

Bank Management System ER Diagram

The **ER diagram for bank management system** in DBMS reveals the relationships of the bank management entities within its database. This describes the logical structure of the system's database or data storage. It is done by identifying the online banking process entities, their properties, and the interactions between them. The database design is sketched out using **bank management system ER diagrams**. This database sketch becomes the actual basis of the system's data storage that will serve as data destination and source.

Bank Management System Database Design

This **bank management system er diagram in DBMS** was made based on bank requirements. The system can encode customer information. Banking admin can have access to the customer status and information for the important transactions. They can handle the data needed in managing customer and employee files as well as the transactions made by the customer and staff.

The features included in the **bank management system ER diagram** (in DBMS) were the security and monitoring of the customer records, transactions, and status. These features were also listed and recorded in reports that served as the history of transactions done in the system.

What is an ER Diagram?

In DBMS, the ER Diagram is referred to as the **bank management system database design**. This ER Diagram is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships. To build and troubleshoot relational databases, the **bank management system ER Diagram** is used. It works best with DFD (Data Flow Diagram), which is responsible for data movement. Designing the **bank management system's database** would be much easier with the help of ER diagram.

Importance of ER Diagram

The **importance of ER diagram for bank management system** is to help in modeling its data storage or database. It is the basis of the project's database foundation for construction. This entity-relationship diagram (ERD) also aids in defining the data types to be stored such as their attributes and characteristics.

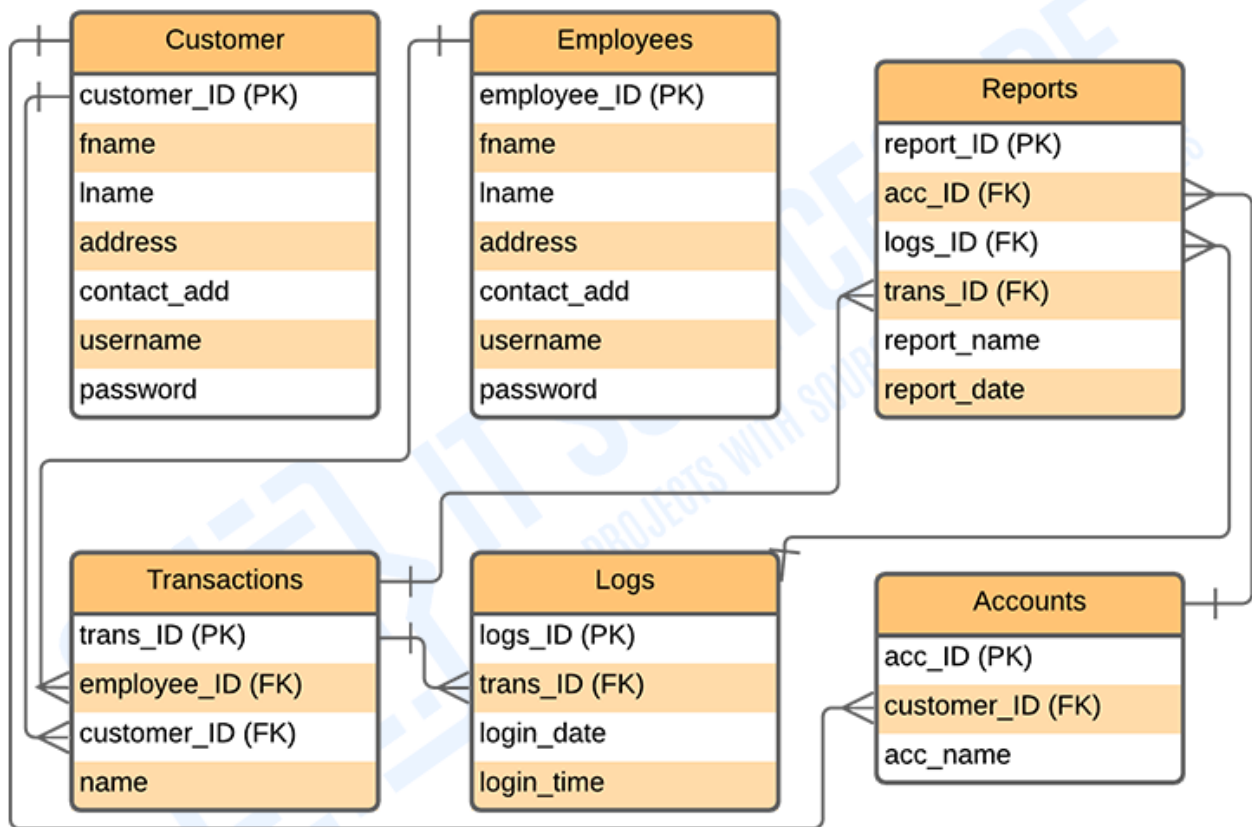
In addition to that, the ER Diagram also describes how an entity interacts with other entities. All other real-world projects are presented with ER Diagrams (database designs). To display the details and attributes of a data store, the **er diagram for bank management system** is used in conjunction with its data flow diagram. They are very important in building a relational database because they let us visualize how data is connected generically.

Entity-relationship diagrams are utilized in software engineering during the planning phase of software development. It aids in the identification of various system constituents and their interrelationships. **Bank Management System ER Diagram** is also used as the foundation of the bank management DFD (Dataflow Diagram).

ER Diagram for Bank Management System

ER Diagram of Bank Management System shows the system entity relationships in each entity and their supposed functions in each relationship.

BANK MANAGEMENT SYSTEM



ENTITY RELATIONSHIP DIAGRAM

Bank Management System ER Diagram

Based on the image given, the **ER diagram for *this System*** is the entity of the **bank management system database**, which is presented by **tables**; customer, employee, reports, transactions, logs, and accounts. These tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

Bank Management System ER Diagram Tables

These tables below provide the complete database table details such as **Field Name, Descriptions, data types, and character lengths**. Each of these tables represents the characteristics and the attributes of data storage.

The **field** column presents the names of each database's attributes, the **description** column gives the complete thought of each attribute, the **type** column is their data type and the **length** is for their character lengths.

Table Name: Customer

Field	Description	Type	Length
customer_ID (PK)	Customer ID	Int	11
fname	Customer First Name	Varchar	255
lname	Customer Last Name	Varchar	255
contact_add	Customer Contact	Int	11
address	Customer Address	Text	
email	Customer Email	Varchar	255
password	Customer Password	Varchar	255

Table Name: Admin

Field	Description	Type	Length
admin_ID (PK)	Admin ID	Int	11
fname	Admin First Name	Varchar	255
lname	Admin Last Name	Varchar	255
address	Admin Address	Text	
email	Admin Email	Varchar	255
password	Admin Password	Varchar	255

Table Name: Employee

Field	Description	Type	Length
employee_ID (PK)	Employee Id	Int	11
fname	First Name	Varchar	30
lname	Last Name	Varchar	30
address	Address	Text	
contact_address	Contact Address	Int	11
email	Email	Varchar	30
password	Password	Varchar	30

Table Name: Bank Account

Field	Description	Type	Length
acc_ID (PK)	Account ID	Int	11
customer_ID (FK)	Customer ID	Int	11
acc_name	Account Name	Varchar	255

Table Name: Logs

Field	Description	Type	Length
logs_ID (PK)	Login ID	Int	11
trans_ID (FK)	Transaction ID	Int	11
login_date	Login Date	Date	30
login_time	Login time	Time	

Table Name: Transactions

Field	Description	Type	Length
transaction_ID (PK)	Transaction ID	Int	11
employee_ID (FK)	Transaction Name	Int	11
customer_ID (FK)	Customer ID	Int	11
transaction_name	Employee ID	Varchar	255
transaction_date	Transaction Date	Date	

Table Name: Reports

Field	Description	Type	Length
report_ID (PK)	Report ID	Int	11
acc_ID (FK)	Account ID	Int	11
logs_ID (FK)	Logs ID	Int	11
trans_ID	Transaction ID	Int	11
report_name	Report name	Varchar	255
report_date	Report Type	Varchar	255

The tables given will be the basis for developers on how would they do the **bank management system database design**. It has the complete description of the database and they will put this into the program or data storage the same as the names given to each of the tables. They will create a database with the attributes given as well as the value of each attribute.