【2016 JAVA 物件導向程式設計 Homework 2】

● 注意事項

- 1. 請使用 JAVA 語言,配合 Eclipse 寫本次作業並進行測試,並安裝、使用 JAVA SE Development Kit(JDK) 8 函式庫。
- 2. 請依據作業規定設定 Eclipse 專案名稱與 package name,若未依照規定將根據狀況扣分。
- 3. 嚴禁抄襲其他同學作業,參與者(抄襲與被抄襲)皆以零分計算。
- 4. 請對你的程式碼有深入瞭解, demo 時助教會問。
- 5. 對題目有問題可以寄信問助教群(java_ta@net.nsysu.edu.tw)或是到實驗室 (EC5018)詢問,但不幫忙 debug。
- 逾期以零分計算,不接受補交,有任何因素導致無法如期繳交,請事先告知;
- 7. Demo 時間會另外通知。

● 作業規定與上傳

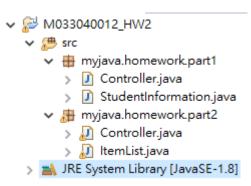
- 1. Eclipse 專案名稱:Student ID HW2
- 2. Package path:請參考右圖
- 3. 作業請繳交專案之 tar 或 zip archive 並 上傳至網路大學。

請於 2016 年 3 月 21 日(週一) 23:59 前

上傳完畢,逾期以零分計算,不接受補交,有任何因素導致無法如期繳 交,有問題請事先告知,再次強調,Demo 時間會另外通知。

4. Example of eclipse package explorer(請根據作業規定修改):

提示:此次作業需參考到 UML。請注意、+、-、__, 都是有意義的。可以參考此 Wiki 之 Members 章節說明:Class Diagram(Wikipedia)



Part 1

You need to create a student's list and show that. Follow these requirements to do a great job.

1. Create a class "StudentInformation". And the class must have one constructors.

It has three-argument "id", "name", "score".

- When you finish the class, "StudentInformation", you need to write a program to provide user to find out student data and add some new data. So make a main class, "Controller".
- 3. When "*Controller*" run, you need to show the result like the following picture.

Step1. Show the usage. (Type 1 ..., Type 2 ..., Type 3...)

Step2. If user enter 1 then let user add new data.

(You need to show student's number.)

Step3. If user input 2 then let user choice student, then display it.

Step4. If user input 3 then display all student's data and how many student pass/fail this project.

Step5. When user input wrong type or words, it will alert user.

StudentInformation -

- id : String₽

- name : String₽

- score : int↩

+ setID(String) : void₽

+ setName(String) : void↓

+ setScroe(int) : void↓

+ getID(): String₽

+ getName() : String₽

+ getScroe : int↔

+ setData(String, String, int): void↓

+ show_data() : void↔

■ Result:

```
Type 1: add a student's data(student ID, student name and score)
Tape 2: show student's data
Type 3 : show all student's data.
Add new student's data :
student id :a01
student name :Yin
Score :70
                             student's number
This is student 1 🖛
Type 1: add a student's data(student ID, student name and score)
Tape 2: show student's data
Type 3 : show all student's data.
To show which student's information
                                      student's number
Data no found
Type 1: add a student's data(student ID, student name and score)
Tape 2: show student's data
Type 3 : show all student's data.
Add new student's data :
student id :a02
student name :Jay
Score :85
                                              student's number
This is student 2
Type 1: add a student's data(student ID, student name and score)
Tape 2: show student's data
Type 3 : show all student's data.
To show which student's information
                                        student's number
Student id :a02
Student name : Jay
Student Jay pass this project
This is student 2
```

```
Type 1: add a student's data(student ID, student name and score)
Tape 2: show student's data
Type 3 : show all student' data.
====Student's data=====
Number: 1
Student id :a01
Student name :Yin
Student Yin pass this project
Number: 2
Student id :a02
Student name :Jay
Student Jay pass this project
Number: 3
Student id :a03
Student name :Tom
Student Tom fail this project
-----
Pass : 2
No pass : 1
```

Part 2

You need to create item's list and show that.

- 1. Create a class , " *ItemList*". Follow these requirements to do.
- You should use the main class "Controller" create Item list.
- 3. Show the result like the following picture.

```
ltemList←

-id : ArrayList<String>←

+ addItem(String): void←

+ remove(String): void←

+ printList():void←
```

```
Step1. Show the usage. (Type 1 ..., Type 2 ..., Type 3...)
```

Step2. If user enter 1 then let user add new item name.

Step3. If user input 2 then let user input item name for remove it.

Step4. If user input 3 then display all item.

Step5. When user input wrong type, it will alert user.

■ Result

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
Add item name :aa
type 1: add item to list
type 2: remove item from list
type 3: show the list
Add item name :bb
type 1: add item to list
type 2: remove item from list
type 3: show the list
show the list
1 : aa
2 : bb
type 1: add item to list
type 2: remove item from list
type 3: show the list
remove item name :aa
type 1: add item to list
type 2: remove item from list
type 3: show the list
show the list
1 : bb
```