

ER Mapping

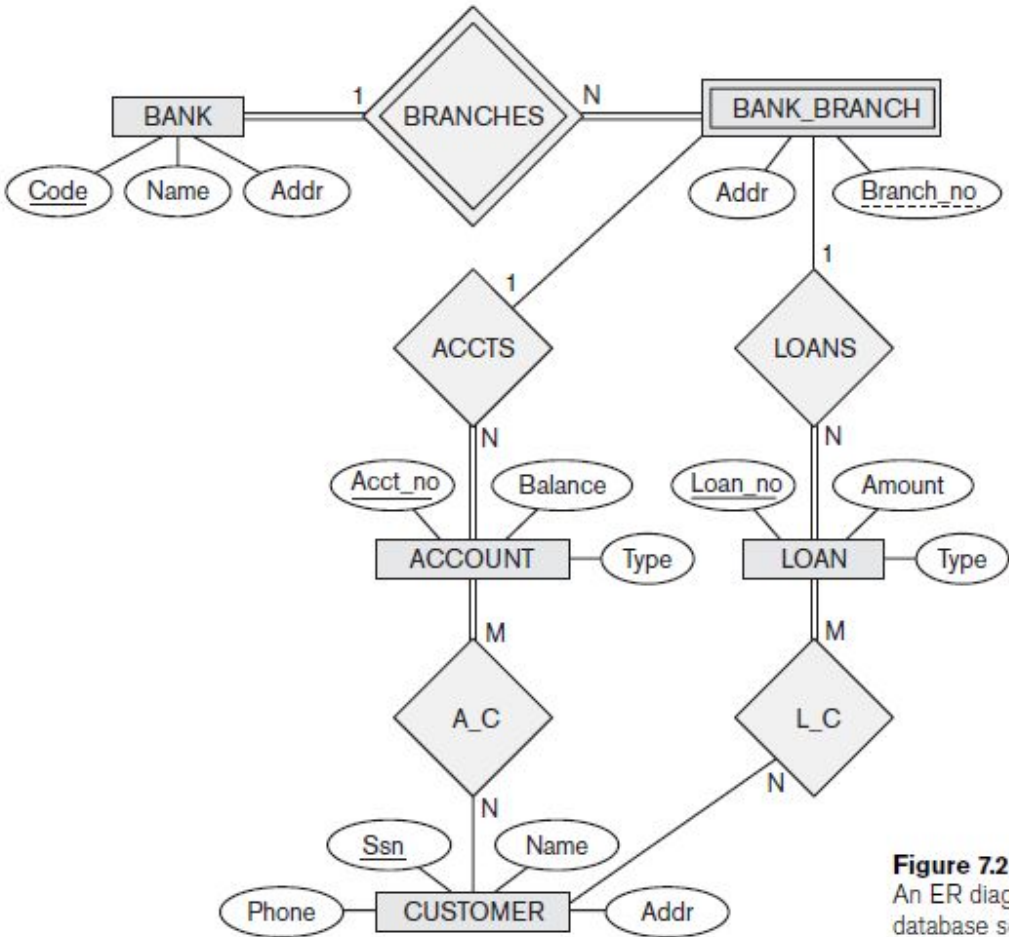


Figure 7.21
An ER diagram for a BANK database schema.

Map Entity Types:

1. BANK
 - Bank(Code, Name, Addr)
2. BANK_BRANCH(Weak Entity Type)
 - Bank_Branch(Addr, Branch_no, Code)
3. ACCOUNT
 - Account(Acct_no, Balance, Type)
4. LOAN
 - Loan(Loan_no, Amount, Type)
5. CUSTOMER
 - Customer(Phone, Ssn, Name, Addr)

Map Relationship Types:

1. BRACHES(1:N): Foreign Key Approach
 - Revise Loan schem from:
Bank_Branch(Addr, Branch_no)
To
Bank_Branch(Addr, Branch_no, Code)
2. ACCOUNTS(1:N): Foreign Key Approach
 - Account(Acct_no, Balance, Type)
To
Account(Acct_no, Balance, Type, Branch_no)
3. LOANS(1:N): Foreign Key Approach
 - Revise Loan schem from:
Loan(Loan_no, Amount, Type)
To
Loan(Loan_no, Amount, Type, Branch_no)
4. A_C(M:N): New Relation Approach
 - A_C(Ssn, Acct_no)
5. L_C(M:N): New Relation Approach
 - L_C(Ssn, Loan_no)

List All Relation Schemas:

Bank(Code, Name, Addr)

Bank_Branch(Addr, Branch_no, Code)

Account(Balance, Type, Acct_no, Branch_no)

Loan(Amount, Type, Loan_no, Branch_no)

A_C(Ssn, Acct_no)

L_C(Ssn, Loan_no)

Customer(Phone, Ssn, Name, Addr)