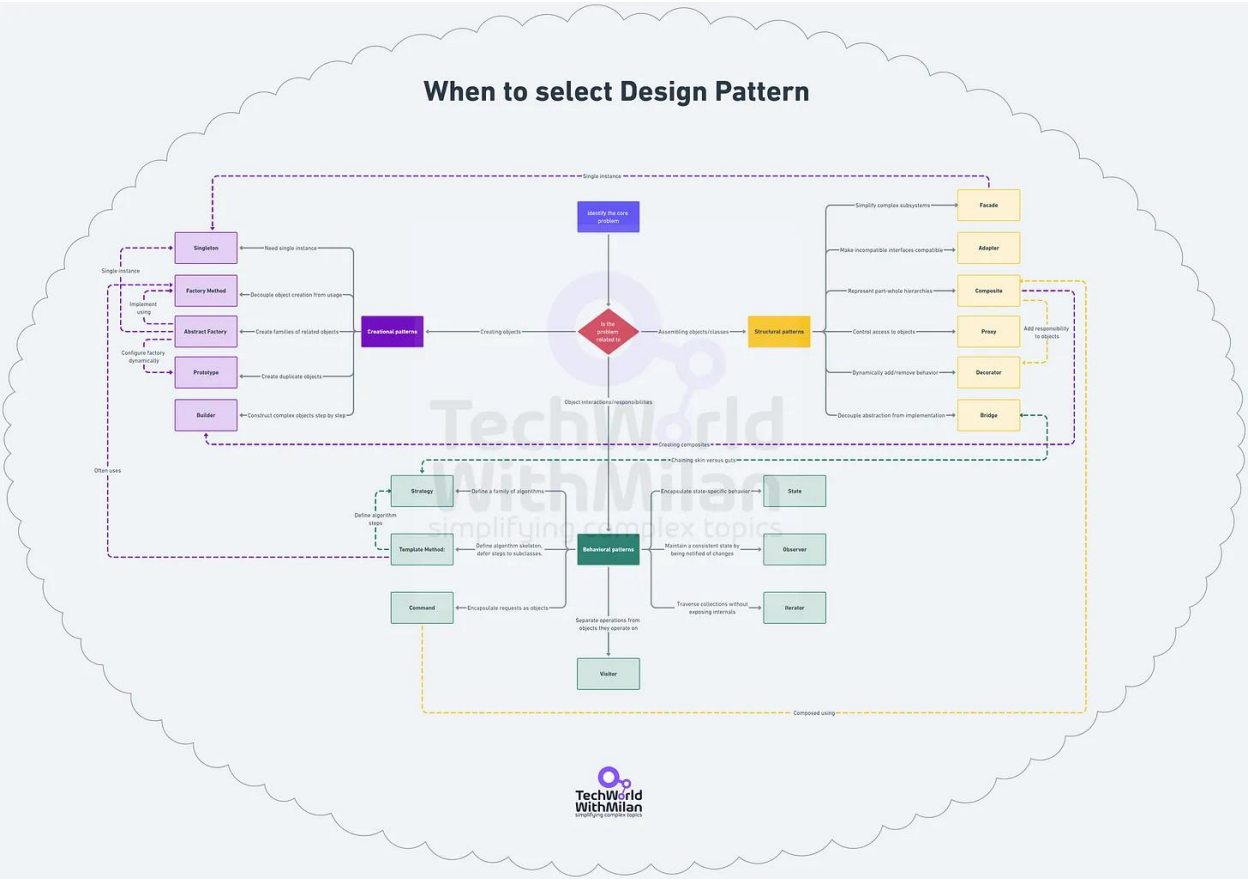
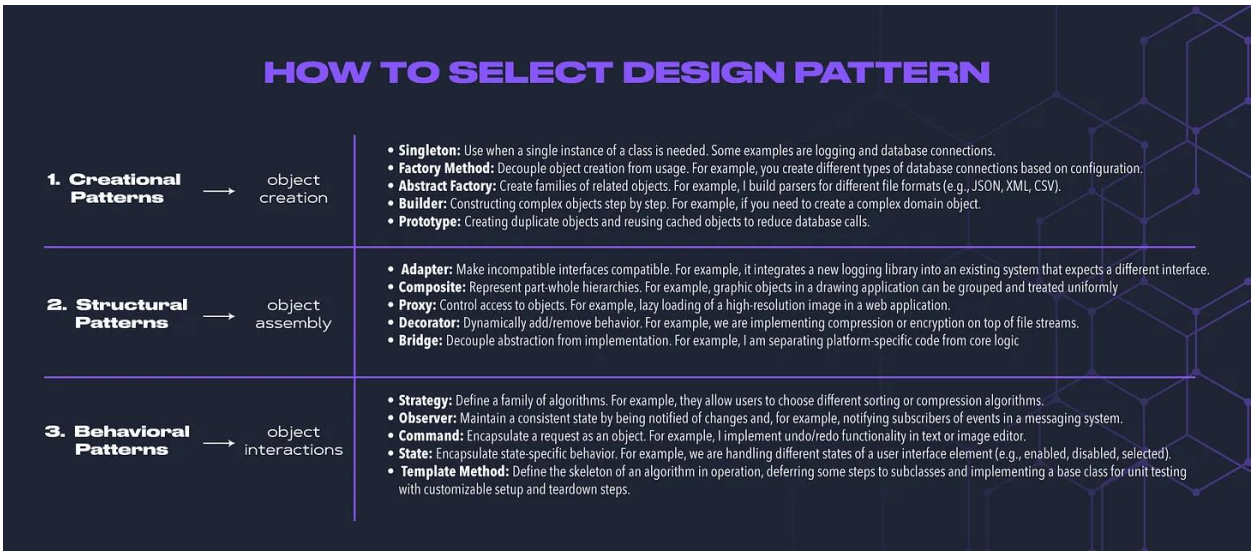
How to select the correct design pattern

Now, when we have analyzed all vital design patterns, we came up with the pattern we needed for our problem:



Here is the summary of the pattern selection:



Design patterns are not the only kind of patterns we have. To learn more about other types of patterns, ***check here****. (architecture-styles-patterns-and-design-patterns.pdf/* Top 10 Architectural Patterns.pdf*)*

BONUS: Design Patterns Cheat Sheet

Most Used Design Patterns Cheat Sheet

Creational Patterns
Used to construct objects

Structural Patterns
Used to form large object structures

Behavioral Patterns
Used to manage algorithms and relationships

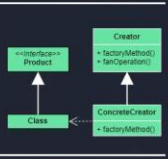
Singleton

Use when you want to have one instances of a class.

Example: logging, db connections.

Factory Method

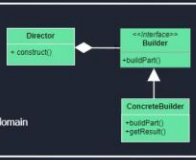
Use when you want to delegate object creation to subclasses.



Example: create GUI component

Builder

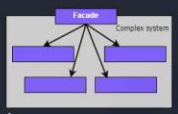
Constructing complex objects, step by step



Example: create complex domain object

Facade

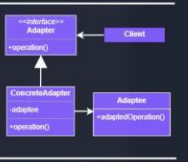
Use when you want to provide a simplified interface to a complex subsystem



Example: Providing a simple interface to a complex subsystem

Adapter

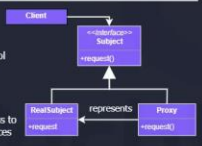
Use when you need to convert an interface to another interface



Example: make incompatible classes work toghether

Proxy

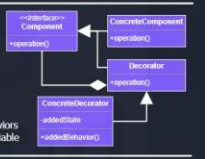
Use for object access control



Example: Controling access to sensitive resources

Decorator

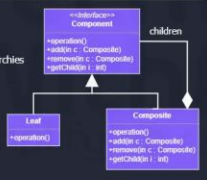
Use when you need to wrap objects to modify their behaviors



Example: make object behaviors dynamically modifiable

Composite

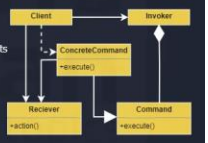
Represent part-whole hierarchies



Example: Graphic object in a drawing can be grouped

Command

Use for encapsulating requests with parameters



Example: Implementing operations

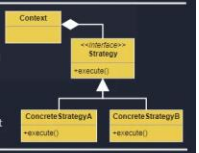
Template Method

Use when you want to break down an algorithm into a series of steps

Example: Common behavior should be located in one class

Strategy

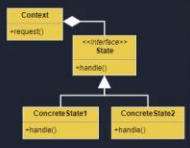
Use for interchangeable algorithms that can be swaped at runtime



Example: Implement different sorting algorithms

State

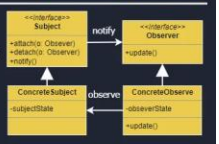
Encapsulate state-specific behavior



Example: Handling different states of a user interface

Observer

Use for automatic updates of dependand objects



Example: Implement subscribers

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