

PATRONES DE DISEÑO

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The present document describes what design patterns consist of, as well as their characteristics and their relationship with mobile devices.

1 Introduccion

Design patterns are general and reusable solutions to common problems encountered when designing software.

These patterns provide a structured approach to solving design problems and help developers create more flexible, maintainable, and scalable code.

Design patterns capture best practices and previous experiences in software development, offering guidance for efficiently and effectively addressing specific problems.

2 Characteristics of design patterns

Reuse: Design patterns are proven and tested solutions to recurring problems in software design, allowing for their reuse in different contexts.

Flexibility: Design patterns provide a flexible structure that can be adapted and applied to different situations and design requirements.

Abstraction: Design patterns abstract specific implementation details, focusing on broader concepts and gen-

eral principles that can be applied more broadly.

Clarity and communication: They facilitate communication among team members by providing a common vocabulary and shared understanding of design solutions.

Documentation: Design patterns are typically well-documented, making it easier for developers to understand and apply them.

Standardization: They promote standardization and best practices in software design by offering proven and recommended solutions to common problems.

Evolution: Design patterns evolve over time to adapt to changing needs and technologies in software development, incorporating new ideas and approaches as they arise.

3 Utility of Design Patterns

Design patterns are fundamental tools in software development, providing a structured framework for addressing specific design problems. They facilitate the creation of modular and

reusable systems by promoting the separation of concerns and the creation of independent components.

Moreover, they help to avoid common errors by encapsulating proven solutions for recurring problems and adhere to best practices established by the development community. These

patterns also promote extensibility and flexibility, allowing systems to evolve and adapt to new requirements and changes in the environment.

Additionally, they facilitate communication among development team members by employing a common language and shared terminology.

4 References

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