

Creational Design Pattern

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Outline

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Creational Pattern Overview

Construction process of an object.

- Singleton: Ensure only one instance.
- Factory Method: Create instance without depending on its concrete type.
- Object pool: Reuse existing instances.
- Abstract factory: Create instances from a specific family.
- Prototype: Clone existing objects from a prototype.
- Builder: Construct a complex object step by step.

Implementation of Singleton pattern?

- The class is made responsible for its own instance.
- It intercepts the call for construction and returns a single instance.
- Same instance is returned every time
- A direct construction of object is disabled.
- The class creates its own instance which is provided to the clients.

Structure of Singleton pattern?

Singleton
static Instance() SingletonOperation() GetSingletonData()
static uniqueInstance singletonData

Basic implementation

Singleton
static Instance() SingletonOperation() GetSingletonData()
static uniqueInstance singletonData