Leveraging Reuse

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Object-Oriented Programming (OOP)

Identifying Classes



- Represents business entities
- Defines properties (data)
- Defines methods (actions/behavior)

Separating Responsibilities



- Minimizes coupling
- Maximizes cohesion
- Simplifies Maintenance
- Improves Testability

Establishing Relationships



 Defines how objects work together to perform the operations of the application

Leveraging Reuse



- Involves extracting commonality
- And building reusable classes/components

Reuse

Build it once

Test it once

Update it once

Enhance it once

Module Outline

Techniques for Leveraging Reuse

The .NET Object Class

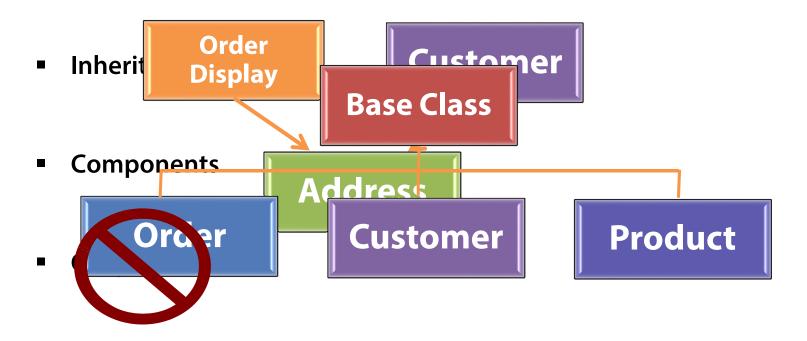
Overriding Base Class Functionality

Polymorphism

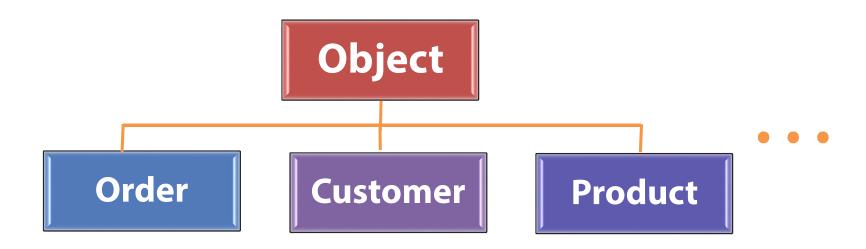
Building a Base Class

Techniques for Reuse

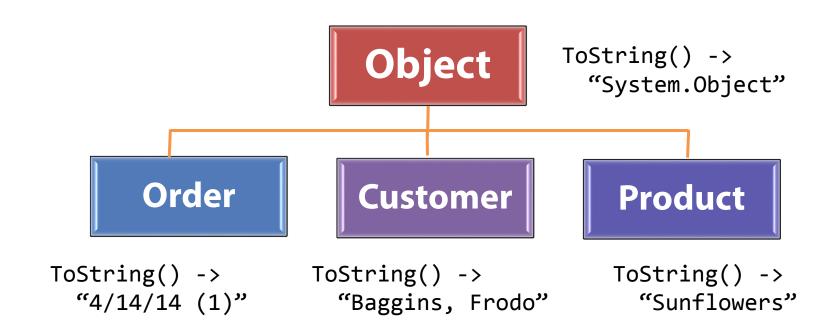
Collaboration



.NET Object Class



Polymorphism



Summary

Techniques for Leveraging Reuse

The .NET Object Class

Overriding Base Class Functionality

Polymorphism

Building a Base Class

Four Pillars of OOP



Terms and Keywords

Abstract vs Concrete classes

Sealed classes

Abstract vs Virtual methods Access
Modifiers:
Public,
Private,
Protected