Design Pattern - Prototype

Intent

Specify the kinds of objects to create using a prototypical instance and create new objects by copying this prototype without making your code dependent on their classes.

```
┌──────────────┐                    <<Interface>>
│    Client    │───────────────────▶    Prototype
└──────────────┘                    ├─────────────────┤
       ┊                            │ Clone(): Prototype
┌──────────────────────┐           └─────────────────┘
│ copy = existing.Clone() │
└──────────────────────┘
```

ConcretePrototype1

field1

ConcretePrototype1(prototype)
Clone(): Prototype

this.field1 = prototype.field1

return new ConcretePrototype(**this**)

ConcretePrototype2

field1

ConcretePrototype2(prototype)
Clone(): Prototype

SubclassPrototype1

field2

SubclassPrototype1(prototype)
Clone(): Prototype

super(prototype)
this.field2 = prototype.field2

return new SubclassPrototype(**this**)

SubclassPrototype2

field2

SubclassPrototype2(prototype)
Clone(): Prototype