

Oops, C# and DotNet Best Practices

19 October 2023 09:20

Best Practices

DRY

KISS

SOLID

Software Development Design Patterns

Reusing the solution for the problems that are already solved for you.

Singleton

Logger - Single Instance across the application for logging.

Http Client - If not used it will create two issues

DNS resolution problem.

Out of socket.

Factory

Object creation is done by another class.

Example - Rule Engine

Observer

Pub/Sub

It defines a one-to-many dependency between objects so that when one object changes its state, all its dependents (observers) are notified and updated automatically. The Observer Pattern is particularly useful for implementing distributed event handling systems, where one object (the subject or publisher) needs to notify multiple other objects (subscribers or observers) about changes or events.

Example - Azure Service Bus or SNS and SQS in aws to send email, fax or text notifications to an end user when patient report is ready.

Repository

It is a design pattern that isolates the data layer from the rest of the app. Data Layer can talk to either SQL Server, Oracle DB Other API etc. and Business Layer is abstracted from it.

Software Architecture Patterns

CQRS

Command Query responsibility separation.

Onion Architecture

Clean Architecture

References

[Top 100 C#/.NET/ Web API/ SQL Interview Questions](#)

