Software Engineering



Lesson #11 - Practice

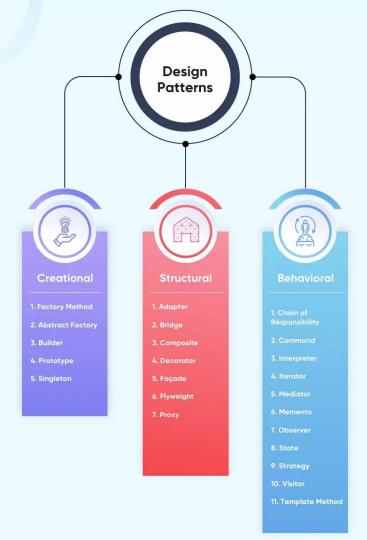
- 1 Introduction
- 2 A Case Study: Designing a Document Editor
- 3 Class Work
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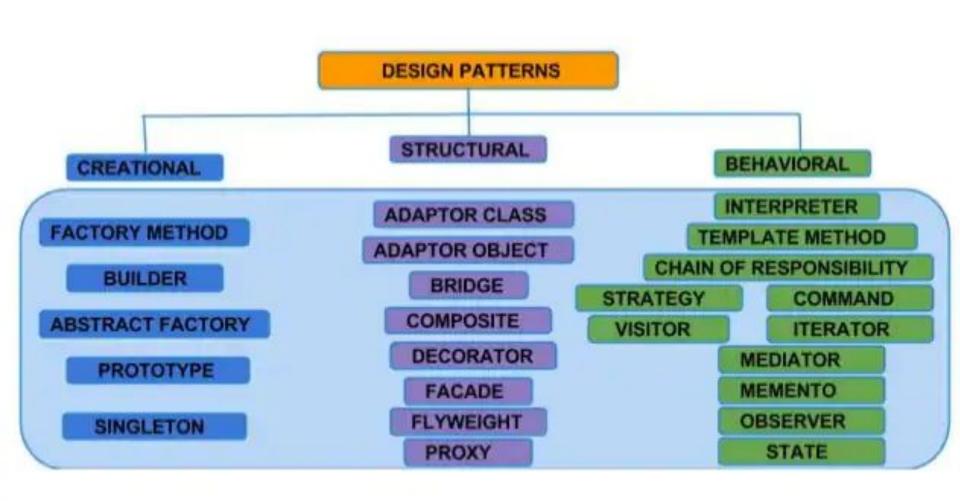
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Design Patterns

Creational	Structural	Behavioral
• Factory Method	Adapter	Interperter
Abstract Factory Builder Prototype Singleton	 Adapter Bridge Composite Decorator Facade Flyweight Proxy 	 Chain of Responsibility Command Iterator Mediator Momento Observer State Strategy Visitor

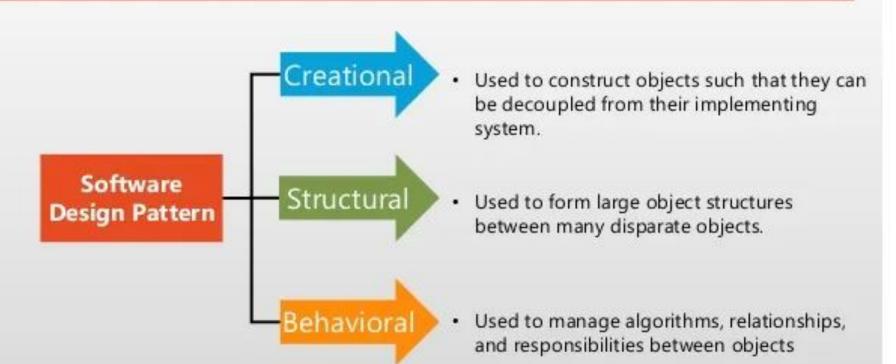




Design Patterns



Types Of Design Patterns



Introduction

Design Patterns

Designing object-oriented software is hard, and designing reusable object-oriented software is even harder

You must find pertinent objects, factor them into classes at the right granularity, define class interfaces and inheritance hierarchies, and establish key relationships among them

Your design should be specific to the problem at hand but also general enough to address future problems and requirements

Introduction

Design Patterns

You also want to avoid redesign, or at least minimize it

Experienced object-oriented designers will tell you that a reusable and flexible design is difficult if not impossible to get "right" the first time

Before a design is finished, they usually try to reuse it several times, modifying it each time

Introduction

Design Patterns

One thing expert designers know not to do is solve every problem from first principles. Rather, they reuse solutions that have worked for them in the past.

When they find a good solution, they use it again and again. Such experience is part of what makes them experts.

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A Case Study: Design a Document Editor

A Case Study: Design a Document Editor

This chapter presents a case study in the design of a "What-You-See-Is-What-You-Get" (or "WYSIWYG") document editor called Lexi.1

We'll see how design patterns capture solutions to design problems in Lexi and applications like it

A Case Study: Design a Document Editor

A Case Study: Design a Document Editor

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Class work

Software Engineering, 10. Global Edition

No classwork for today



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Q&A