

Prototype

Objective Function

Create new objects by cloning them from an existing instance.

Structure

As shown in figure 1

- Prototype is an interface that defines the cloning operation. It will be implemented by all objects that can be cloned. Sometimes it is implemented as an abstract class. The client class creates new objects by cloning them. While PrototypeConcretoN is a class that can be instantiated by cloning a prototype. It implements the Prototype interface.

The structure that meets this pattern is shown in Figure 1

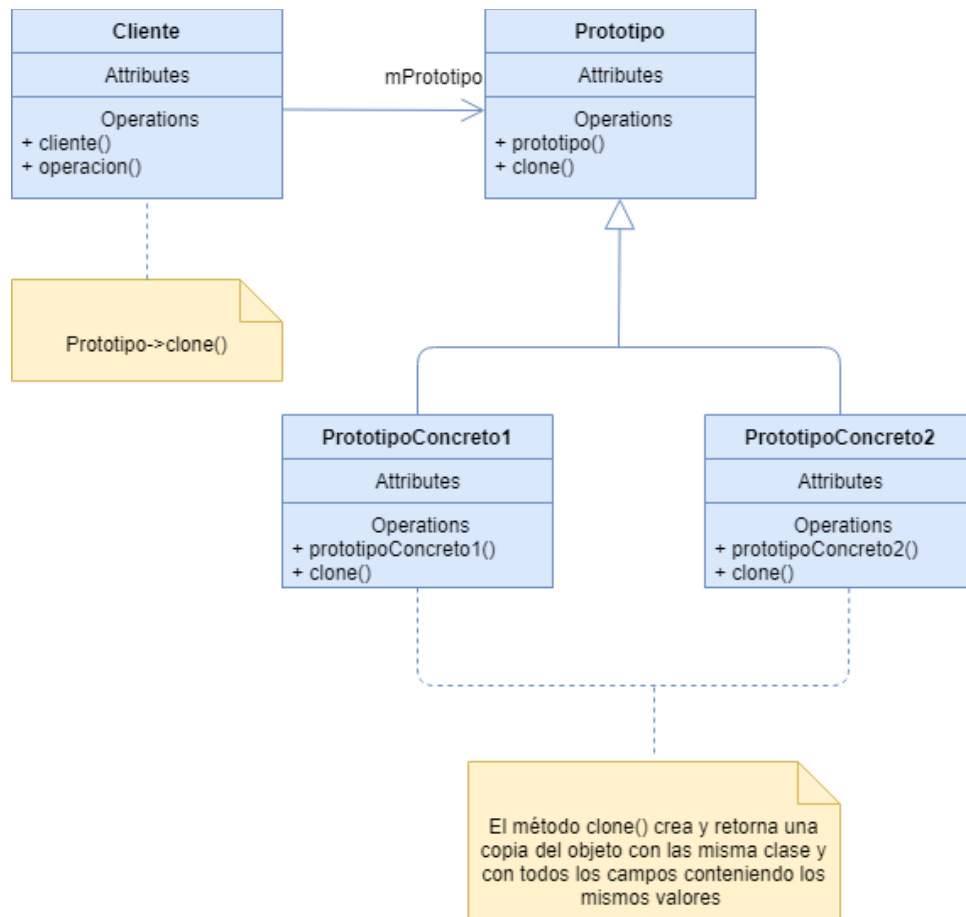


Figure 1: UML Diagram Prototype Pattern

Scope of action

Applied at the object level.

Diagram or Implementation

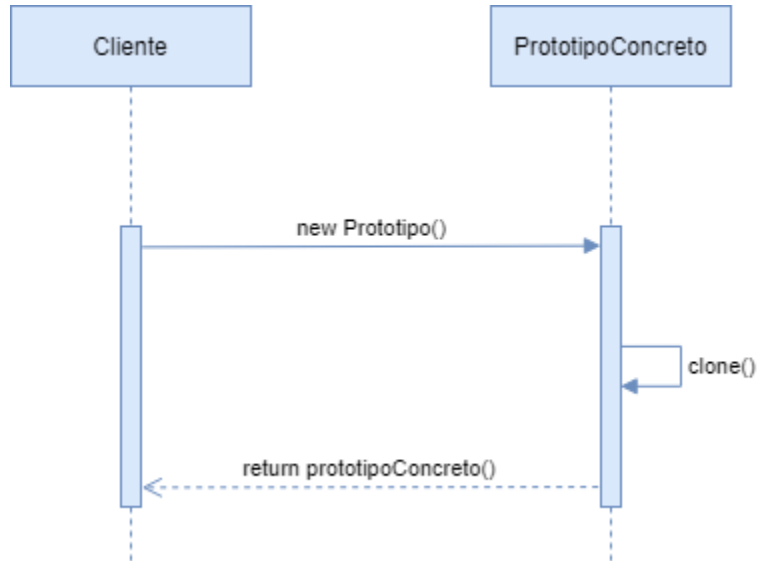


Figure 2: UML Diagram Prototype Pattern

Figure 2 explains the behaviour of the pattern by means of a sequence diagram.

Case Studies

Banking System One

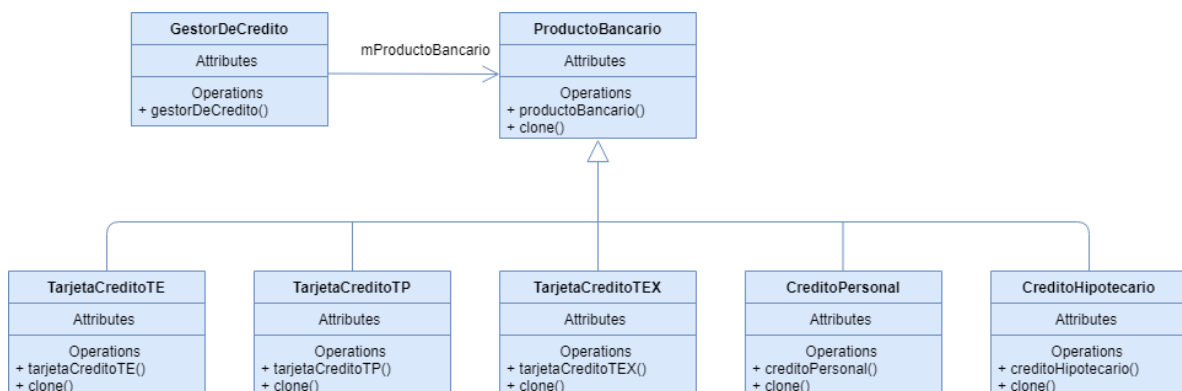


Figure 3: UML Diagram Banking System One

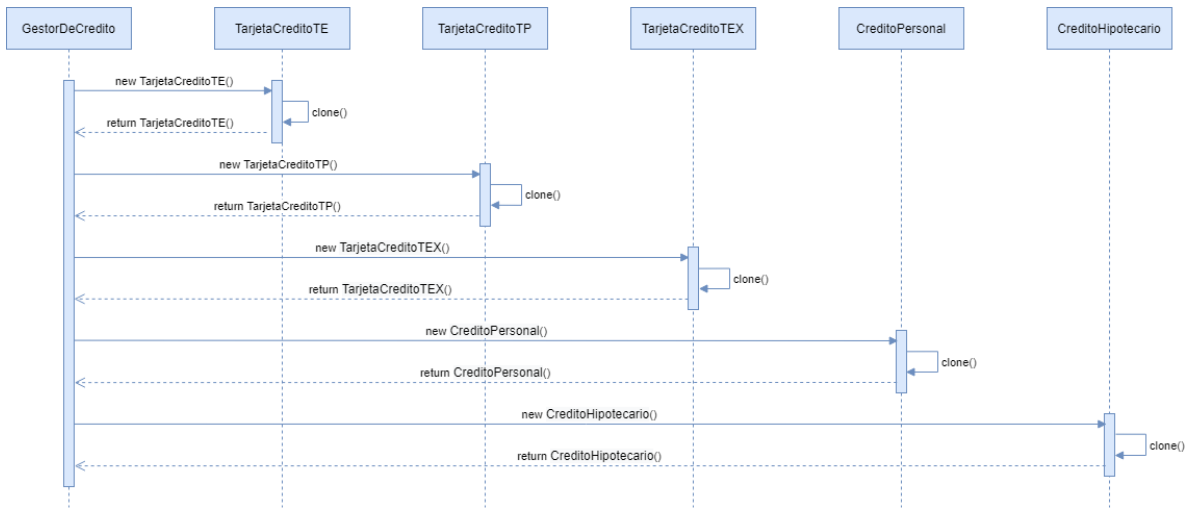


Figure 4: UML Diagram Banking System One

Banking System Two

Concepto de diseño usando el patrón prototype

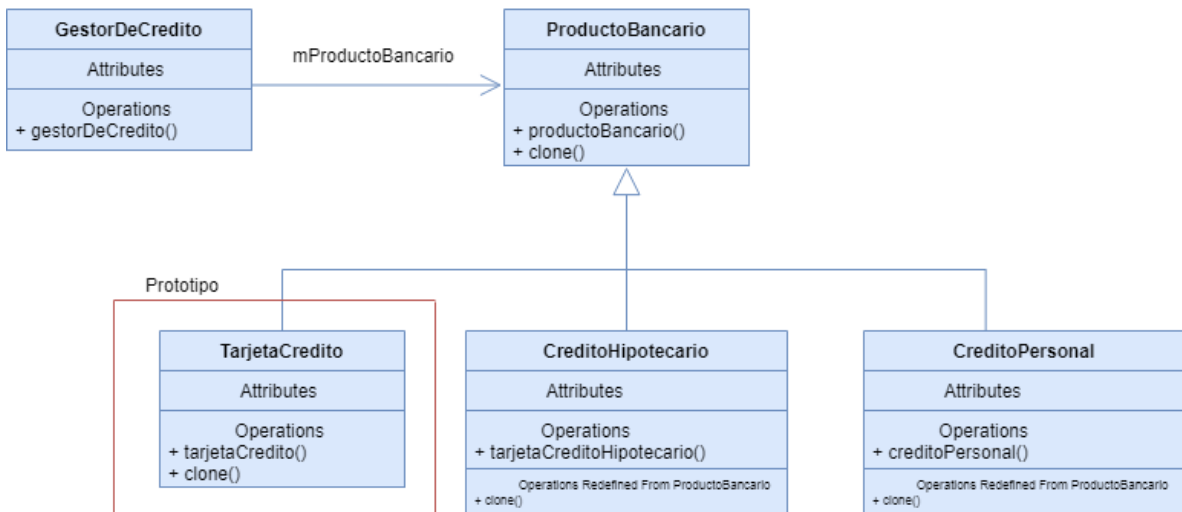


Figure 5: UML Diagram Banking System Two

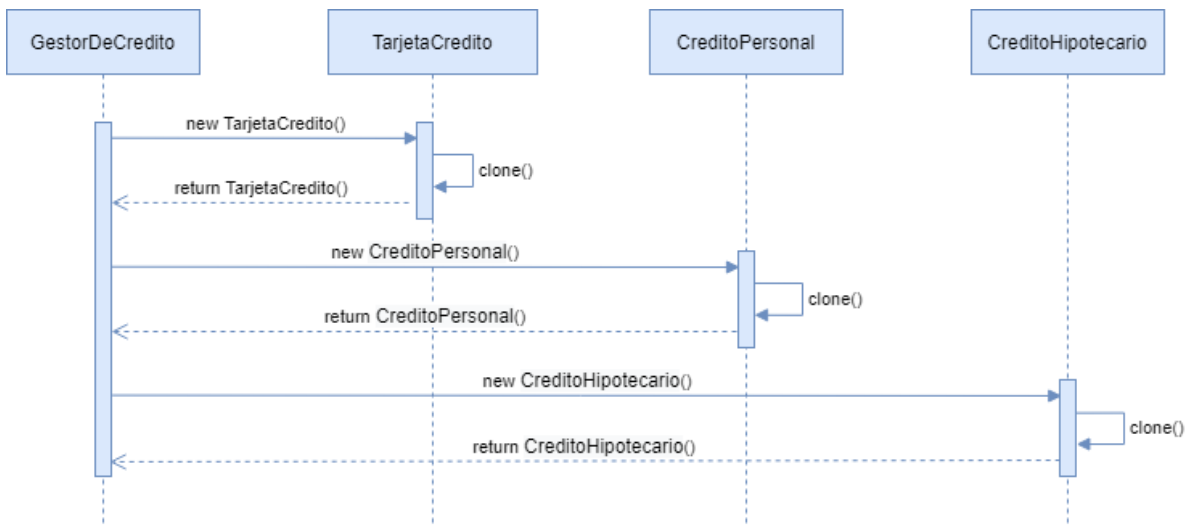


Figure 6: UML Diagram Banking System Two