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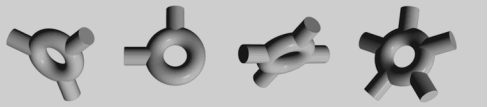

Book Package

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1 Interfaces

1.1 Book

A book is an account that is used to “hold” a collection of deals. These deals will most likely have a common element, such as the type of the deals or the user who made the deals, however no restrictions are imposed.

While the purpose of a book is to hold a collection of deals, we do not specify a method on this interface to obtain this collection of deals. When the system desires to find all the deals in a certain book, it will have to search through all the existing deals and collect those within the given book. This approach is taken in

order to decouple books from deals. This will enable implementations involving these models to be deployed independently. For example the reference data server can be delopyed independently from the deal server.

1.1.1 Relationships

	Class	Description	Notes
⇑	Party		
⇑	Validatable		
↓	BookModel §2.1		
↓	BookReferenceDataModel §2.2		
↔	BookModel §2.1	parent	
↔	BookReferenceDataModel §2.2	model	

⇑:Inherits ↓:Realized by ↔:Association →:Navigable ◊:Aggregate ⧫:Composite

1.1.2 Operations

Book parent() parent

Returns the book's parent. A parent book will hold all the deals contained within its child books. A book hierarchy is used to provide a way of viewing progressively more comprehensive collections of the trades made throughout the organization. This operation may return null.

Reportable validate() validate

This method returns an object of type Reportable which will contain all the errors and warnings generated from this method. Below is a list of the axioms that must hold for an instance of this class to be valid. Each statement is followed by the error or warning message that will be issued if the axiom is violated.

- None of this book's ancestors or descendants can be itself. That is, the books must form a hierarchy, and can not form a loop.

2 Classes

2.1 BookModel

This class is a concrete realization of the Book interface.

2.1.1 Relationships

	Class	Description	Notes
↑	Book §1.1		
↔	Book §1.1	parent 0..1	→

↑:Realizes ↔:Association →:Navigable ◊:Aggregate ♦:Composite

2.1.2 Attributes

identifier: String A name given to the book to identify it.

2.2 BookReferenceDataModel

This class implements the Book interface by delegating to the associated model.

2.2.1 Relationships

	Class	Description	Notes
⇑	ReferenceDataModel		
↑	Book §1.1		
↔	Book §1.1	model	→

⇑:Inherits ↑:Realizes ↔:Association →:Navigable ◊:Aggregate ♦:Composite

2.2.2 Operations

validate() validate

Returns the validation results for the superclass, composed with the validation results from the associated model.

3 Associations

Table 1: Book— Associations

Association Role	Class	Card.	Notes
parent	Book §1.1	0..1	→
model	BookModel §2.1		

Table 1: . . . continued

Association Role	Class	Card.	Notes
	Book §1.1		→
	BookReferenceDataModel §2.2		

→:Navigable ◊:Aggregate ⧫:Composite

3.1 parent

Role: *Navigable* Book, 0..1.
Role: BookModel.

3.2 model

Role: *Navigable* Book.
Role: BookReferenceDataModel.

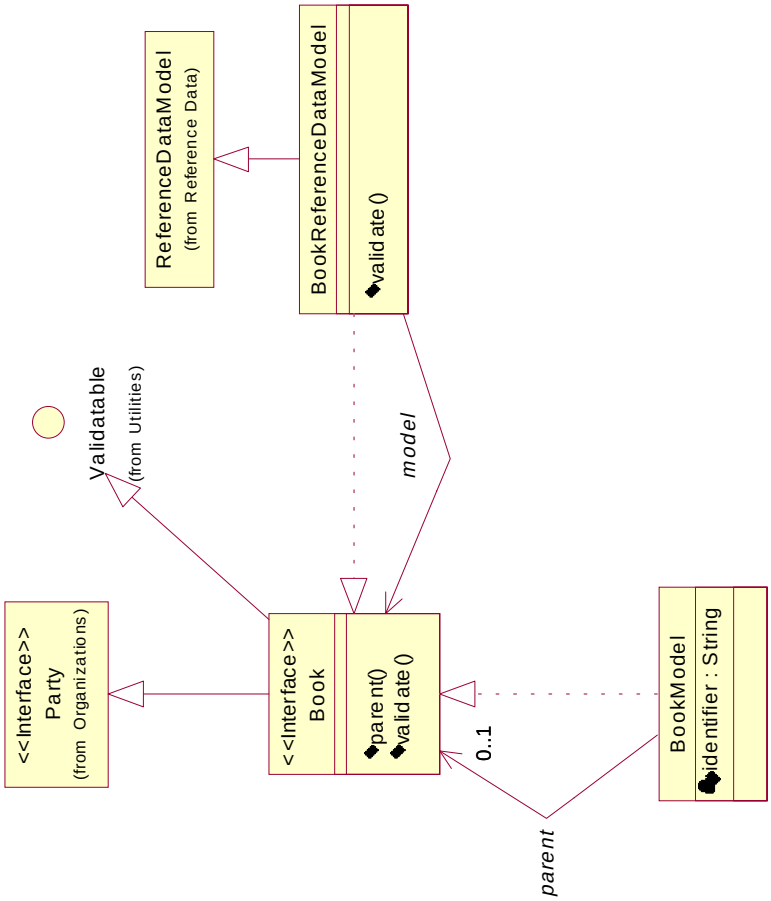

Figure 1: Class Diagram— Book

References