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MSA, PMOC, PMP®, PMP®, PMP-REP®, CS, ITIL®, MCPD, MCD



لا تنسى الاشتراك في قناتنا على اليوتيوب ومشاركة القناة مع اصدقائك
لتعم الفائدة للجميع وانقاذ الاف الناس من التشتت جزاكم الله خيرا

لا تنسوننا من دعائكم وادعو لوالدي بالرحمة

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مهم جداً

هذا الملف للمراجعة السريعة واخذ الملاحظات عليه فقط ،لانه يحتوي على اقل من 20% مما يتم شرحه في الفيديوهات الاستعجال والاعتماد عليه فقط سوف يجعلك تخسر كميه معلومات وخبرات كثيره

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لاتنسى عمل لايك ومشاركة القناة لدعم الفائدة للجميع
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SOLID PRINCIPLES

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Introduction to SOLID Principles





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Analogies



Analogy 1: Library

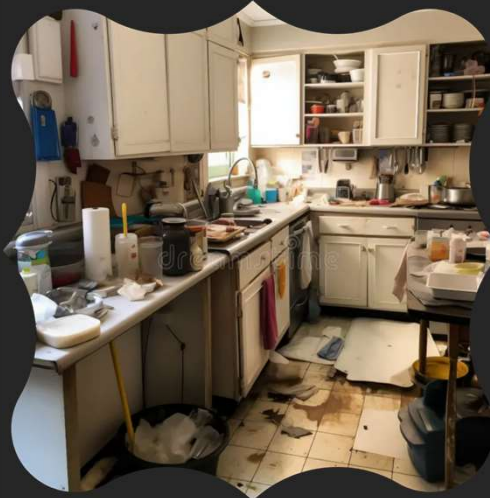


Imagine you are organizing a library with thousands of books. If the library is poorly organized, finding a book or adding a new one could be time-consuming and prone to errors.

SOLID Principles:

The SOLID principles are like guidelines for organizing the library in such a way that everything is well-structured and easy to maintain, making the system both flexible and scalable.

Analogy 2: Large Restaurant



Imagine you're running a large kitchen in a restaurant with many dishes to prepare. If ingredients, utensils, and recipes are scattered everywhere, it would be incredibly chaotic. Preparing meals would take longer, and mistakes would be frequent. However, if the kitchen is organized with specific stations for prep work, cooking, and plating, and everything has its place, the kitchen runs smoothly.

SOLID Principles:

The SOLID principles help structure a software system just like an organized kitchen, making it efficient, flexible, and easier to manage, even during a rush.

Analogy 3: Planning City



Think about designing a city. If roads, utilities, and buildings are poorly planned or intertwined, adding new roads or buildings would cause chaos and make the city hard to navigate. On the other hand, if the city has well-planned roads, zoning areas, and dedicated infrastructure for utilities, it allows for easy expansion and development without disrupting daily life.

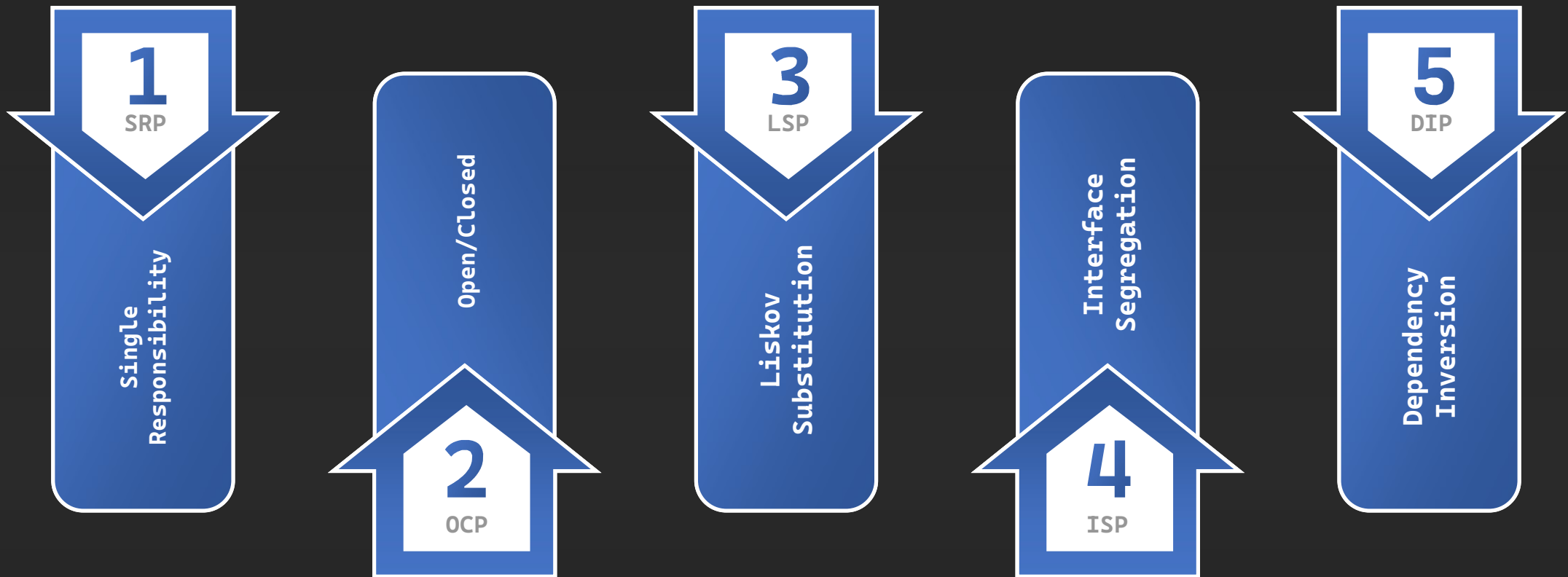
SOLID Principles:

The SOLID principles are like city planning for software organizing your code in a way that makes future additions and changes seamless without breaking existing functionality.

What are SOLID Principles?

- SOLID principles are five design guidelines intended to make software design more understandable, flexible, and maintainable.
- These principles were introduced by Robert C. Martin and are foundational in object-oriented design (OOD).
- They help in avoiding software design issues that can lead to rigid, fragile, and hard-to-maintain code.

5 Solid Principles



The SOLID acronym stands for:

- S – Single Responsibility Principle (SRP).
- O – Open/Closed Principle (OCP)
- L – Liskov Substitution Principle (LSP)
- I – Interface Segregation Principle (ISP)
- D – Dependency Inversion Principle (DIP)

To understand Solid Principles:

- You should be strong in OOP.
- You should have a lot of practice on OOP.
- You should not be a beginner developer, you need to have some projects.
- If you don't understand then this means you need to have some experience before.



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Thank You

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