ĐẠI HỌC TÔN ĐỨC THẮNG
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REQUIREMENTS ANALYSIS AND DESIGN (PHÂN TÍCH VÀ THIẾT KẾ YÊU CẦU) 502050

Chapter 9
Construction, Final Verification and Validation, and Closeout Phase

Outline

- Construction Phase
- Final Verification and Validation Phase
- Closeout Phase
- Planning and Managing

Phases

- We can generalize SDLC into 5 different phases:
  1. Initiation
  2. Discovery
  3. **Construction**
  4. Final Verification and Validation
  5. Closeout

Construction Phase

- Business analysis activity during this phase depends on the lifecycle approach being used:

- Waterfall projects (predictive)

- Iterative projects (adaptive)

- In iterative projects
  - Requirements analysis and solution development take place over a number of iterations
  - The steps described for the Discovery phase are carried out during each iteration of the Construction phase

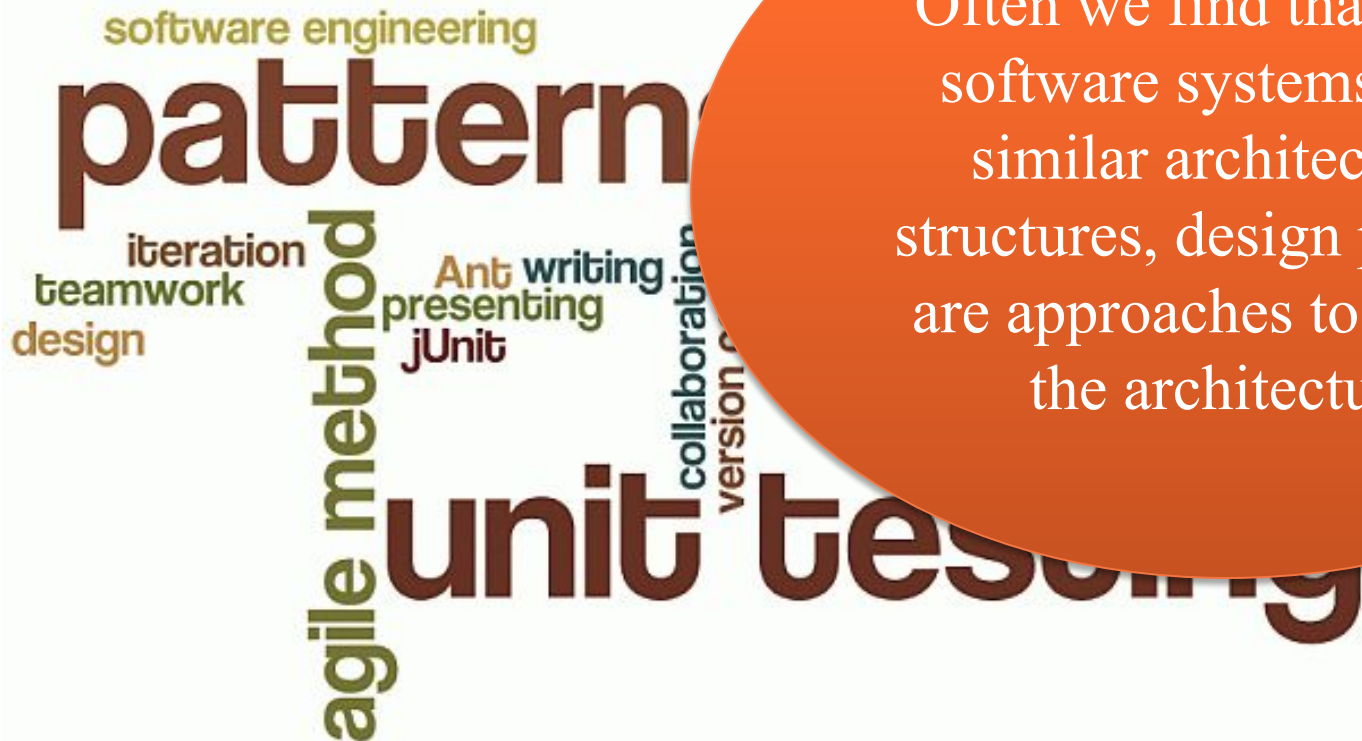# Implementation

● Frameworks and common standards

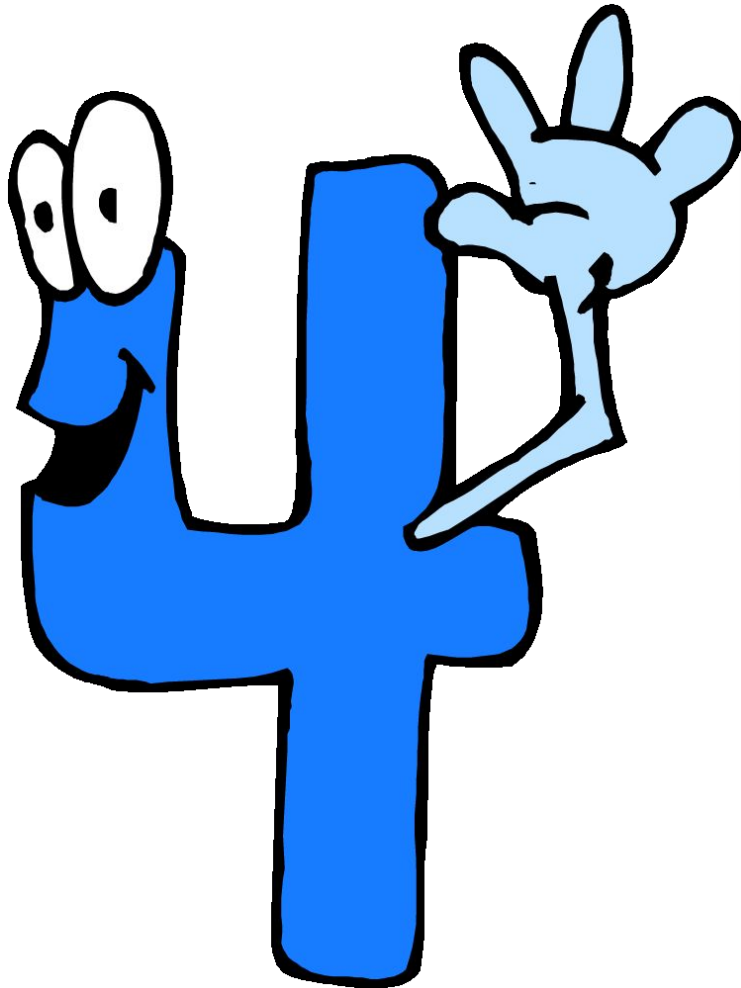Recommended to use frameworks and common standards for development
- Ensure interoperability
- Ensure standardization and better integration with other system (or future systems)
- Speeds up development process

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Software Design patterns

Often we find that many software systems have similar architectural structures, design patterns are approaches to design the architecture

Elements of a Pattern

4 elements of a pattern:
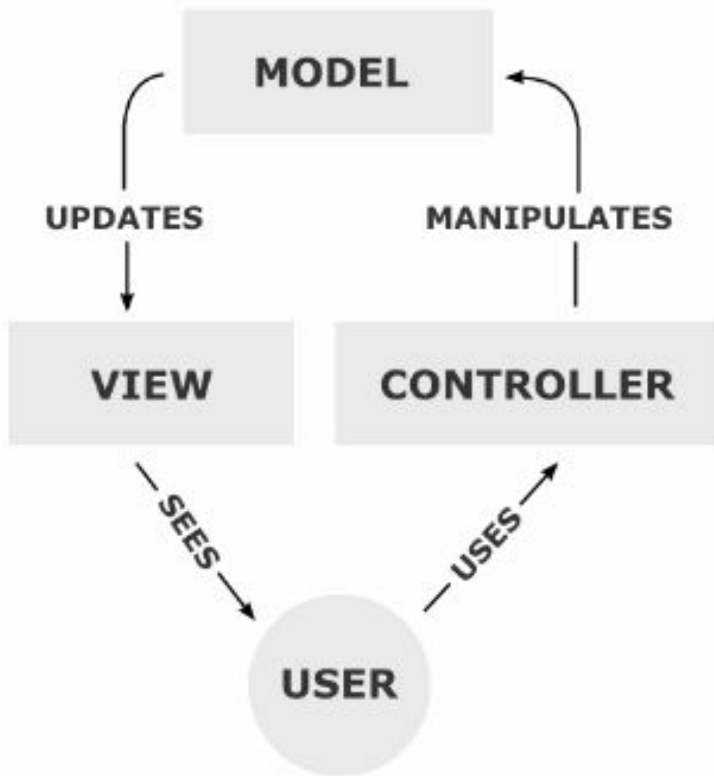1. Name
2. Problem
3. Solution
4. Constraints

Why study design patterns?

These design patterns are best practices which considers various factors. Some of them are natural solution to a problem

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Structural patterns

- ## Model/View/Controller (MVC)

Model : Domain object (updates the view)
View : Presentation
Controller : receives commands from user and invoke the model's methods (direct traffic)

One of the most popular design pattern nowadays, commonly used for web applications

Final Verification and Validation Phase

- The IT Business Analyst supports final testing before the completed solution is deployed, reviewing test plans and results and ensuring that all requirements are tested

Closeout Phase

- The IT Business Analyst supports the deployment process, reviewing transition plans and participating in a post-implementation review to evaluate the success of the change

Planning and Managing

1. Deployment

- Considerations when planning deployment
  - Incurring costs of operating both systems in parallel
  - Detecting and correcting errors in the new system
  - Potentially disrupting the company and its IS operations
  - Training personnel and familiarizing customers with new procedures
- Each deployment approach has strengths and weaknesses

2. Training Users