Factory Method Design Pattern

●Factory method is creational design pattern.

● It is also known as Virtual Constructor.

● It defines an interface for creating an object, but let subclasses decide which class to instantiate.

● Factory Method lets a class defer instantiation to subclasses.

**Applicability**

Use the Factory Method pattern when

* a class can't anticipate the class of objects it must create.
* a class wants its subclasses to specify the objects it creates.
* classes delegate responsibility to one of several helper subclasses, and you want to localize the knowledge of which helper subclass is the delegate.

**Participants**

* Product (Interface)
  + defines the interface of objects the factory method creates.
* ConcreteProduct
* implements the Product interface.
* Creator (Application)
* declares the factory method, which returns an object of type Product. Creator may also define a default implementation of the factory method that returns a default ConcreteProduct object.
* may call the factory method to create a Product object.
* ConcreteCreator (MyApplication)
* overrides the factory method to return an instance of a ConcreteProduct.

