

## 【2018 JAVA 物件導向程式設計 Homework 2】

### ■ 注意事項

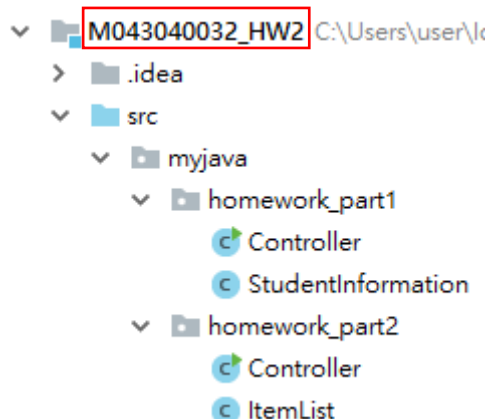
1. 請使用 JAVA 語言，配合 IntelliJ IDEA 實作本次作業並進行測試，並安裝、使用 JAVA SE Development Kit(JDK)8 函式庫。
2. 請依據作業規定設定 IntelliJ IDEA專案名稱與 package name，若未依照規定，將根據狀況扣分。
3. 嚴禁抄襲其他同學作業，參與者(抄襲與被抄襲)皆以零分計算。
4. 請對你的程式碼有深入瞭解，demo 時助教會問。
5. 逾期以零分計算，不接受補交，有任何因素導致無法如期繳交，請事先告知。
6. Demo 時間會另外通知。

### 作業規定與上傳

1. IntelliJ IDEA專案名稱：Student ID\_HW2 (ex: M043040032\_HW2)
2. Package path：myjava.homework\_part1、myjava.homework\_part2
3. 作業請繳交專案之 tar 或 zip archive 並上傳至網路大學。

請於 2018 年 3 月 19 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，請事先告知。

4. Example of 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”.

2. 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*”.

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↵

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.

■ Result :

```
Type 1: add a student's data(student ID,student name and score)
Type 2: show student's data
Type 3 : show all student's data.
```

1

Add new student's data :

student id :a01

student name :Yin

Score :70

This is student 1

Student's number



```
Type 1: add a student's data(student ID,student name and score)
Type 2: show student's data
Type 3 : show all student's data.
```

2

To show which student's information

2

Data no found

Student's number



```
Type 1: add a student's data(student ID,student name and score)
Type 2: show student's data
Type 3 : show all student's data.
```

1

Add new student's data :

student id :a02

student name :Jay

Score :85

This is student 2

Student's number



```
Type 1: add a student's data(student ID,student name and score)
Type 2: show student's data
Type 3 : show all student's data.
```

2

To show which student's information

2

Student id :a02

Student name :Jay

Student Jay pass this project

This is student 2

Student's number



Type 1: add a student's data(student ID,student name and score)  
Type 2: show student's data  
Type 3 : show all student' data.

3

|====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.
2. You should use the main class “*Controller*” create Item list.
3. 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 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.

ItemList↵
-id : ArrayList<String>↵
+ addItem(String): void↵ + remove(String): void↵ + printList():void↵

## ■ Result

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
```

1

```
Add item name :aa
```

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
```

1

```
Add item name :bb
```

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
```

3

```
show the list
```

```
1 : aa
```

```
2 : bb
```

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
```

2

```
remove item name :aa
```

```
type 1: add item to list
type 2: remove item from list
type 3: show the list
```

3

```
show the list
```

```
1 : bb
```