Intro
Design Pattern

Creational Design Pattern

Abstract Factory

Abstract Factory Design method falls under Creational Pattern of Gang of Four (GOF) Design Patterns in .Net. It is used to create a set of related objects, or dependent objects. Internally, Abstract Factory use Factory design pattern for creating objects. It may also use Builder design pattern and prototype design pattern for creating objects. It completely depends upon your implementation for creating objects.
Example:AFP

Factory Method Pattern

In Factory pattern, we create the object without exposing the creation logic. In this pattern, an interface is used for creating an object, but let subclass decide which class to instantiate. The creation of object is done when it is required. The Factory method allows a class later instantiation to subclasses.

In short, factory method design pattern abstract the process of object creation and allows the object to be created at run-time when it is required.

Singleton Design Pattern

This pattern ensures that the class has only one instance and provides a global point of access to it. The pattern ensures that only one object of a specific class is ever created. All further references to objects of the singleton class refer to the same underlying instance.

Builder Design Pattern

Builder pattern builds a complex object by using a step by step approach. Builder interface defines the steps to build the final object. This builder is independent of the objects creation process. A class that is known as Director, controls the object creation process.

Moreover, **builder pattern** describes a way to separate an object from its construction. The same construction method can create a different representation of the object.

Example : String Builder Pattern ,APIRequestBuilder Pattern,Ice Cream Builder Pattern (Sir er code).

https://stackoverflow.com/questions/38138100/addtransient-addscoped-and-addsingleton-services-differences