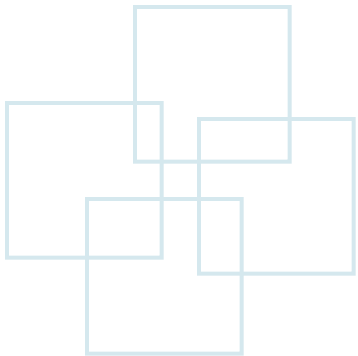


# Project 4

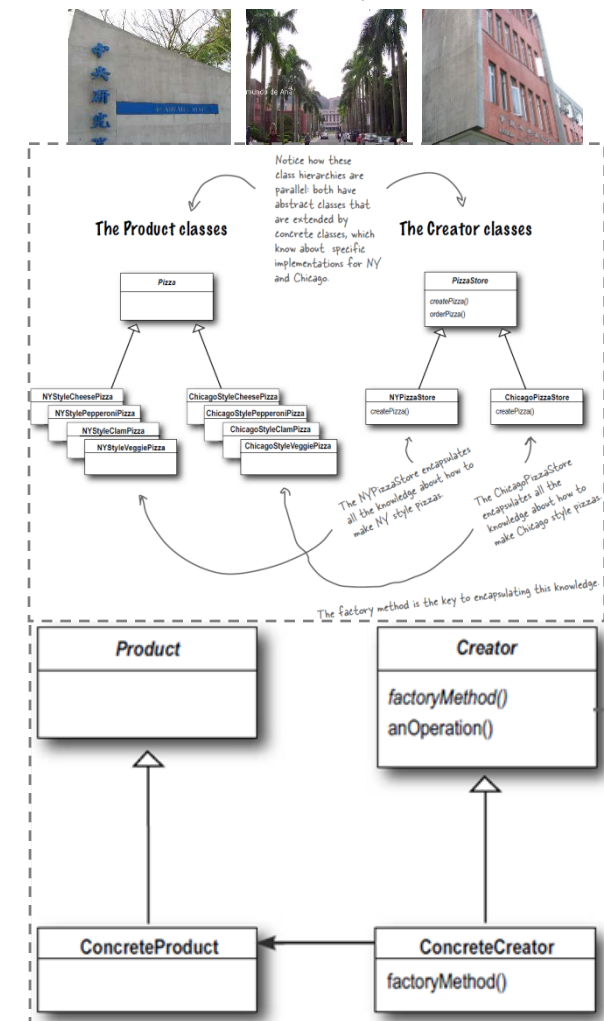
## Factory Method Pattern

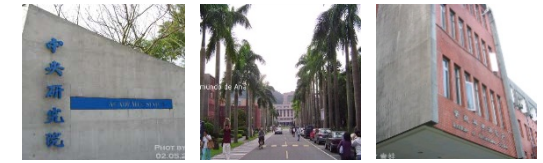




# Requirement

- Factory method practice
  - Write a JAVA/C++ project to implement the example in Project 1.
- Each character uses one type of weapons
  - King with sword, Queen with knife
  - Troll with Axe
  - Knight with sword
  - Archer with Bow
- Now we have two different cities: **Paris** and **London**
- Suppose that your program is called “game”.
  - Execute: `java game King Paris`
  - Output: `I am a King in Paris. The weapon I use to fight is sword.`
- Please use factory method pattern to solve this problem:
  - Creator: Paris, London
  - Products: LondonKing, ParisKing, etc.
- The member functions in classes can be defined by your own.





# Submission

- Each person in one group.
- Write down a brief report in 2 pages to describe how you do and what you do and learn, including:
  - 1. Explain how you work on this project or how you make this project work.
  - 2. Depict and explain the framework or relation of objects in your program.
  - 3. What you learned and what are the main problems that you encounter?
- Compress your report, source code, and the executable/binary files in a compressed file named with **OOAD-P4-FullStudentID(YourName)**
- Email your project to TA [coolivan3@outlook.com](mailto:coolivan3@outlook.com) (徐雅姿) with the email title: **OOAD Project 4, FullStudentID(YourName)**
  - Write emails to ask TA if you have any question about this project.
- For the delayed submission, deduct two points for each day.
- The deadline is two weeks later (**2013/3/24 24:00**).