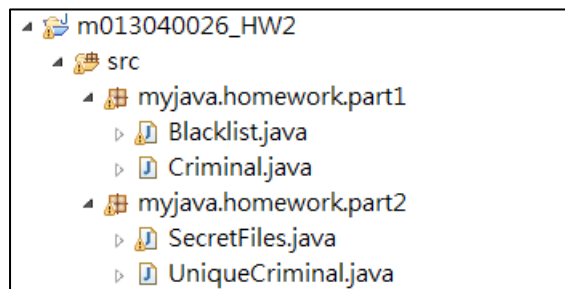# [2013 JAVA 物件導向程式設計 Homework 2]

● **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) 7 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)均以零分計算。

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。

6. 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；Demo 時間會另外通知。

● **作業規定與上傳**

1. Eclipse 專案名稱：**<學號>_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 **2014 年 3 月 10 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。
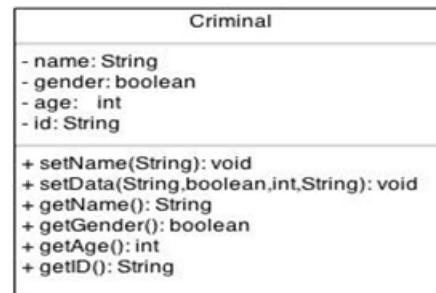
4. Example of eclipse package explorer(請根據作業規定修改)：

● **Part1**

You are a rookie police in the NYPD. There is a job for the new guy. You need to create some criminal's list for the department.　Follow these requirements to do a great job.

1. Create a class "*Criminal".* And the class must have three constructors. The first one is no-argument constructor. The second one has one argument "name". The third one has four- argument "name", "gender", "age", "id".

Criminal
- name: String - gender: boolean - age:　int - id: String
+ setName(String): void + setData(String,boolean,int,String): void + getName(): String + getGender(): boolean + getAge(): int + getID(): String

2. When you finish the class, "*Criminal*", you need to write a program to provide other officer to find out these bad men and add some new data.

So make a main class, "*Blacklist*", and creates three criminals.

The first one does not need to input any data. The second one we only knows his/her name is "*Ballchinian*". The third one his name is "*Scofield*", a white male ,25 years old, and his social ID is "C0102<your last 5 student ID>" ,that is all we know.

3. Now show your partner what a great job you did. Provide the functions like the following picture. (Show suspect's detail. Change suspect's detail. Check out the data again.)

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

Step2. If user input 1 then let user choice which criminal's data user want to see and display it.

Step3. If user input 2 then let user set the criminal's data.

```
Type 1 means looking for some one.
Type 2 means change someone's detail.
Input:1
Which one you want to check?(1 , 2 , 3)
Input:1
First suspect is:null
He/She's age is:0
Social ID:null
Gender:female
```

```
Type 1 means looking for some one.
Type 2 means change someone's detail.
Input:2
Which one you want to change?(1 , 2 , 3)
Input:1
Name:Manson
Gender(male/female):male
Age:41
ID:CXXX11111
```

Result:

```
Type 1 means looking for some one.
Type 2 means change someone's detail.
Input:1
Which one you want to check?(1 , 2 , 3)
Input:1
First suspect is:Manson
He/She's age is:41
Social ID:CXXX11111
Gender:Male
```

- **Part2**

    Sometimes you find a legendary and unique criminal. For example, a *BOSS of Toto Riina*, the mafia, or *Jack Sparrow*. So you need to create a special and unique item to represent it.

    1. Create a class," *UniqueCriminal*", it has a private constructor. The constructor includes four arguments, "name", "gender", "age", "id".

UniqueCriminal
- name:String - gender:boolean - age:int - id:String - bigBadGuy:UniqueCriminal
+ getInstance(String,boolean,int,String): UniqueCriminal + printData(): void

    2. You should use the bigBadGuy to generate a unique instance via getInstance(), and then make a main class which name is *"SecretFiles"*.(getInstance() should call the constructor)
    3. Show the result like the following picture.
        Step1. Input criminal's data.
        Step2. Show the criminal's data via printData().

```
Create a unique bad guy's detail now.
Name:Jack The Ripper
Gender(male/female):male
Age:30
ID:CXX1000015

Check the Detail:
The bad guy is:Jack The Ripper
He/She's age is:30
Social ID:CXX1000015
Gender:Male
```