

## 2012/11/20 Software Studio Lab 6

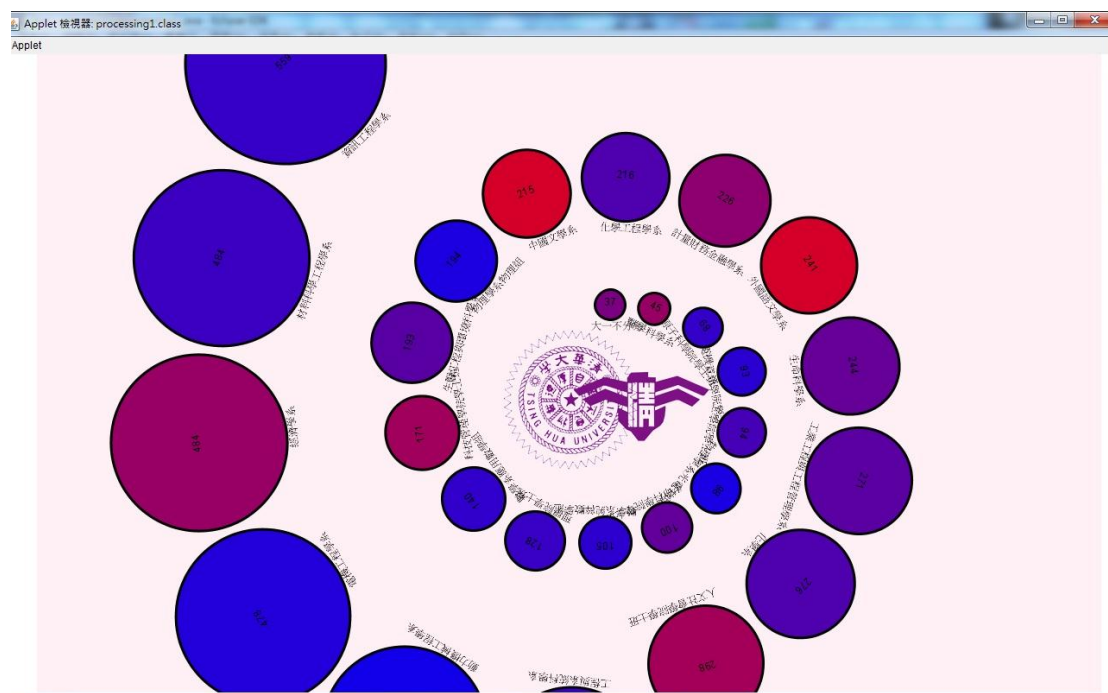
### Honor Code

Any cheating will be handled seriously in compliance with the university rules. All assigned work is expected to be individual, except where explicitly written otherwise (e.g., term project). You are encouraged to discuss with your classmates; however, what you hand in should be your own work.

### 1. Data visualization with *Processing* (80% programming skill, 20% design)

In this assignment, you will use design visualizations to represent a dataset of NTHU's student register information for the past two years in a user-friendly way. You should visualize the data by using the Processing library. You can download the data from LMS (files: "regb101\_1.txt" for information of year 101 and "regb100\_1" for year 100). First, you need to parse the data to separate register information by different departments. Second, identify a way (which can be very novel) to visualize available information. You have the sole authority to decide what kind of information to display and what questions you want to answer through your visualization graphics. For example, you may design a visualization to answer what's the relative ratio of male and female among registered students for different departments. Visualize what you're interested and try to push the limit of your imagination.

We provide two datasets, register information for year 100 and year 101. You have to submit TWO visualization programs (runnable jar file), one for the dataset of year 100 another for the data of year 101. Submit also your application project and source codes.



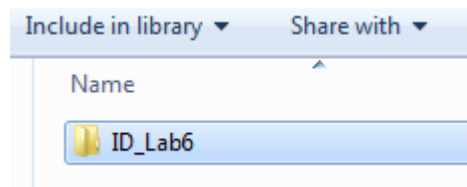
Grading component : 80% programming skill, 20% visualization design.

**Data visualization example (see page 1 for the screenshot) :**

Visualize the number the registered students of each department (the higher number of registered students, the larger the size of the circle) and gender proportion of each department (the more male students, the bluer the circle; the more female students, the redder the circle).

注意事項：

1. **Deadline: 2012/11/25 23:59 (11/26 00:00~23:59 交者，成績\*0.8)**
2. 交作業時，請按照以下格式標示清楚題號：



請在各題的資料夾放入**整個 project 資料夾**、**export 後的 runnable .jar file**、**Readme.txt**

再將這些資料夾一起壓縮成“ID\_Lab6.zip”，

將壓縮檔上傳至 <http://lms.nthu.edu.tw/> 軟體實驗的作業區

3. 每個.java 檔內，第一行請用註解加上學號、姓名及題號。
4. 程式碼務必要有**註解**，說明你解題的方法。(此項也列為評分標準之一)
5. **Readme** 請包含執行步驟(條列式)、遇到的困難及解決方法。