



REQUIREMENTS ANALYSIS AND DESIGN (PHÂN TÍCH VÀ THIẾT KẾ YÊU CẦU) 502050

Chapter 6 Design Discipline I

Outline

- Design Discipline
- Design Discipline Activities
- Use Cases Realization
- Design Class Diagram

Design Discipline

- The Requirement Discipline: Focuses on what the system should do
- Oriented towards how the system will be built
- Structural components
- Dynamic interactions

Construction Phase

- This is the phase when the business model is turned into a design specification
- This also means the start of technical work (actual implementation of system)



Comparison of Disciplines

Discipline	Purpose
Business Modeling	Understand and communicate the nature of the business environment in which the system will be deployed, understand how the company does its business
Requirements	Understand and document business needs and processing requirements, find requirements of the system
Design	Develop the architecture and details of hardware, networks, software, and the database

Design Discipline Activities

- Modern Information Systems: Operating with a complex collection of computer hardware, networks and system software which are called support services architecture and deployment environment
- Design/decide on the required computer hardware, servers, etc

Design software Architecture

- Software Architecture refers to the “big picture”
- Coming out with the classes, methods, etc
- Requirements discipline results in **domain model class diagram**
- Architectural design extends it to a **design class diagram**

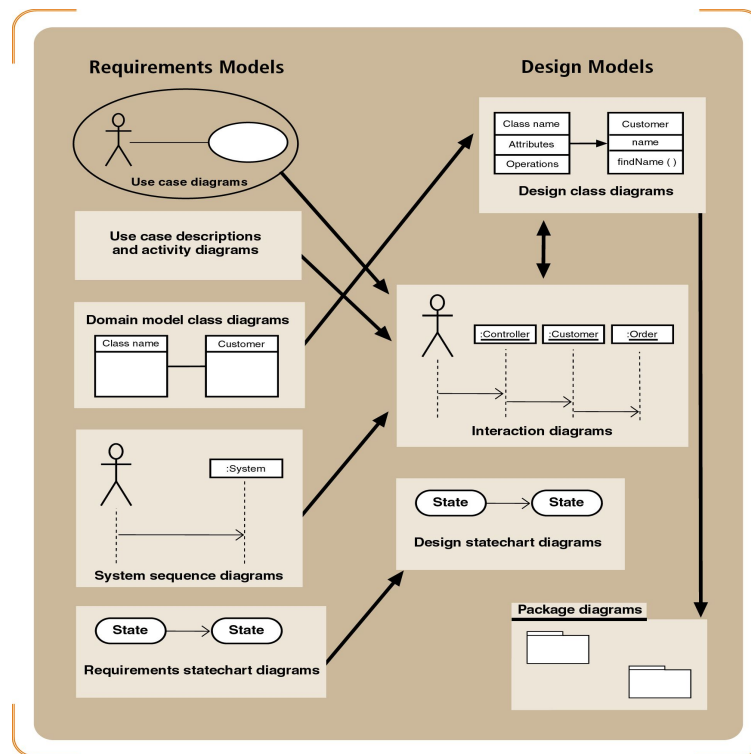
Design Database

- Domain model class diagram is used to create the physical model of the database
- Usually a relationship DB
- Performance tuning, integrating with existing DB, etc

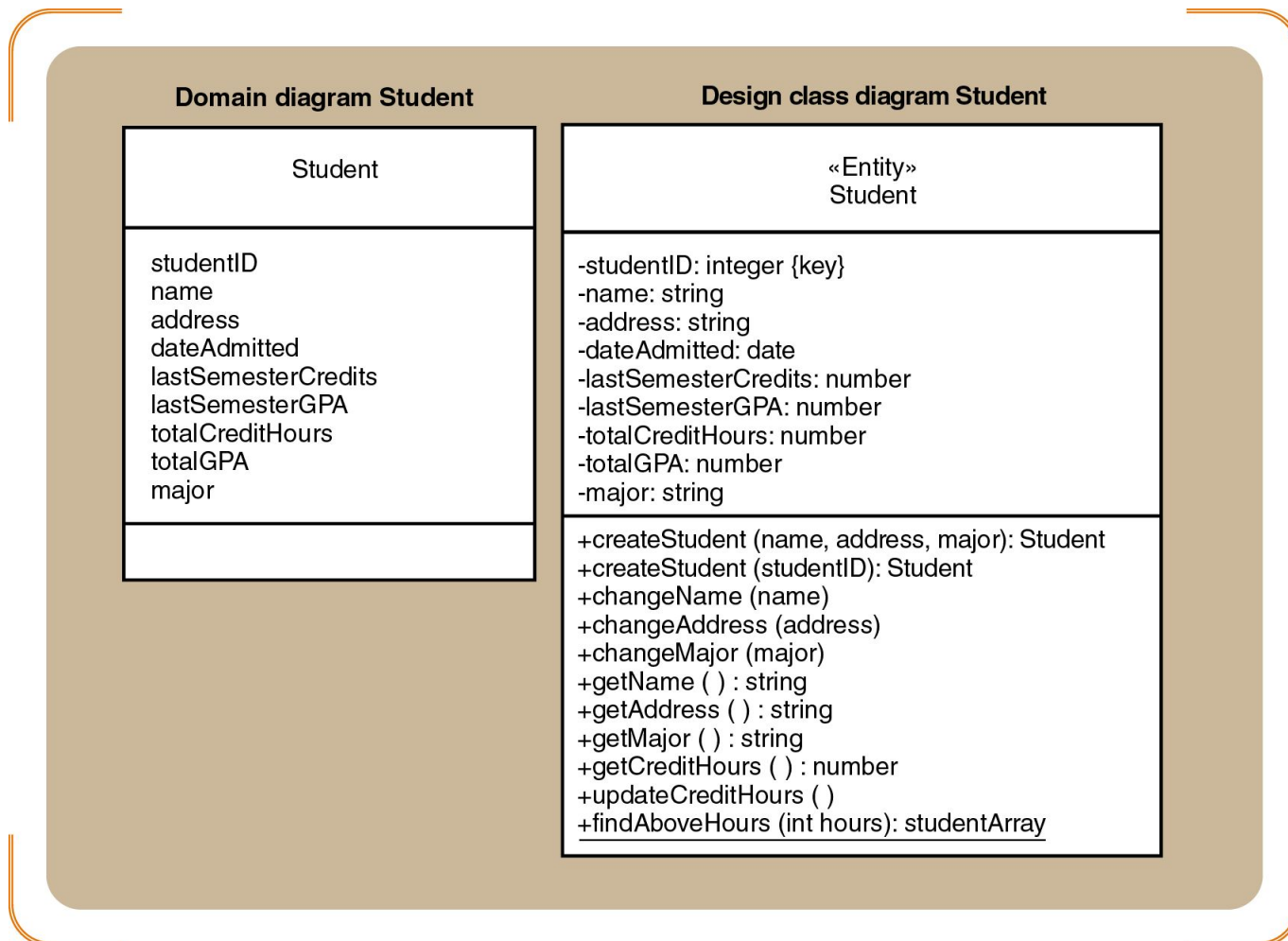


Use Cases Realization

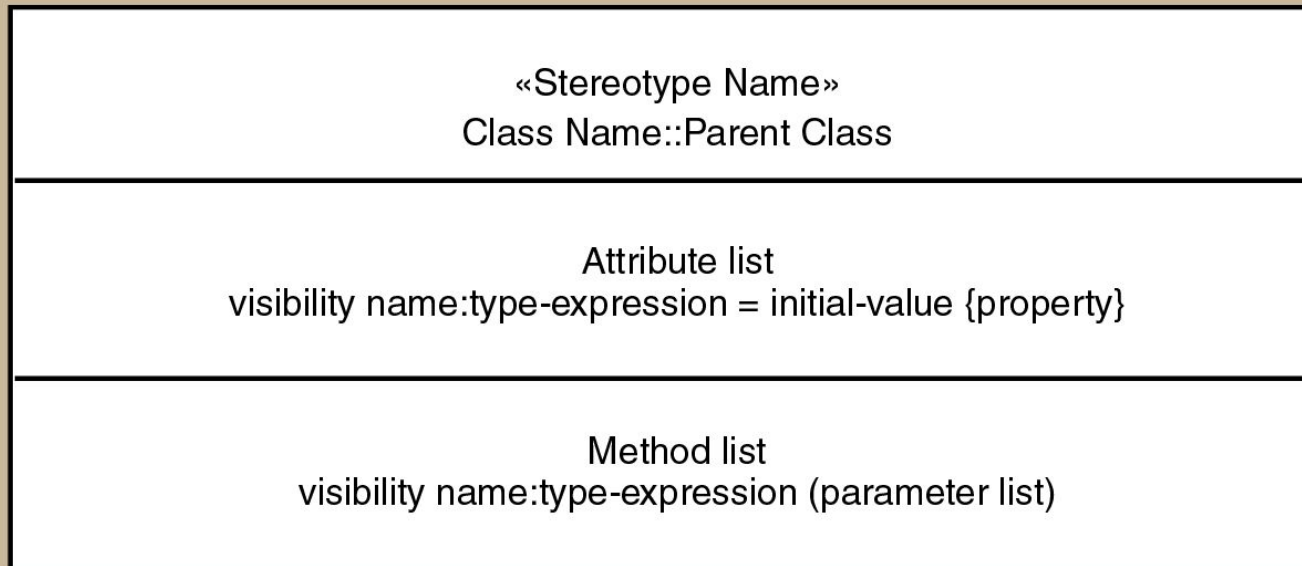
- Use-case realization is the design of software that implements each use case



Design Class Diagram



Design Class Notation



Stereotypes

