

Design Patterns - Background

Design Patterns

What is so special about Design Patterns?

Design Patterns - Background

What Are They?

Design patterns are **well-tested**, reusable solutions.

They are like a solution template for how to solve common Software Engineering problems.

They are flexible and adaptable.

They save time because they are optimal.

Why Use Them?

You know that you are using something that has been utilized successfully in countless projects before.

They are like a common meta-language for developers. If you and I both know what a **Singleton Pattern** is then we already have a common understanding of everything about how it would be used or how it should be implemented.

Design Patterns - Background

We are on the same page. And this is powerful.

Even if you code in different languages.

Design patterns in general, carry over to different programming languages.

If you understand a pattern in a general manner, then you know that regardless of the language implementation, it will effectively offer **the same useful solution**.

Summary

Design Patterns are associated with good, well organized Software Design.

As developers, we are prone to mistakes and sometimes inexperienced decisions.

Think of design patterns as a bag of **reusable experience** from many generations of coders and Software Engineers, that we get to learn from.