

Class-based Model

▼ 1 Identifying Classes

- ▼ Type
 - External entitles
 - Things
 - Occurrences or events
 - Roles
 - Organizational units
 - Places
 - Structures

▼ 2 Class Selection

- ▼ 6 selection characteristics
 - ▼ Retained information
 - Information must be remembered about the system overtime
 - ▼ Needed services
 - A set of operations that can change the attributes of a class
 - ▼ Multiple attributes
 - A class must have multiple attributes
 - ▼ Common attributes
 - All instances of a class share the same attributes
 - ▼ Common operations
 - A set of operations apply to all insurances of a class
 - ▼ Essential requirements
 - Entities produce or consume information

▼ Class Components

- ▼ Class Attribute
 - Describes a class: tele no., password, id ...
- ▼ Class Operations
 - ▼ Behavior of an object: acting on class attributes and/or associations (verbs)
 - Manipulate data
 - Perform computation
 - Inquire about the state of an object
 - Monitor an object for the occurrence of event
- ▼ Class Associations
 - Relationship between 2 classes
 - ▼ Multiplicity: indicates the number of instances exist in an association
 - One-to-one
 - One-to-many
 - Many-to-one
 - Many-to-many
 - ▼ Two forms
 - ▼ Aggregation (聚合)

- "Has a" relationship
- ▼ Composition (组合) -- stronger
- "Part of" relationship