Database Systems Lab – Mini Project

Abstract

Title: Banking System Database

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Problem Description:

In a large scale banking system, there is a need to store a vast variety of data. A bank needs to keep track of its customers, their accounts and the transactions made by them between these accounts. A customer can have more than one account and can transfer money between them which adds to the complexity of the problem. A bank has multiple branches, with the customer having the option of creating an account in each of these branches. On top of this, there are also different types of accounts an individual can have, such as current and savings accounts. A person may also take a loan from the bank, on which he is charged an interest, while he earns interest on the money he has deposited, with the interest rate varying depending on the principal amount and also on the financial status of the individual. It then becomes necessary to store the date of the transaction as well since the debt increases with time.

Thus, there are many transactions taking place every day in a bank, and the database needs to be updated each time. In such a scenario, we can develop a relational database that can represent the real life scenario and store the results of all transactions in its tables. The database will have relations representing customer's details, details of the various types of accounts, details of when transactions were made, and details of the various branches of the bank. By developing and employing a relational database, we can efficiently keep track of the daily activities taking place in a bank.

In conclusion, an efficient relational database is required for the smooth running of a bank. The aim of our project is to develop such a database.

Tools Used:

1. Java(JDBC)
2. SQL (Oracle Database)