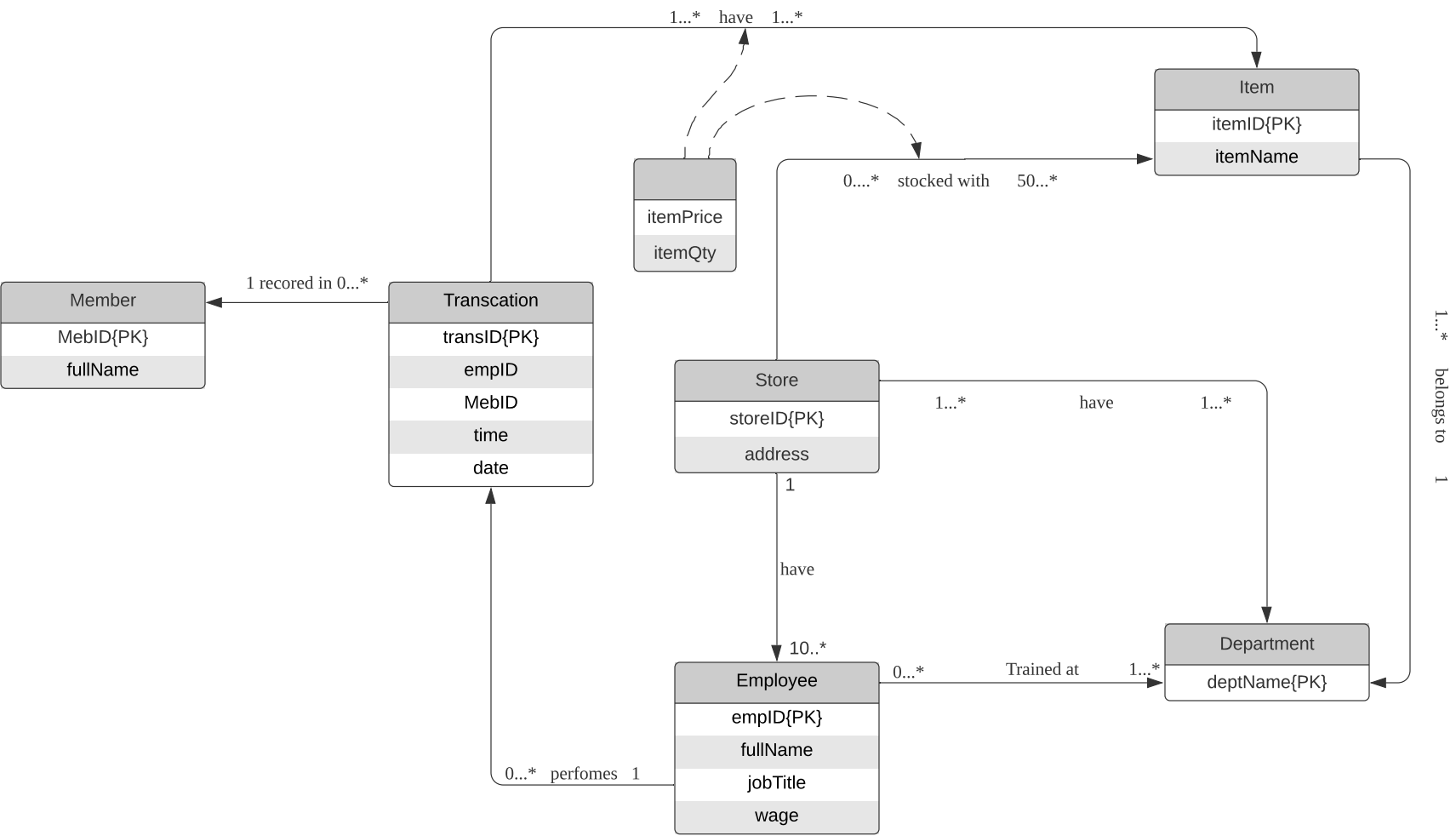


# Chain Store ER-Model

## CS331

Cheng Shi  
23375304



### Weak Entity

N/A

### 1To1

N/A

### 1ToMany relationship

Meb>Trans(add MebID into Trans )  
Store>Emp(add StoreID into Emp)  
Dept>Item(add DeptName into Item)  
Emp>Trans(add empID into Trans)

### Updated Schema

Store(storeID,address)  
Department(deptName)  
Employee(empID,fullName,jobTitle,wage,storeID)  
Item(itemID,itemName,deptName)  
Transcation(transID,empID,time,date,MebID)  
Member(MebID,fullName)

### ManyToMany relationship

Store>Dept(+ StoreDept table)  
Store>Item (+ inventory table)  
Dept>Emp(+ EmpDept table)  
Item>Trans(+TransShopList table)

### Updated Schema

Store(storeID,address)  
Department(deptName)  
Employee(empID,fullName,jobTitle,wage,storeID)  
Item(itemID,itemName,deptName)  
Transcation(transID,empID,time,date,MebID)  
Member(MebID,fullName,)  
+  
StoreDept(storeID,deptName)  
Inventory(storeID,itemID)  
EmpDept(empID,deptName)  
TransShopList(transID,itemID)

### Final Schema

Store(storeID,address)  
Department(deptName)  
Employee(empID,fullName,jobTitle,wage,storeID)  
Item(itemID,itemName,deptName)  
Transcation(transID,empID,time,date,MebID)  
Member(MebID,fullName)

StoreDept(storeID,deptName)  
Inventory(storeID,itemID,itemPrice,itemQty)  
EmpDept(empID,deptName)  
TransShopList(transID,itemID,itemPrice,itemQty)

### Attributes on relationship

Inventory(+itemPrice,itemQty)  
TransShopList(+itemPrice,itemQty)

**Basic Schema**

Store( <u>storeID</u> ,address)
Department( <u>DeptName</u> )
Employee( <u>empID</u> ,fullName,jobTitle,wage)
Item( <u>itemID</u> ,itemName)
Transcation( <u>transID</u> ,empID,time,date,MebID)
Member( <u>MebID</u> ,fullName)

TransShopList
transID{PK}
itemID{PK}
itemPrice
itemQty

Inventory
storeID{PK}
itemID{PK}
itemPrice
itemQty