# Prototype

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## Overview

- Identification
- Structure
- Participants
- Related Patterns
- Example



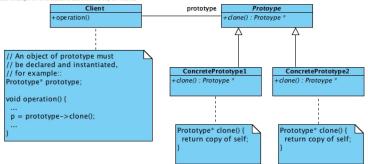
#### Name and Classification:

Prototype (Object Creational)

#### Intent:

"Specify the kinds of objects to create using a prototypical instance, and create new objects by copying this prototype" GoF(117)

Visual Paradigm for UML Standard Edition(University of Pretoria)



- Gives flexible alternatives to inheritance
- The client creates a prototype and each time it requires a new object, the prototype is asked to clone itself

## **Prototype**

defines an interface for cloning

### ConcretePrototypeN

implementation of operation for cloning

#### Client

 asks the prototype to clone so that a new object can be created



#### Related Patterns

- Abstract Factory (87): Competes in producing product, however an AF may use Prototype to clone product.
- Composite and Decorator (163 and 175): Make use of the prototype for nodes cloning.

