

# ERP Course: Analysis Patterns Accountability, Inventory, and Accounting Readings: Chapter 2 and 6 from Martin Fowler

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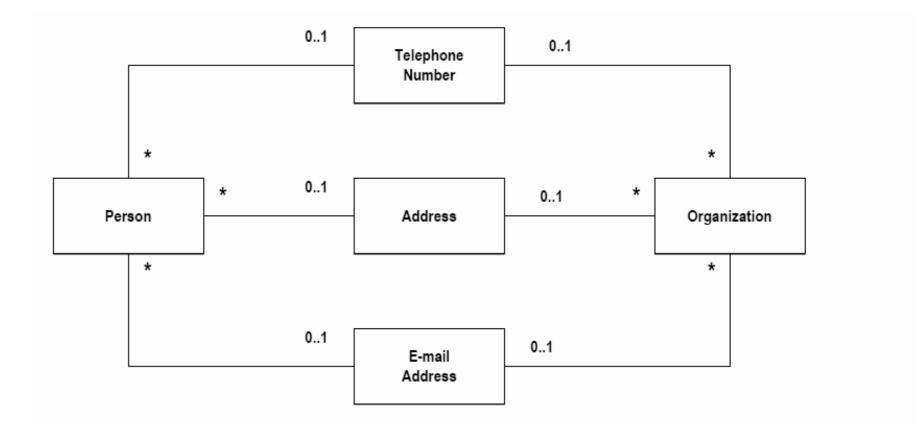


# Accountability

A relationship of responsibility between responsee and responsible Organizational structures Employments Contracts

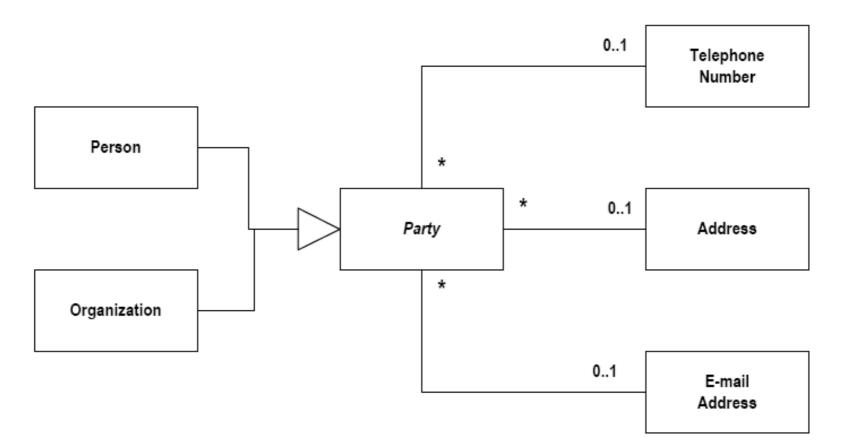


#### **Address Book**



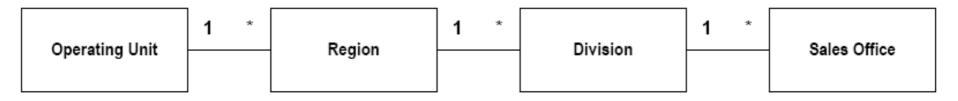


Party



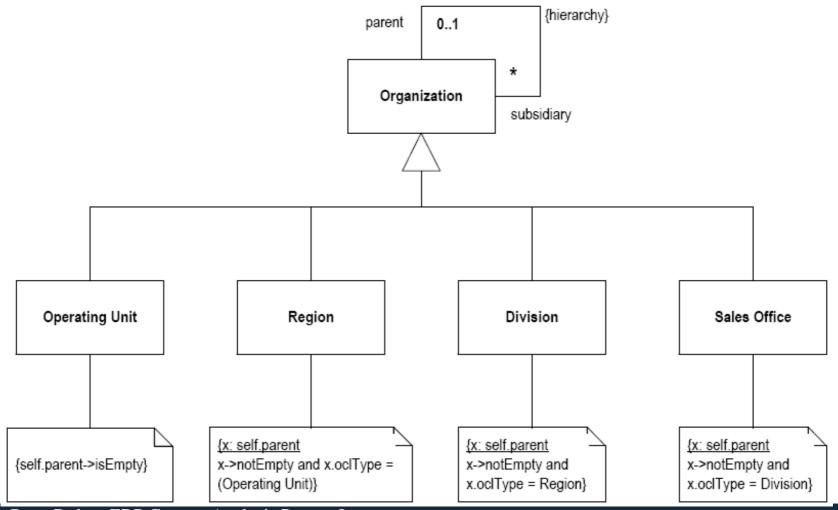


# **Organization Structure with Explicit Levels**





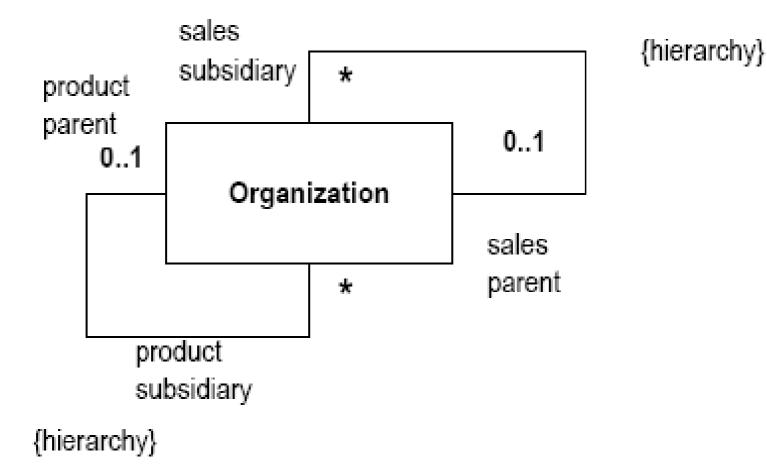
## **Organization Supertype**



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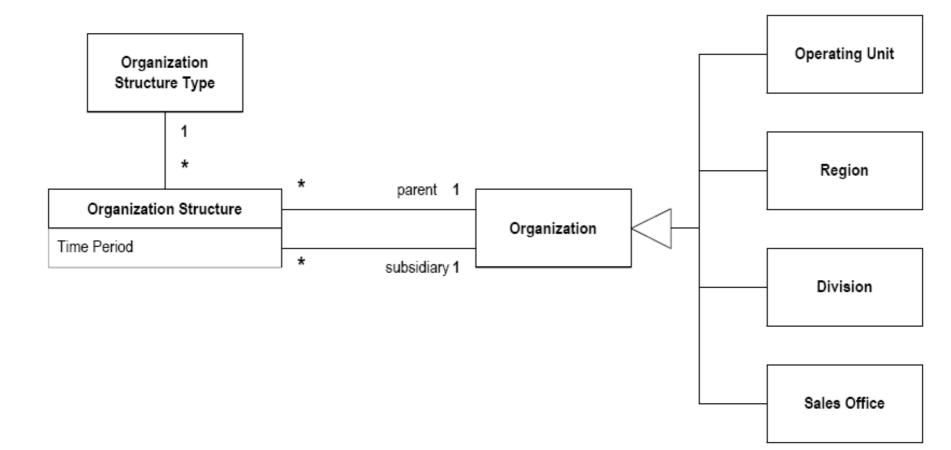
## **Two organizational hierarchies**



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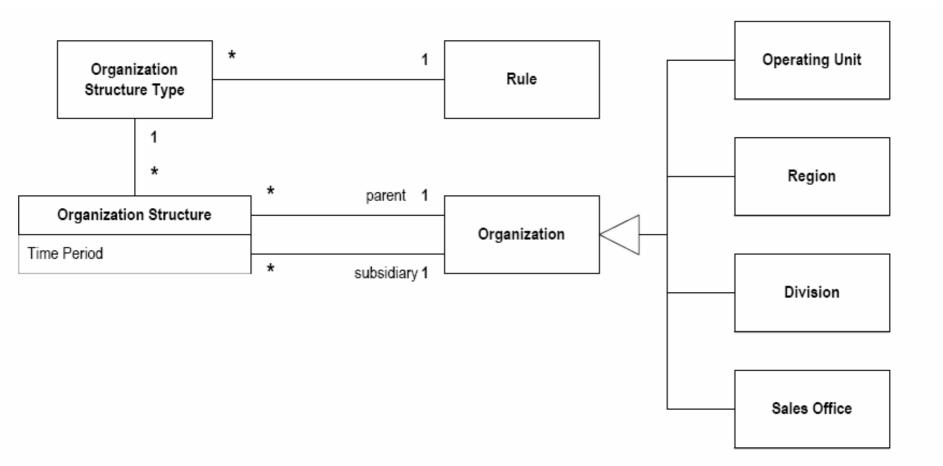


## **Typed Relationships**



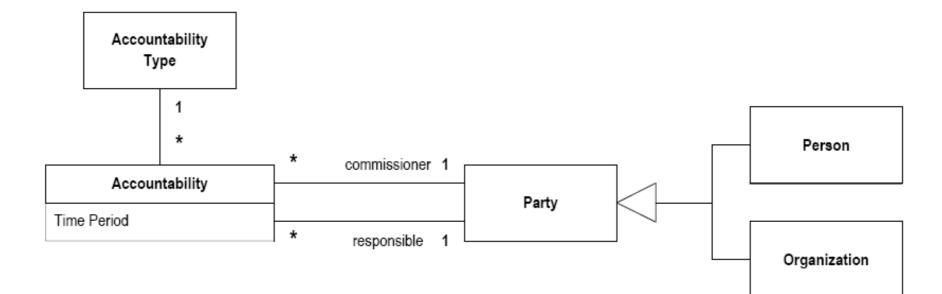


#### **Rules**



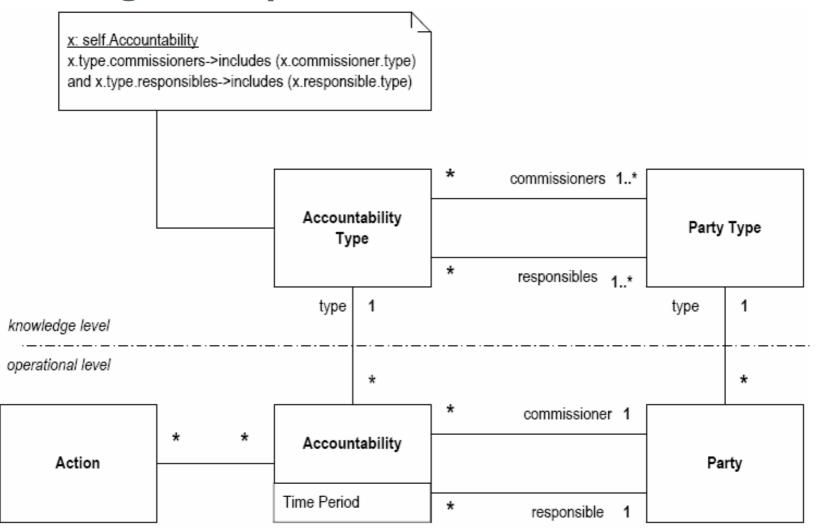


## Accountability





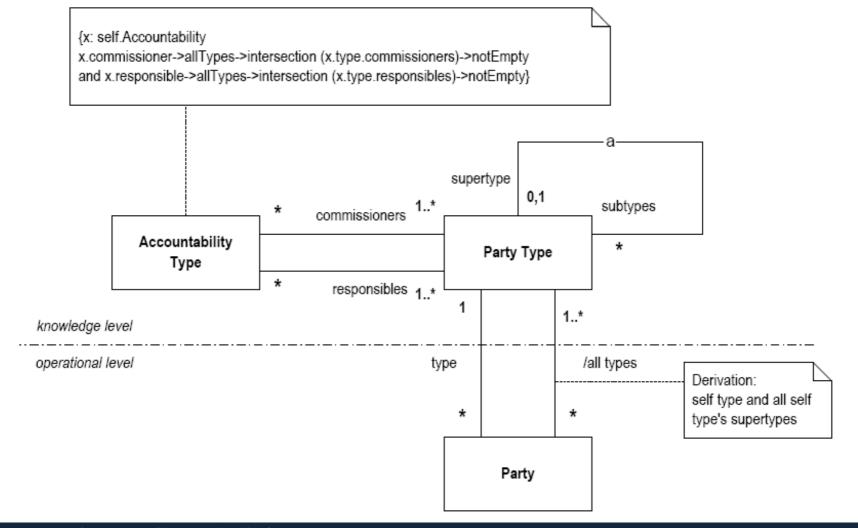
### **Knowledge and operational levels**



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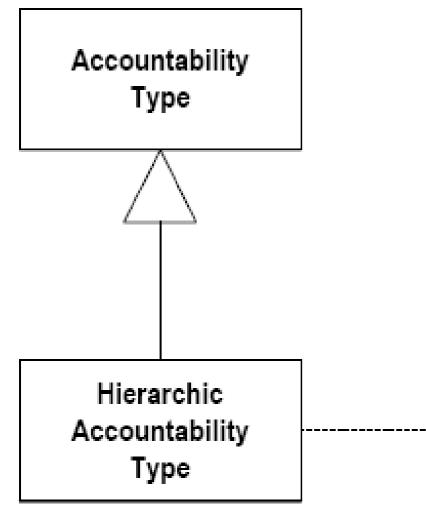


## **Party Type Generalizations**





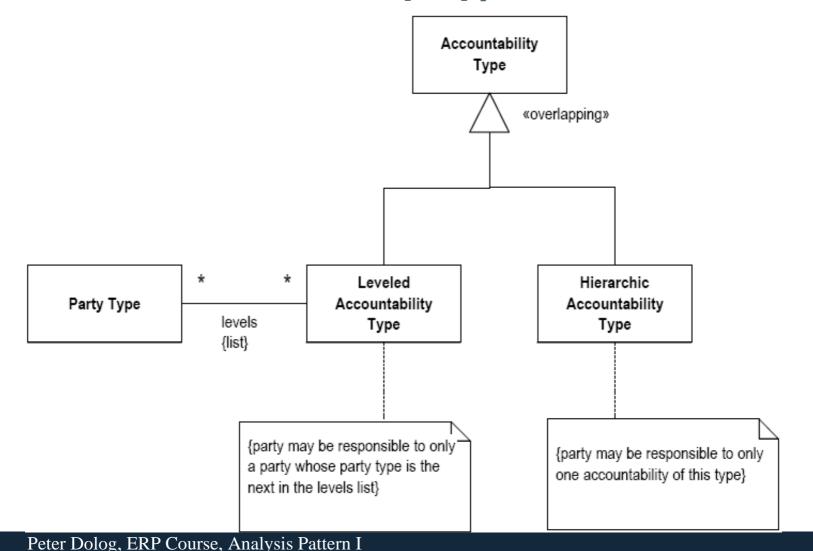
## **Hierarchic Accountability Type**



{party may be responsible to only one accountability of this type}

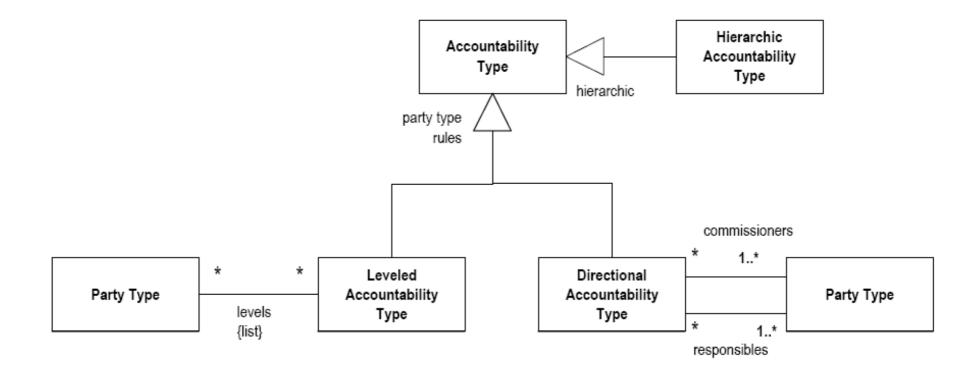


## **Leveled Accountability Type**

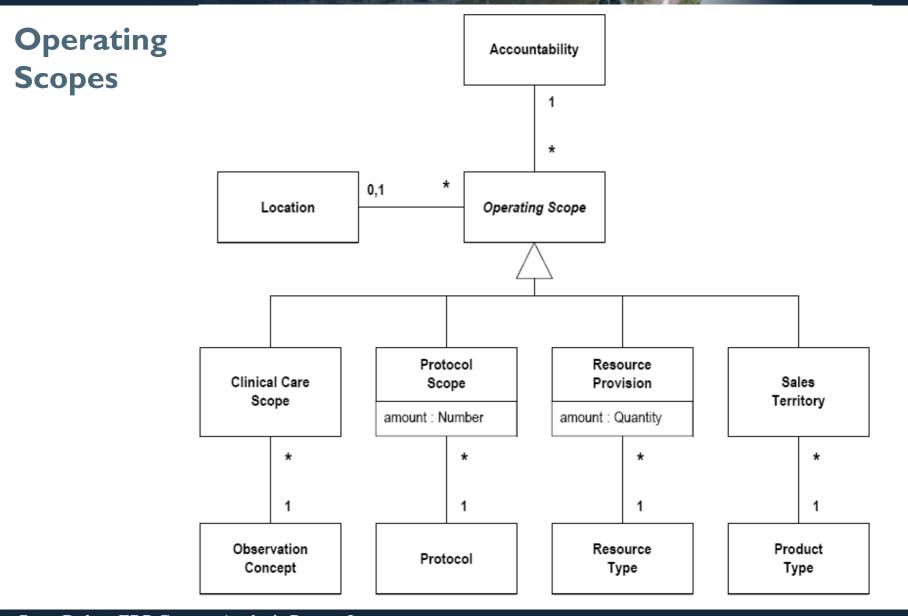




# **Subtypes of Acountability Types**







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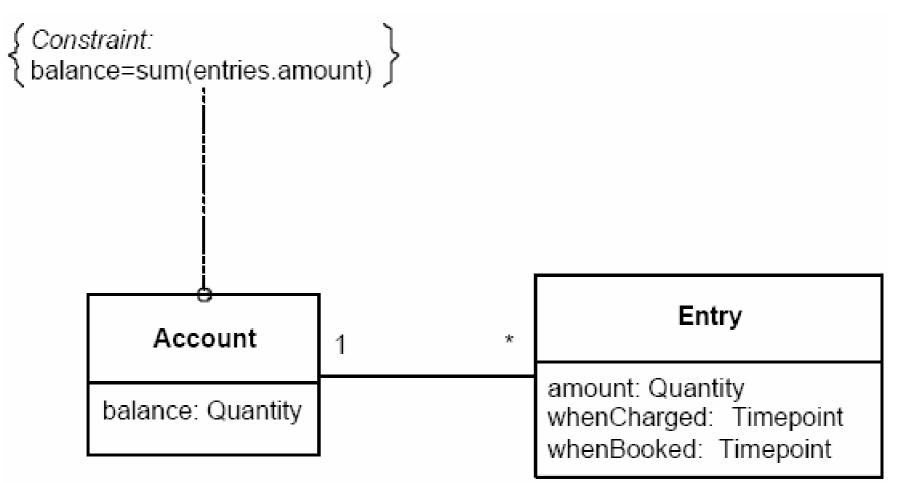


## Accounting

Tracing how money move througout the company Tacking of earnings and expenditures Posts of money and goods to record – entries

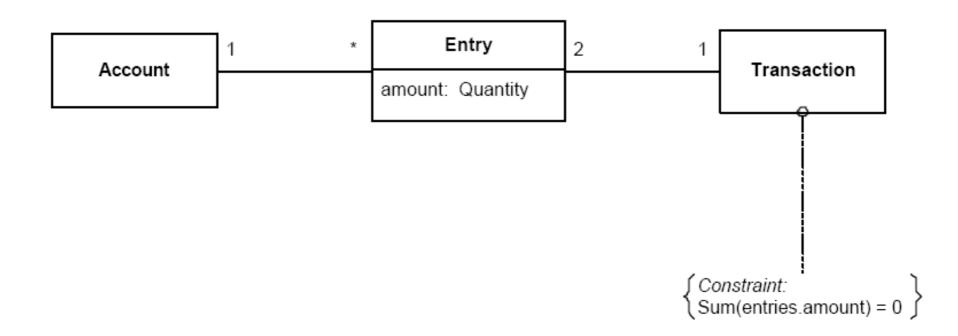


## Account



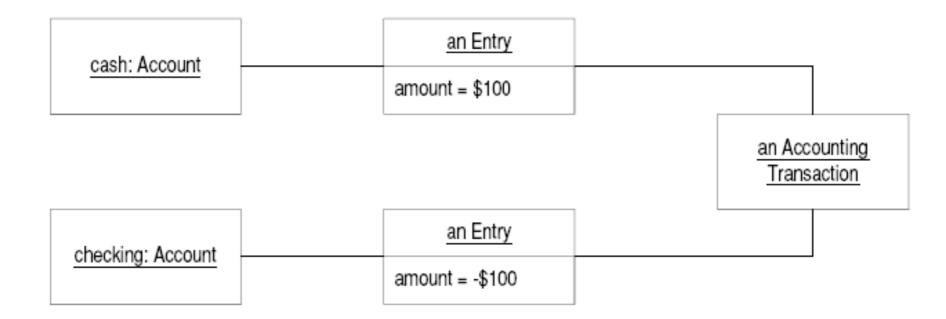


## **A** Transaction with Two Entries



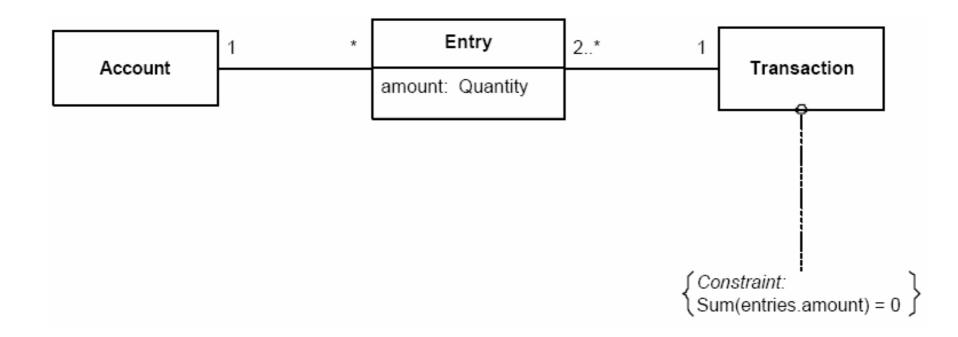


#### **Instance Example**



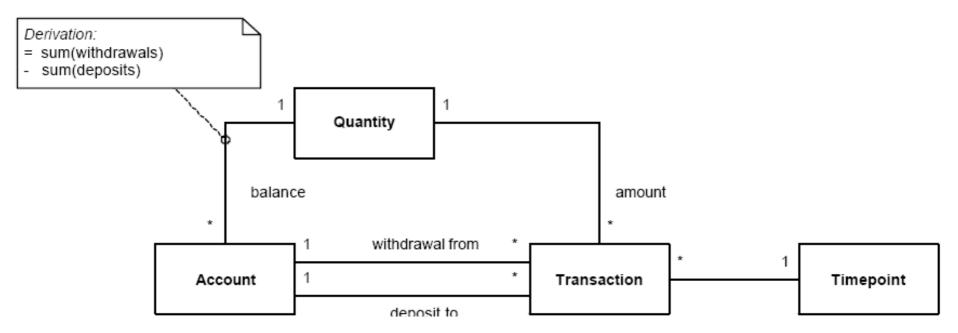


## **Multiledged Transactions**



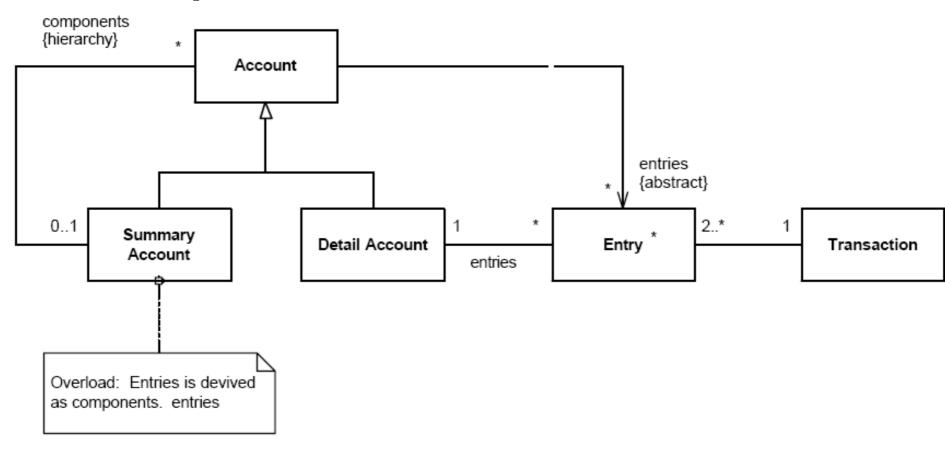


## 2-legged transaction without entries



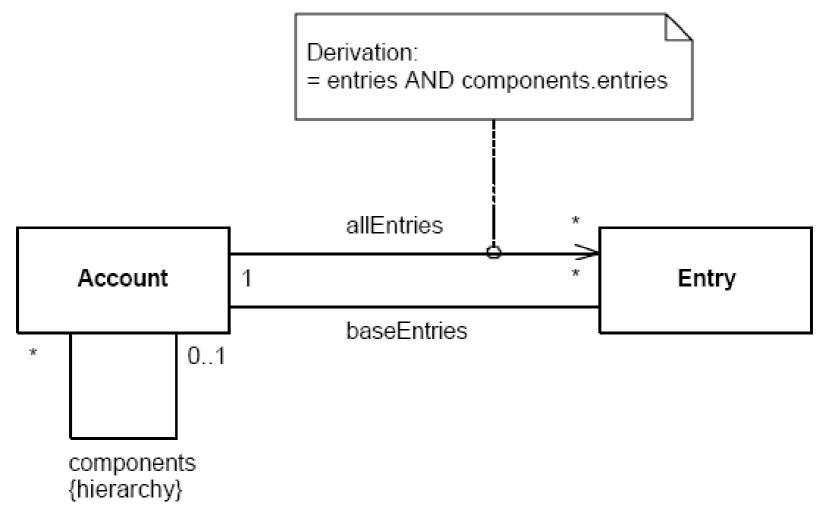


## **Summary and Detail Accounts**



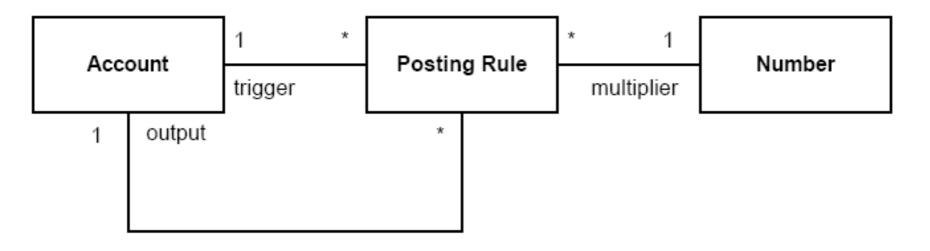


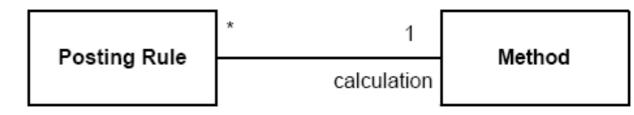
# Account hierarchies without separating summary and detail accounts



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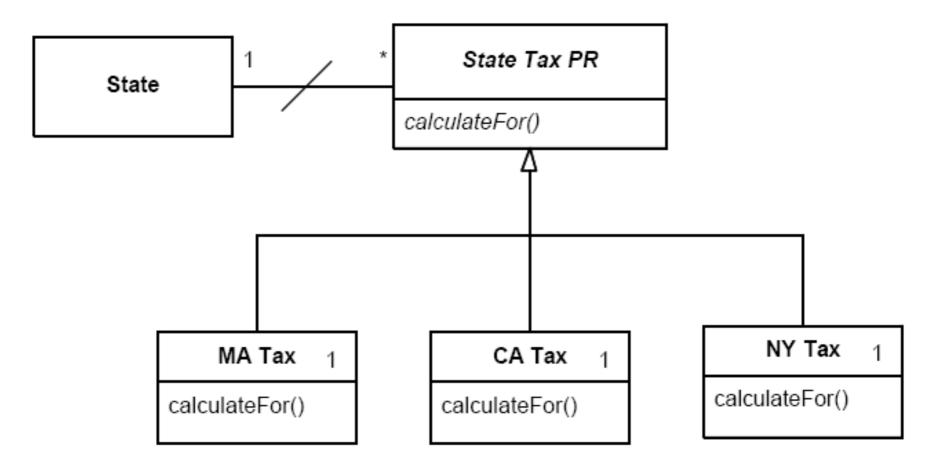
# Posting Rules Multiplied by a Factor or a method to calculate an entry





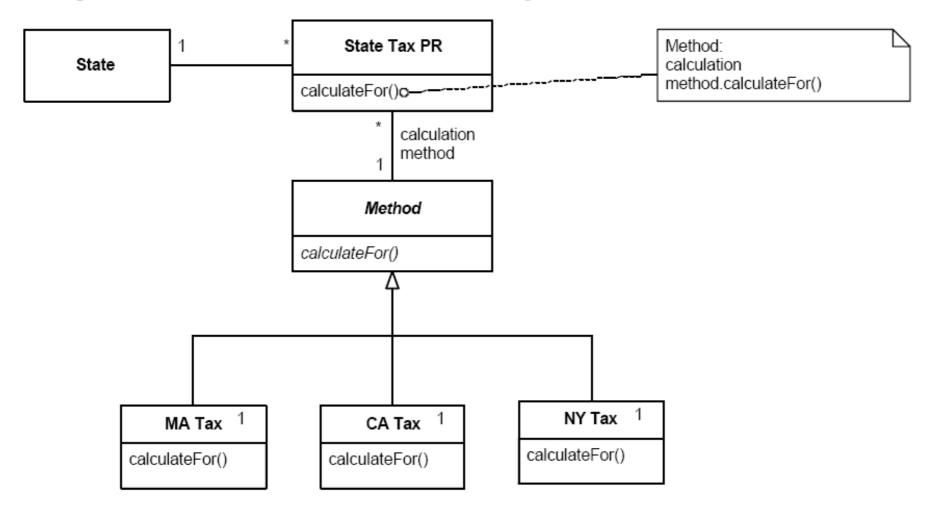


#### **Individual Instance Methods with Singletons**



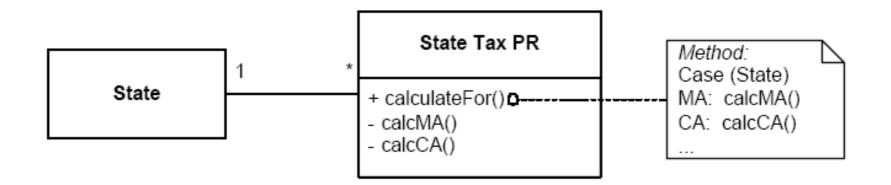


## Implementation with Strategy Pattern



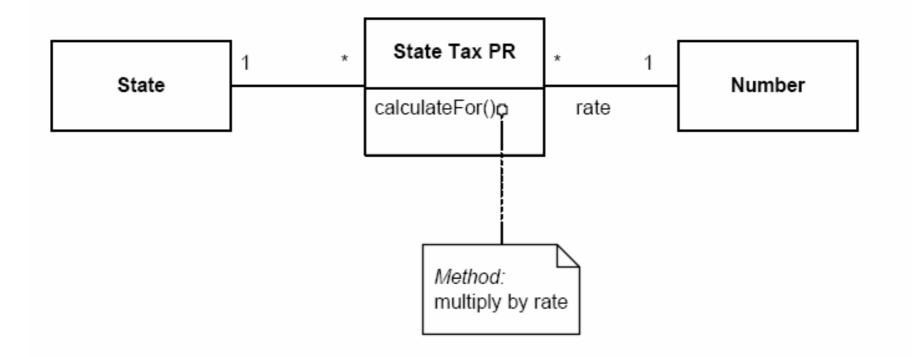


## **Implementation with Internal Case Statement**



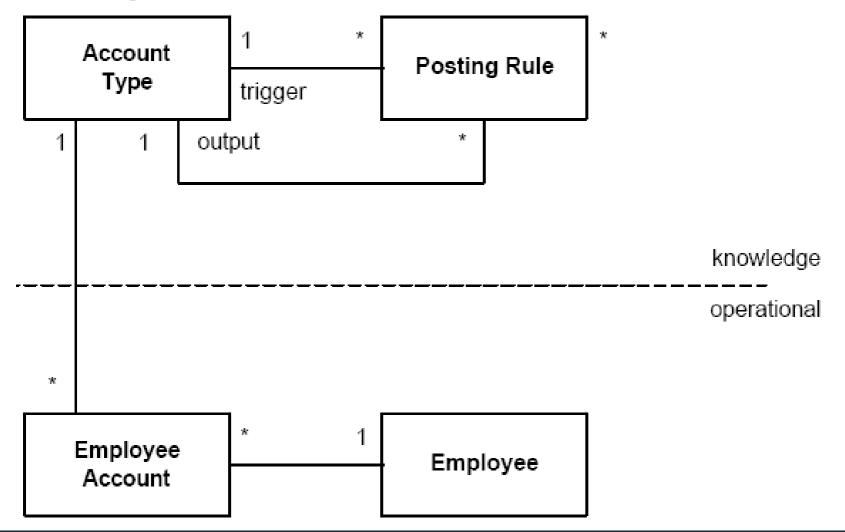


## **Implementation with Parametrized Method**



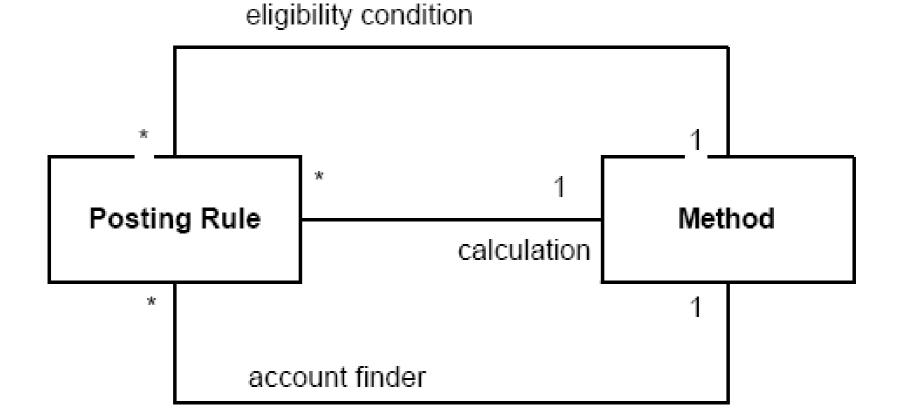


## **Posting Rules for Many Accounts**





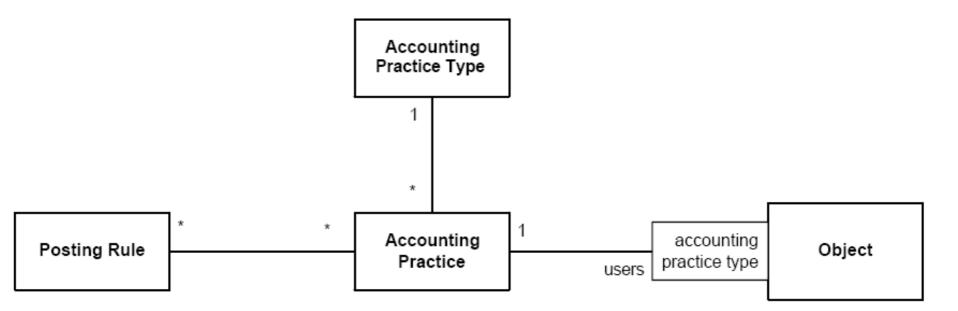
# **Account finder and Eligibility Conditions**



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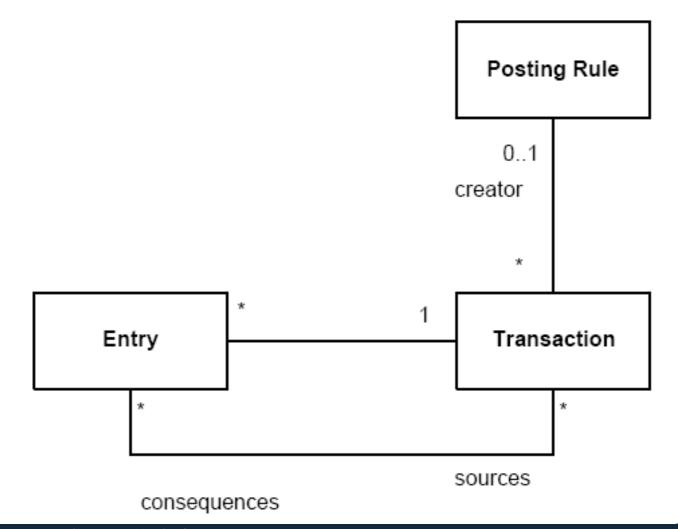


## **Acount Groups: Accounting Practices**





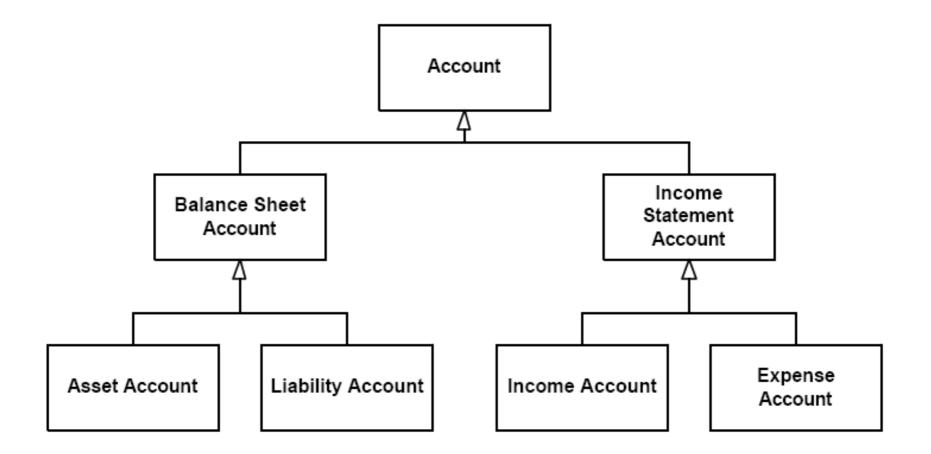
#### **Sources for Transactions**



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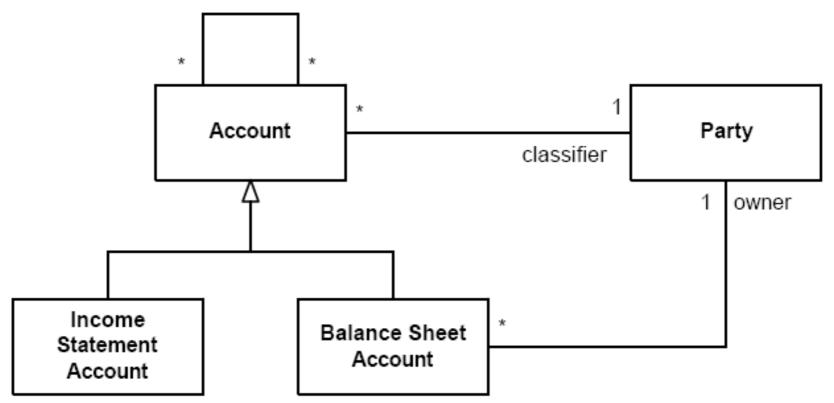
#### **Balance Sheet and Income Statement**



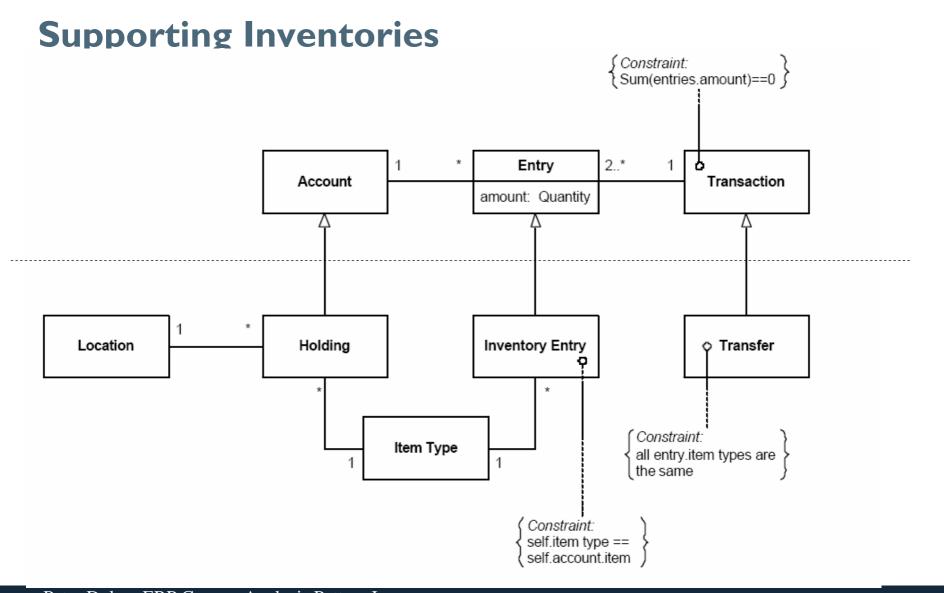


#### **Corresponding Accounts**

correspondents {symmetric, transitive}

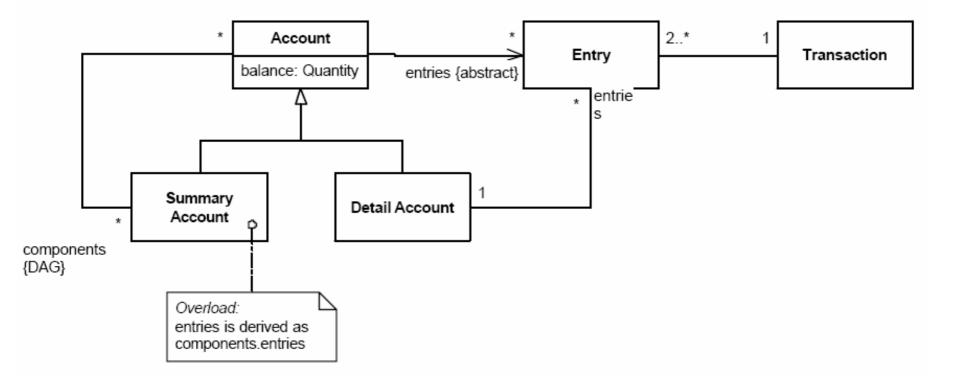






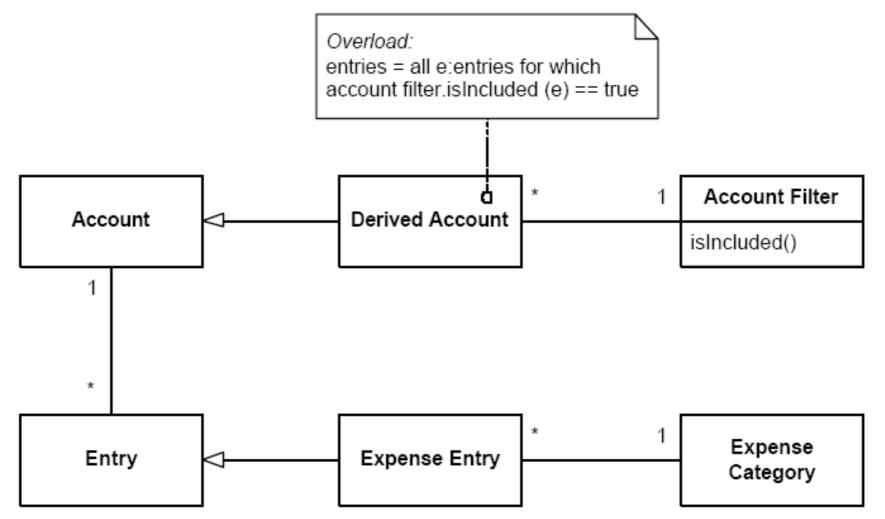


## **Multiple Summary Accounts**





#### **Derived Accounts**





## **Expenses to Abandon Accounting Model**

