10 Common Software Architectural Patterns in a nutshell
10 种常见软件架构模式简述

Ever wondered how large enterprise scale systems are designed? Before major software development starts, we have to choose a suitable architecture that will provide us with the desired functionality and quality attributes. Hence, we should understand different architectures, before applying them to our design.
有没有想过大型企业级系统是如何设计的？在大型软件开发开始之前，我们必须选择一个合适的架构，为我们提供所需的功能和质量

What is an Architectural Pattern?
什么是建筑模式？

According to Wikipedia,
根据维基百科、

An architectural pattern is a general, reusable solution to a commonly occurring problem in software architecture within a given context. Architectural patterns are similar to software design pattern but have a broader scope.
架构模式是一种通用的、可重复使用的解决方案，用于解决特定环境下软件架构中经常出现的问题。架构模式与软件设计模式类似，

In this article, I will be briefly explaining the following 10 common architectural patterns with their usage, pros and cons.
在本文中，我将简要介绍以下 10 种常见的架构模式及其用法、优点和缺点。

Layered pattern
分层图案

Client-server pattern
客户服务器模式

Master-slave pattern
主从模式

Pipe-filter pattern
管道过滤器模式

Broker pattern
经纪人模式

Peer-to-peer pattern
点对点模式

Event-bus pattern
事件总线模式

Model-view-controller pattern
模型-视图-控制器模式

Blackboard pattern
黑板图案

Interpreter pattern
口译模式

1. Layered pattern
1.分层图案

This pattern can be used to structure programs that can be decomposed into groups of subtasks, each of which is at a particular level of abstraction. Each layer provides services to the next higher layer.
这种模式可用于构建可被分解成子任务组的程序，每个子任务都有特定的抽象层次。每一层都为下一层提供服务。

The most commonly found 4 layers of a general information system are as follows.
一般信息系统最常见的 4 个层次如下。

Presentation layer (also known as UI layer)
呈现层（也称用户界面层）

Application layer (also known as service layer)
应用层（也称服务层）

Business logic layer (also known as domain layer)
业务逻辑层（又称领域层）

Data access layer (also known as persistence layer)
数据访问层（又称持久层）

Usage
使用方法

General desktop applications.
一般桌面应用程序。

E commerce web applications.
电子商务网络应用程序。

2. Client-server pattern
2.客户-服务器模式

This pattern consists of two parties; a server and multiple clients. The server component will provide services to multiple client components. Clients request…
这种模式由双方组成：一个服务器和多个客户端。服务器组件将为多个客户端组件提供服务。客户端请求...