BANK MANAGEMENT SYSTEM

(DBS Lab Project Proposal)

(Phase 1)

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Abstract:

This system is going to be designed for the Management of a Bank system to maintain its total working that circle around the transaction of account, ATM service, bank loan etc.

Description:

We have selected the topic of **"BANK MANAGEMENT SYSTEM"** as the title suggest, as our Lab project of Database Systems. The main theme of this system is to provide ease to the bank worker and its customers as well for the daily tasks they perform in Bank. This system will maintain some static data of the entities like Bank, Branch, Account, Employee and also the dynamic data like transaction etc. The Employee of the Bank includes all types of workers in Bank including cashier, Loan Processor, financial advisor, security guard etc. Similarly, the accounts entity may also have different types of account. Different types of transactions like bill payment, wire transfer, credit card transaction etc. might be performed. Any customer can get loan from Bank for that he will be charged interest. Bank workers will have the facility of quick working through fixed deposit. Hopefully, if this system is deploy in real world then, it will sufficient to full fill all the requirements of the Bank.

Tools:

Many tools are available for creating database we will use following ones:

◈ **Microsoft SQL Server Management Studio** in which SQL Server will be used for DDL and DML commands.
◈ For Entity Relationship Diagram (ERD) we will use MS Visio that's a powerful tool for creating Charts and Diagrams.

Entities & their Attributes:

Here the bold items are entities, first underlined item is primary key while the second one if there is foreign key

1) **Bank:** Code, Name, Address
2) **Branch:** Branch_ID, Name, Address
3) **Customer:** Customer_ID, Name, PhoneNo, email, extra_note, Cust_type_code, date_became_cust
4) **Customer_type:** Cust_type_code, type_description
5) **Accounts:** Acc_ID, Name, date_opened, balance, extra_note, type_code, Customer_ID
6) **Account_type:** type_code, type_description
7) **Transaction:** Transaction_ID, date, amount, extra_note, account_ID, tran_type_code
8) **Transaction_type:** type_code, type_description
9) **ATM_Card:** Account_No, card_number, address
10) **Loan:** Account_No, loan_type, loan_amount, interest,
11) **Employee:** Employee_ID, branch, status, email_ID, phone_No, nationality, gender, salary

12) Manager: <u>Manager_ID,</u> <u>Employee_ID,</u> Branch_Code

13) Fixed_deposite: <u>Cust_ID</u>, <u>transaction_ID,</u> deposite_type, amount, account_to_deposite

Relationships:

All the possible relationships that can found between entities are as follows:

- ❖ A Bank may have many branches
- ❖ Every person that comes to Bank will be customer or employee
- ❖ Every Account must be a Customer too
- ❖ Every Branch may have one Manager at all
- ❖ Transaction will be done through account
- ❖ Fixed deposits can be performed for ease
- ❖ ATM card is connected to a single account
- ❖ Any Account may get loan from Bank