



Chapter 12 Multi-Class Applications

I. Scott MacKenzie



Outline

- 12.1 Introduction**
 - 12.1.1 Multi-Class Apps
 - 12.1.2 The Abstract Foods Company
- 12.2 Inventory Control**
 - 12.2.1 The Items
 - 12.2.2 The Fresh Items
 - 12.2.3 The Inventory Map
- 12.3 Contacts**
 - 12.3.1 The Need for an Abstract Class
 - 12.3.2 The Clients
 - 12.3.3 The Suppliers
 - 12.3.4 The Contacts Map
- 12.4 Transactions**
 - 12.4.1 Why Are Transactions Needed?
 - 12.4.2 The `TRX` Class
 - 12.4.3 The Journal List

Inter-class Relationships

- Review (Section 7.1.3): There are three inter-class relationships

- Dependency
- Aggregation
- Inheritance

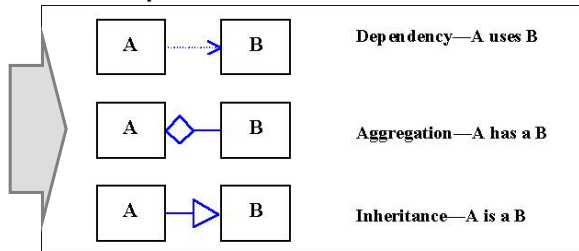
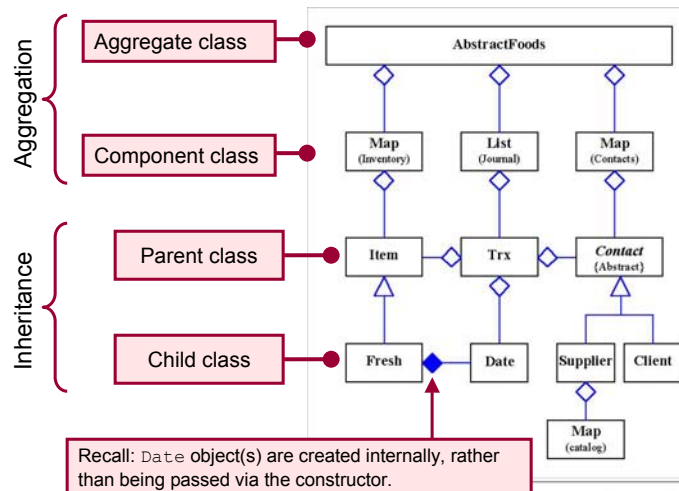


Figure 7.4
UML Relationship diagrams.

UML Diagram of Multi-class Application



The UML diagram of a multi-class application shows several classes with inheritance and aggregation relationships.

Inventory Control Subsystem

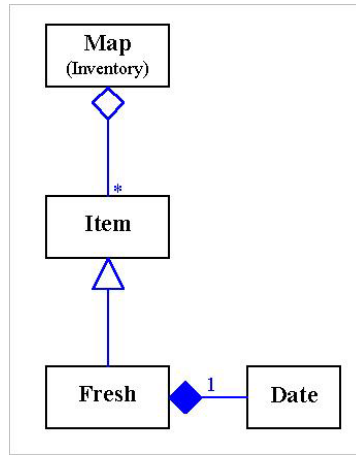


Figure 12.2
The Inventory Control subsystem.

Contact, Supplier, Client Classes

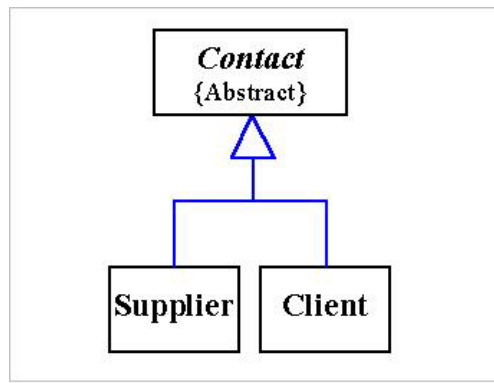


Figure 12.3
Contact, the superclass of Client and Supplier, must be made abstract.

Contacts Subsystem

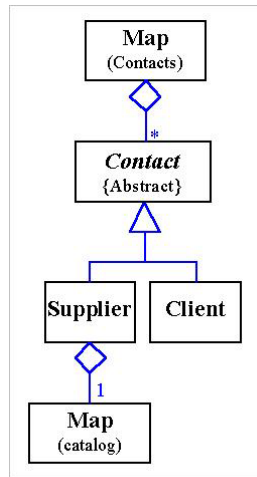


Figure 12.4
The Contacts subsystem.

7

Transaction Subsystem

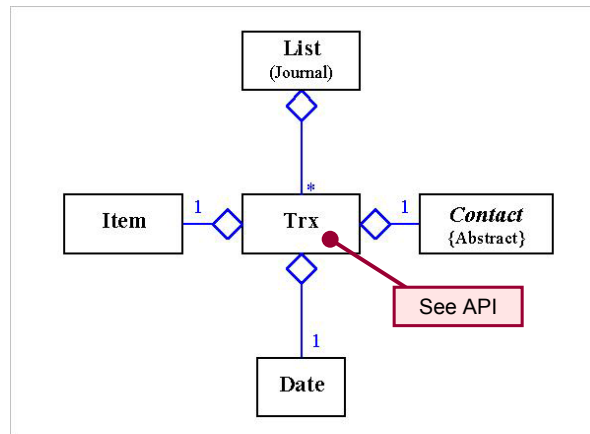


Figure 12.5
The Transaction subsystem.

8



Thank You