

# Prototype



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# Module Overview



Motivation

Contact Records

Shallow vs. Deep Copy

A Prototype Factory

Boost Serialization

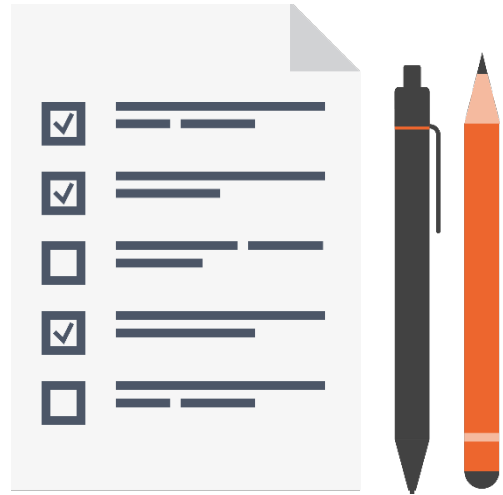
# Motivation

- Complicated objects (e.g., cars) aren't designed from scratch
  - They reiterate existing designs
- An existing (partially constructed design) is a **Prototype**
- We make a copy (clone) the prototype and customize it
  - Requires 'deep copy' support
  - Painful without metadata!
- We make the cloning convenient (e.g., via a **Factory**)

# Prototype

A partially or fully initialized object that you copy (clone) and make use of.

# Summary



To implement a prototype, partially construct an object and store it somewhere

Clone the prototype and then customize the instance

Ensure deep copying!