

CS544 EA Hibernate

Inheritance

Inheritance

- With Inheritance a class can extend another class
 - Inheriting its properties and methods
 - Often referred to as an 'IS-A' relationship
- In our example
 Account is abstract

 <abstract>>
 Account
 +number
 +balance

 CheckingAccount
 +APY
 +overdraftLimit
- Relational does not have inheritance
 - There are 3 ways to emulate it

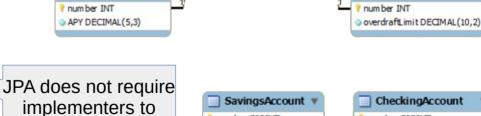
Emulate Inheritance

SavingsAccount

provide this strategy

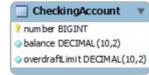
- Single Table per Hierarchy
 - De-normalized schema
 - Fast DB operations
- Joined Tables
 - Normalized schema
 - Bit slower operations
- Table per Concrete Class
 - Uses UNION instead of JOIN
 - All needed columns in each





Account
number BIGINT
balance DECIMAL (10,2)





CheckingAccount

<<abstract>>

Polymorphism

- Polymorphism is the ability of a subtype to appear and behave like its super type
- This enables a person to have a list of account references, which can be any type of account

A polymorphic query is a query for all objects in a hierarchy,

independent of subtype

