

UML簡介

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What is UML?

UML(Unified Modeling Language) is a well-defined and widely accepted language to build **Object-Oriented and Component-based** system developed by Rational Corp.

UML Combined **OOSE/Booch, Jacobson** and **OMT/Rumbaugh** is adopted by **OMG** in Nov/1997 and accepted by **IBM, HP ...etc..**

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The characteristics of UML:

- **Use Case view:** find out the **internal Use Case and external Actor**
- **Logical view:** describe the **internal static structure and dynamic behavior**
- **Component view:** describe the **module construction**

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The characteristics of UML:(cont.)

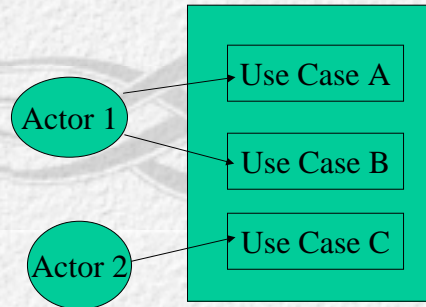
- **Concurrency view:** describe the **procedure of modules**
- **Deployment view:** describe the **physical architecture of system**

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UML使用的圖示工具:

1. Use case diagram

- 以使用者觀點找出系統運作之Use Case及external Actors



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UML使用的圖示工具:

- Use case diagram
 - Use case 文字表示法

Use case name :

Actor's name :

Condition :

Function :

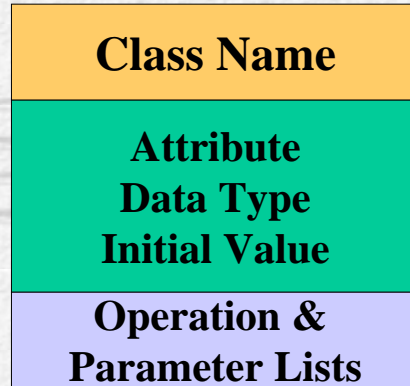
Use case description :

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UML使用的圖示工具:

2. Class diagram

- 歸納Use Case diagram
以整合說明同一類特性物件的靜態結構關係與內部關聯性

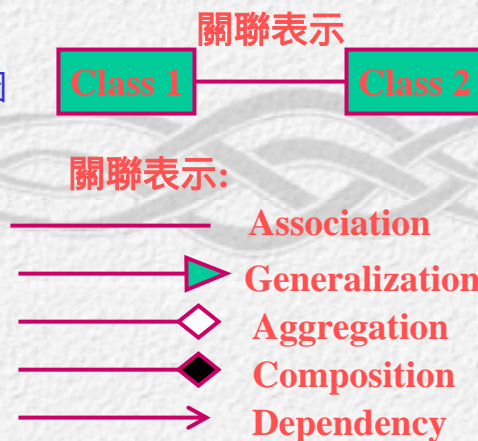


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UML使用的圖示工具:

• Class diagram

- 類別間關聯表示圖

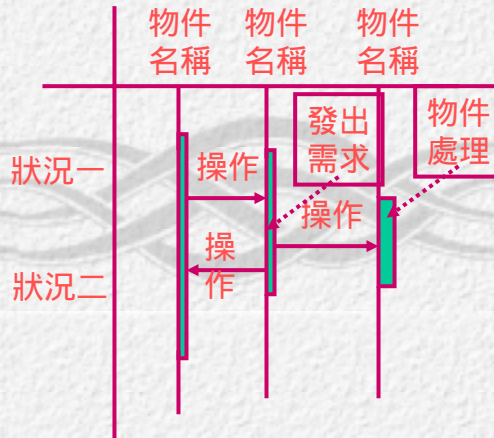


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UML使用的圖示工具:

3. Sequence diagram

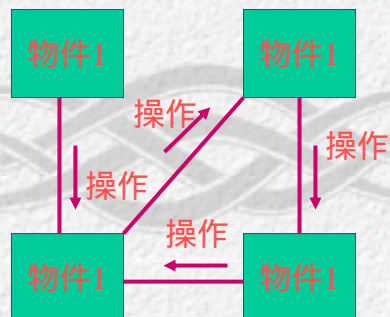
- 事件時間之發展,並表現物件活動之先後關係



UML使用的圖示工具:

4. Collaboration diagram

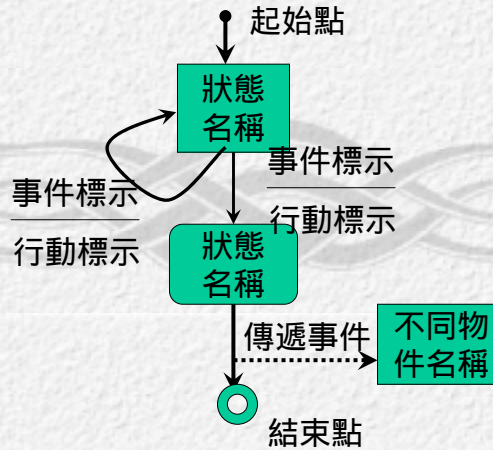
- 以系統整體之宏觀表現,來說明各物件間的聯結與訊息交換的情形



UML使用的圖示工具:

5. State diagram

- 描述類別內部因事件驅動所展現的行為,是系統微觀的狀態變化概念圖

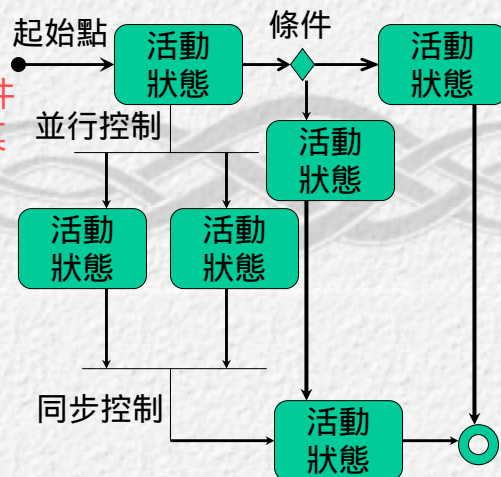


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UML使用的圖示工具:

6. Activity diagram

- 描述事件發生時,物件的處理程序及執行某項操作的經歷過程

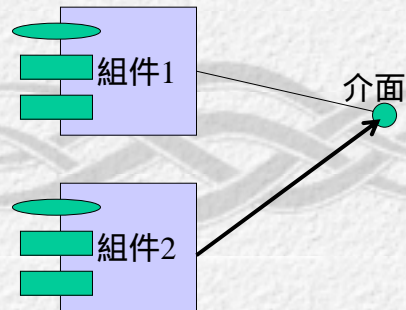


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UML使用的圖示工具:

7. Component diagram

- 以實體觀點來描述類別與物件的放置情形,亦即表達出原始碼及軟體元件架構



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UML使用的圖示工具:

8. Deployment diagram

- 表現系統運作時之實體架構,如網路協定、主從架構及終端節點等



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