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DBMS assignment

ER diagram of Bank has the following description :

Banks are identified by a name, code, address of main office.
Banks have branches:Branches are identified by a branch_no., branch_name, address.
Bank have Customer:Customers are identified by name, customer-id, phone number, address.
Customer can have one or more accounts.Accounts are identified by account_number., account_type, balance.

Entities and their Attributes are :

Bank Entity :
- Name
- Code
- Address.

➢ Code is Primary Key for Bank Entity.

Customer Entity :
- Customer_id
- Name
- Phone Number
- Address.

➢ Customer_id is Primary Key for Customer Entity.

Branch Entity:
- Branch_id
- Name
- Address.

➢ Branch_id is Primary Key for Branch Entity.

Account Entity :
- Account_number
- Account_Type
- Balance.

➢ Account_number is Primary Key for Account Entity.

RELATIONSHIPS

Bank has Branches => 1 : N
One Bank can have many Branches but one Branch can not belong to many Banks, so the relationship between Bank and Branch is one to many relationship.

Branch maintain Accounts => 1 : N
One Branch can have many Accounts but one Account can not belong to many Branches, so the relationship between Branch and Account is one to many relationship.

Account held by Customers => N: N
One Customer can have more than one Accounts and also One Account can be held by one or more Customers, so the relationship between Account and Customers is many to many relationship.

Database schema

Bank

name	**code**	**address**

Branch

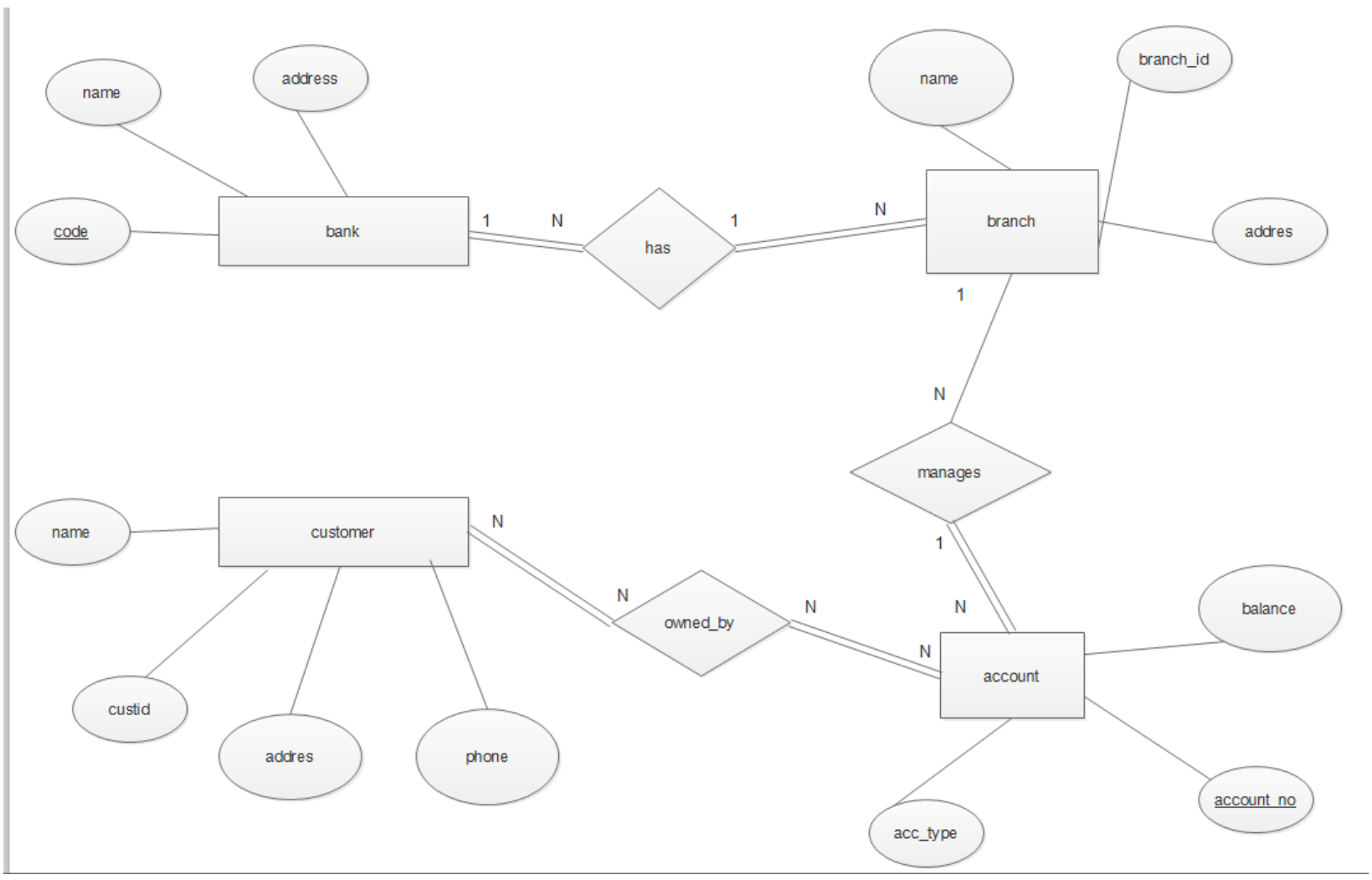
Branch_id	**name**	**address**

Customer

Customer_id	**name**	**address**	**Phone number**

Account

Account_number	**Account_type**	**balance**



In conclusion, this ERD project successfully mapped out the intricate relationships within a banking system. By identifying key entities such as Banks, Branches, Customers, and Accounts, we have created a detailed and comprehensive diagram that accurately represents the structure and operations of a bank.