

Polymorphism

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OOP Class, May 03-04, 2010

Content/Reference Polymorphism: Summary

backward compatibility handled

forward advance: only via downcast (RTTI)

simpler mechanism for forward advance?

Our Needs in Forward Advance

- new instance variables for advanced state
- new instance methods to manipulate new variables
- give new meanings to existing instance variables
- give new meanings to existing instance methods
- ★ ● write an “updated but compatible” version of existing method

{ focus forward does not affect back. cannot backward comput.. }

Method Overriding (Virtual Function)

calls the updated version through an upper-level reference

one method (via upper-level reference),
many possible extended behaviors