CS 535 Object-Oriented Programming & Design Fall Semester, 2008 Doc 14 Exploratory Phase Cont. Oct 30 2008

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References

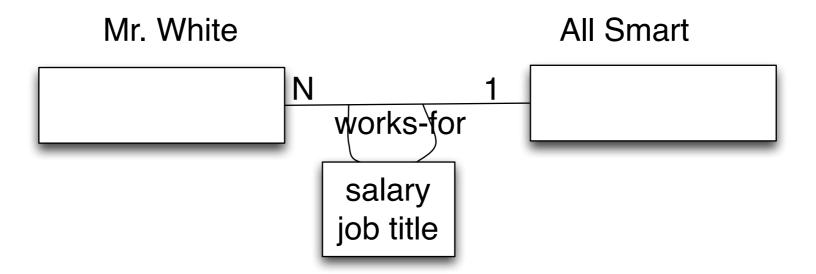
Wirfs-Brock, Designing Object-Oriented Software, chapters 1-5

Relations





Model View

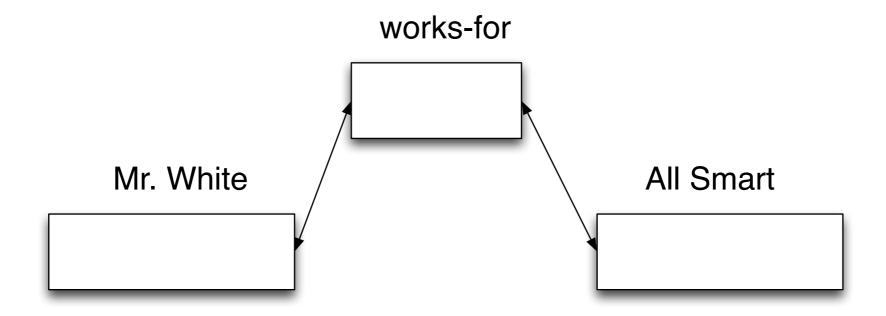


If need both directions

Two Pointers



If need both directions



Recording Responsibilities

Class: Drawing	
List responsibilities here	

Class: Drawing	
	_
Know which	
elements it contains	
Maintain ordering	
between elements	

Collaboration

Represents requests from a client to a server in fulfillment of a client responsibility

Interaction between objects

Finding Collaborations

Examine class responsibilities for dependencies

For each responsibility:

Is class capable of fulfilling this responsibility?

If not, what does it need?

From what other class can it acquire what it needs?

For each class:

What does this class do or know?

What other classes need the result or information?

If class has no interactions, discard it

Finding Collaborations

Examine scenarios

Interactions in the scenarios indicate collaboration

Common Collaboration Types

The is-part-of relationship

X is composed of Y's

Composite classes

Drawing is composed of drawing elements

Some distribution of responsibilities required

Container classes

Arrays, lists, sets, hash tables, etc.

Some have no interaction with elements

Recording Collaborations

Class: Drawing

Know which elements it contains

Maintain ordering Drawing between elements element