

We asked to make database system for bank in USA.

So, client ask to design DB system depend on his requirements which are listed as follow:

- System can store data about every branch like Branch ID, Location and Branch Name.
- We need to store data about accounts and their owners, every account has account type (saving or current), account number, balance, account status (active or not active), open date, cards with properties (card number, card type, expiry date, status which is active or not active).
- Customer who linked to account must have id, first name, last name, gender, email, birthdate, phones and age which is depend on birthdate.
- Every branch can make loan to his customers, properties of loan are loan id, loan type, amount, interest rate, start date, end date, duration.
- Many employees work in every branch have id, first name, last name, salary, position.
- Any customer through his account can make many transactions by ATM or in branch without ATM.
- Transaction has Transaction id, Transaction type, Transaction date and amount.
- Every ATM with atm id, location, status is owned by one branch but branch must have many ATM.
- A branch must maintain many accounts and one account at least is maintained by one branch.
- Customer must have one or more account and any account must owned by a customer.
- One customer may make one loan and a loan already is made by a customer.
- Loan must be offered by a branch but a branch offers many loans.
- A branch must contain on many employees and each employee must work in one branch.
- Some of employees in each branch are supervisors, each supervisor supervises the rest of employees who works in the same branch.
- Bank system contain departments with id, name, manager ID from employees, each department must have one employee at least, in the same time every employee must works in one department.