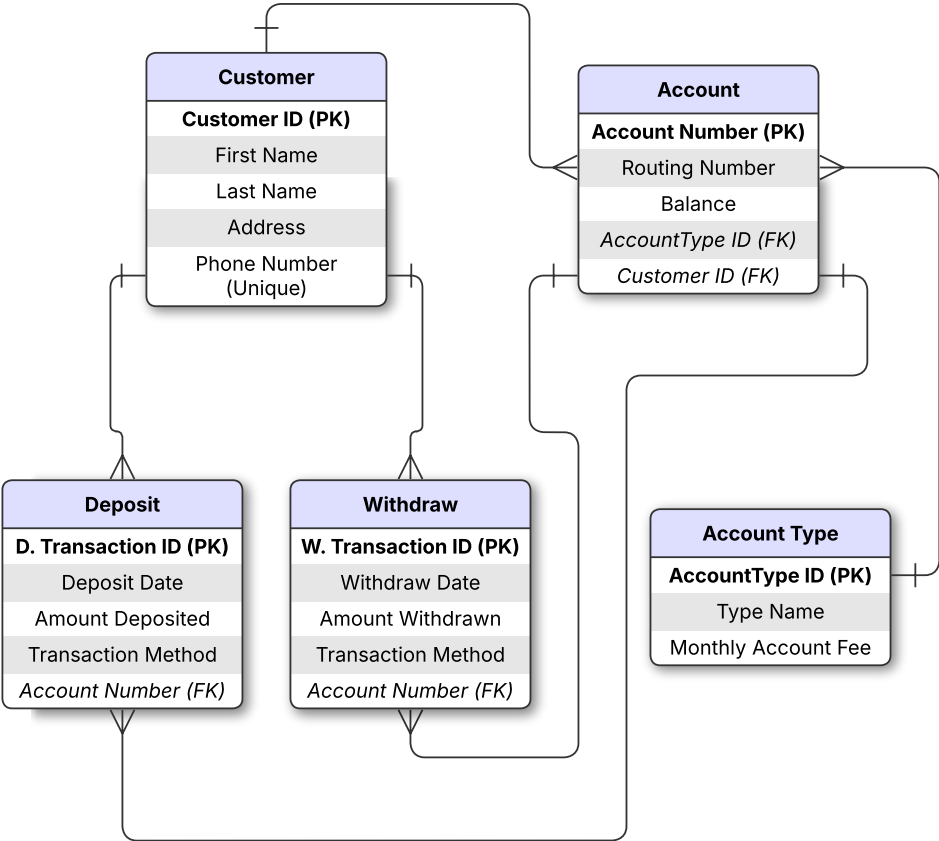


Banking System Entity-Relationship Diagram



Banking System Entity-Relationship Diagram

Assignment 2 - ERD

By Momen Suliman

Diagram information

This diagram represents the entity-relationship structure of a banking system. It outlines the relationships between various entities such as Deposit, Withdraw, Customer, Account, and Account Type. Each entity is defined with its attributes, including primary keys (PK) and foreign keys (FK) that establish connections between them. The diagram illustrates how customers are linked to accounts, and how accounts are associated with deposits and withdrawals, while account types define account characteristics.

Banking System Entity-Relationship SOP

1. Identify the entities involved in the banking system: Deposit, Withdraw, Customer, Account, and Account Type.
2. Define the attributes for each entity:
 - 2.1. Deposit: Transaction ID (PK), Deposit Date, Amount Deposited, Transaction Method, Account Number (FK).
 - 2.2. Withdraw: Transaction ID (PK), Withdraw Date, Amount Withdrawn, Transaction Method, Account Number (FK).
 - 2.3. Customer: Customer ID (PK), First Name, Last Name, Address, Phone Number (Unique).
 - 2.4. Account: Account Number (PK), Routing Number, Balance, Account Type ID (FK), Customer ID (FK).
 - 2.5. Account Type: Account Type ID (PK), Type Name, Monthly Account Fee.
3. Establish relationships between entities:
 - 3.1. Link Customer to Account using Customer ID (FK).
 - 3.2. Connect Account to Deposit and Withdraw using Account Number (FK).
 - 3.3. Associate Account with Account Type using Account Type ID (FK).
4. Ensure all foreign keys are correctly referenced to maintain data integrity and relationships.
5. Review the diagram to verify that all connections and attributes are accurately represented and follow the **3rd Normal Form**.