

Loan Management System ER Diagram

The **ER diagram for loan management system** shows the relationships of the loan management entities within its database. This describes the logical structure of the system's database or data storage. It is done by identifying the loan management process entities, their properties, and the interactions between them. The database design is sketched out using **loan 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.

What is an ER Diagram?

In DBMS, the ER Diagram is referred to as the **loan 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 **loan management system ER Diagram** is used. It works best with DFD (Data Flow Diagram), which is responsible for data movement. Developing the **loan management system database design** would be much easier with the help of ER diagram.

Importance of ER Diagram

The **importance of ER diagram for loan 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 loan 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. **Loan Management System ER Diagram** is also used as the foundation of the loan management DFD (Dataflow Diagram).

Loan Management System Database Design

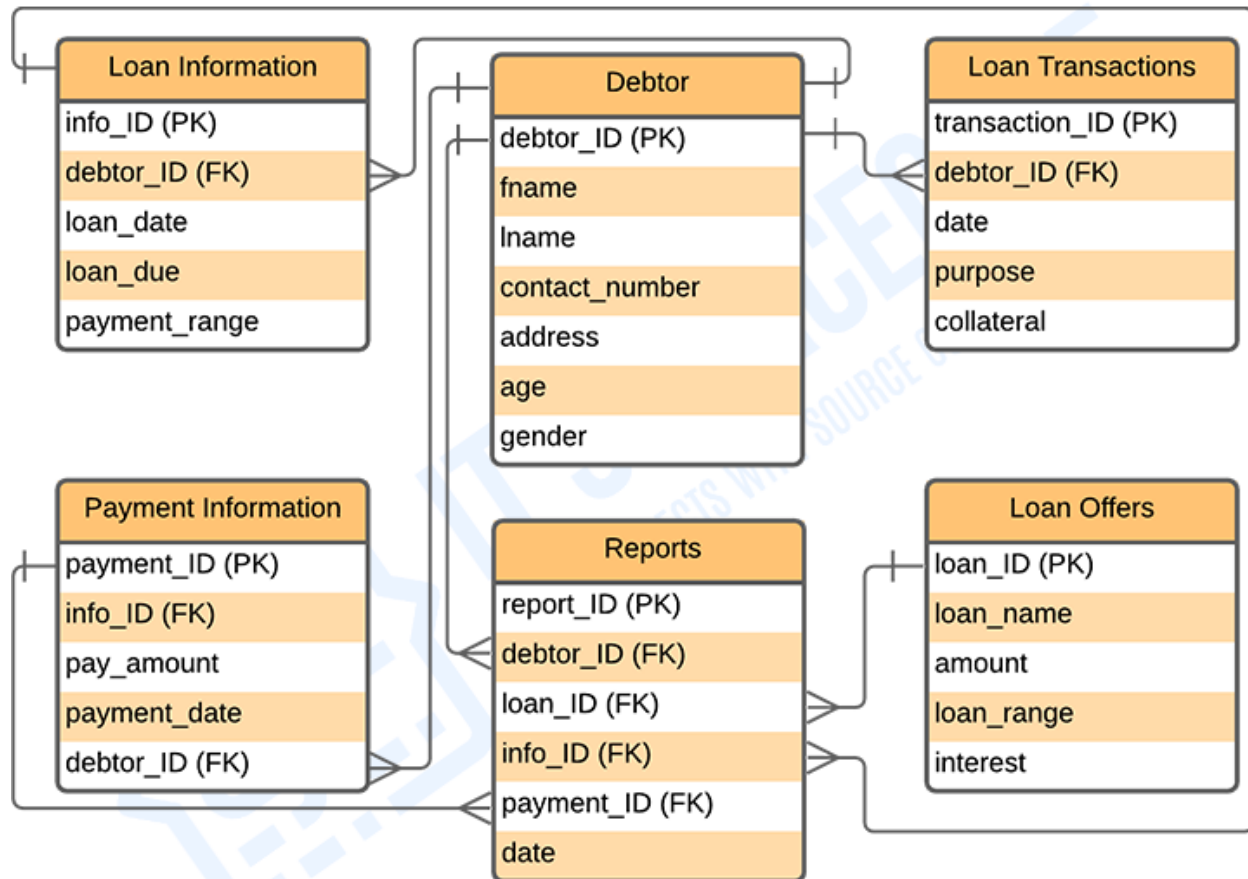
This **Loan Management system database** was made based on loan management requirements. The system can encode the debtors' information upon the transaction. The admin can have access to the debtors' status as well as their transactions. They can handle the data needed in managing information and records the request made by the client/debtor.

The features included in the system ER diagram were the security and monitoring of the lending/bank information and debtors' information status. These features were also listed and recorded in reports that served as the history of transactions done in the system.

Entity Relationship Diagram for Loan Management System

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

LOAN MANAGEMENT SYSTEM



ENTITY RELATIONSHIP DIAGRAM

Loan Management System ER Diagram

Based on the image above, the **ER diagram for *this System*** is the entity of the **Loan Management system database**, which is presented by **tables**; debtor, loan information, payment information, loan transactions, loan offers, and reports. The tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

Loan 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** are for their character lengths.

Table Name: Debtor

Field	Description	Type	Length
debtor_ID (PK)	Debtor's ID	Int	11
fname	Debtor's First Name	Varchar	255
lname	Debtor's Last Name	Varchar	255
contact_number	Debtor's Contact	Int	11
address	Debtor's Address	Text	
age	Debtor's Age	Int	11
gender	Debtor's Gender	Varchar	255

Table Name: Loan Offers

Field	Description	Type	Length
loan_ID (PK)	Loan ID	Int	11
loan_name	Loan Name	Varchar	255
amount	Loan Amount	Varchar	255
loan_range	Range of loan	Text	
interest	Loan Interest	Varchar	255

Table Name: Loan Transactions

Field	Description	Type	Length
transaction_ID (PK)	Employee ID	Int	11
debtor_ID (FK)	Debtor's ID	Varchar	30
date	Date of Loan Request	Date	
purpose	Loan Purpose	Text	
collateral	Collateral	Varchar	30

Table Name: Loan Information

Field	Description	Type	Length
info_ID (PK)	Information ID	Int	11
debtor_ID (FK)	Debtor ID	Int	11
loan_date	Date of Loan	Date	

loan_due	Due Date of Loan	Date	
payment_range	Range of the Payment	Int	11

Table Name: Payment Information

Field	Description	Type	Length
payment_ID (PK)	Payment ID	Int	11
info_ID (FK)	Information ID	Int	11
pay_amount	Payment Amount	Date	
payment_date	Date of Payment	Time	
debtor_ID	Debtor's ID	Int	11

Table Name: Reports

Field	Description	Type	Length
report_ID (PK)	Report ID	Int	11
debtor_ID (FK)	Debtor's Id	Int	11
loan_ID (FK)	Loan ID	Int	11
info_ID (FK)	Info_ID	Int	11
payment_ID (FK)	Payment ID	Int	11
date	Date of Report	Date	

The tables given will be the basis for developers on how would they do the **loan 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.