClientIdsByPackageName (String packageName)	This method filters the packageName and returns the list of client Ids that have the same packageName. Condition: packageName is case-insensitive

You are provided with the main method as code template and it is excluded from evaluation.

Note:

- In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user, and the rest of the text represents the output.
- Ensure to follow the object-oriented specifications provided in the question description.
- Ensure to provide the names for the classes, attributes, and methods as specified in the question description.
- Adhere to the code template, if provided.

Sample Input/Output 1:

Enter number of clients to be added

3

Enter the client details (Client Id: Package Name)

FIT0324:Silver

FIT5345:Gold

FIT5678:Silver

Enter the package name to find the total count of clients

Silver

Total number of clients with package name Silver is 2

Enter the package name to search for client Ids

Silver

Client Ids based on package name Silver

FIT0324

FIT5678

Sample Input/Output 2:

Enter number of clients to be added

3

Enter the client details (Client Id: Package Name)

FIT4556:Silver

FIT3456:Gold

FIT2312:Bronze

Enter the package name to find the total count of clients

Platinum

No clients found with package name Platinum

Enter the package name to search for client Ids

Bronze

Client Ids based on package name Bronze

FIT2312

Sample Input/Output 3:

Enter number of clients to be added

2

Enter the client details (Client Id: Package Name)

FIT4523:Gold

FIT3423:Silver

Enter the package name to find the total count of clients

Silver

Total number of clients with package name Silver is 1

Enter the package name to search for client Ids

Bronze

No clients found with package name Bronze

```
1 import java.util.ArrayList;
2 import java.util.HashMap;
3 import java.util.List;
4 import java.util.Map;
5 import java.util.Scanner;
6
7 public class ClientInfo {
8     private Map<String, String> clientMap = new HashMap<String, String>();
9
10    public Map<String, String> getClientMap() {
11        return clientMap;
12    }
13
14    public void setClientMap(Map<String, String> map) {
15        this.clientMap = map;
16    }
17
18    public int findTotalCountOfClientsBasedOnPackageName(String packageName) {
19        //Fill the code
20    }
21
22    }
23
24    public List<String> searchClientIdsByPackageName(String packageName) {
25        //Fill the code
26    }
27
28    }
29
30    }
31
32    public static void main(String[] args) {
33        Scanner sc = new Scanner(System.in);
34        ClientInfo clientInfo = new ClientInfo();
35        Map<String, String> map = new HashMap<String, String>();
36        System.out.println("Enter number of clients to be added");
37        int n = sc.nextInt();
```

Qualifier Assessment Fit Zone

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=104786&userid=137159#

File List Save Compile & Run Evaluate Reset Restore Description

File list
FitZone
src
ClientInfo.java

```
ClientInfo.java
20 //Fill the code
21
22 return 0;
23
24
25 public List<String> searchClientIdsByPackageName(String packageName) {
26 //Fill the code
27
28
29 return null;
30
31
32 public static void main(String[] args) {
33 Scanner sc = new Scanner(System.in);
34 ClientInfo clientInfo = new ClientInfo();
35 Map<String, String> map = new HashMap<String, String>();
36 System.out.println("Enter number of clients to be added");
37 int n = sc.nextInt();
38 sc.nextLine();
39 System.out.println("Enter the client details (Client Id: Package Name)");
40
41 for(int i = 0; i < n; i++) {
42 String s = sc.nextLine();
43 String[] clientDetails=s.split(":");
44 map.put(clientDetails[0],clientDetails[1]);
45 }
46 clientInfo.setClientMap(map);
47
48 System.out.println("Enter the package name to find the total count of clients");
49 String packageName=sc.nextLine();
50 int count=clientInfo.findTotalCountOfClientsBasedOnPackageName(packageName);
51 if (count==0) {
52 System.out.println("No clients found with package name "+packageName);
53 }else{
54 System.out.println("Total number of clients with package name "+packageName+" is "+count);
55 }
56 }
```

Qualifier Assessment Fit Zone

https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=104786&userid=137159#

File List Save Compile & Run Evaluate Reset Restore Description

File list
FitZone
src
ClientInfo.java

```
ClientInfo.java
34 ClientInfo clientInfo = new ClientInfo();
35 Map<String, String> map = new HashMap<String, String>();
36 System.out.println("Enter number of clients to be added");
37 int n = sc.nextInt();
38 sc.nextLine();
39 System.out.println("Enter the client details (Client Id: Package Name)");
40
41 for(int i = 0; i < n; i++) {
42 String s = sc.nextLine();
43 String[] clientDetails=s.split(":");
44 map.put(clientDetails[0],clientDetails[1]);
45 }
46 clientInfo.setClientMap(map);
47
48 System.out.println("Enter the package name to find the total count of clients");
49 String packageName=sc.nextLine();
50 int count=clientInfo.findTotalCountOfClientsBasedOnPackageName(packageName);
51 if (count==0) {
52 System.out.println("No clients found with package name "+packageName);
53 }else{
54 System.out.println("Total number of clients with package name "+packageName+" is "+count);
55 }
56
57 System.out.println("Enter the package name to search for client Ids");
58 String searchPackage =sc.next();
59 List<String> clientIds = clientInfo.searchClientIdsByPackageName(searchPackage);
60 if(clientIds.isEmpty()) {
61 System.out.println("Client Ids based on package name "+searchPackage);
62 for(String id : clientIds) {
63 System.out.println(id);
64 }
65 } else{
66 System.out.println("No clients found with package name "+searchPackage);
67 }
68 }
69 }
70 }
```