# CS 631 Term Project Phase 1

Cs 631-007 Group -1

Shashwat Singh

**BANK PROJECT**

**Business Requirements:**

Each Bank is identified by its name and the bank has a number of branches. The branch cannot exist without a bank. So, it’s a weak entity.

Each branch is identified by a unique Branch ID, Bank name, Address, Branch City and Assets.

Employees are identified by their SSN, Name, phone number, start date, and names of dependents. Employees are employed by the bank, work in branches, and are managed by the branch manager. There are three types of employees – Manager, Assistant Manager and Personal Banker. Each manager is associated with a number of employees

Each branch of the bank has many accounts. There are four types of accounts – Savings A/C, Checking A/C, Money Market A/C and Loan A/C. Each account is identified by an account number, Account Balance and Account type. Savings A/C and Loan A/C have fixed interest rates. Checking A/C has an overdraft and Money Market A/C has a variable interest rate.

Each transaction is associated with an account and there may be charges applied for a particular transaction. A transaction is identified by Transaction ID, Type, Amount, Date and Time. A transaction cannot exist without being associated with an account.

Loan account is identified by their loan number, loan amount, and fixed interest rate. Loan accounts are based at a branch and loans are borrowed by a customer.

Customers can be associated with any type of account. Each customer is identified by their SSN, Name, Address and phone number. Customers deposit in accounts, borrow from loan accounts, and have a personal banker.

1. **Entity-Relationship Diagram**

Map

Description automatically generated

1. **Relational Schema**

**Diagram

Description automatically generated**