Bilel Ben Romdhane

Brixton Pizzuti

Harneik Dhanota

Ikram Khan

**Bank Mock Database**

**1. Who is in your project group and what they did**

The team members for this project are Harneik Dhanota, Ikram Khan, Brixton Pizzuti, and Bilel Ben Romdhane. Each team member helped in every area of the project but also had a particular part they would focus on. Ikram oversaw the foundation of the project. He came up with the initial idea of creating a database for a bank and helped create the blueprints for the project. He also was the one to gather information for additional tables and attributes. Brixton and Bilel brought the project to life as they were in charge of using the SQL and making the database. Bilel created the data we loaded into the tables while Brixton created queries for it. They both continuously worked on problem solving and making sure there were no errors. Finally Harneik was in charge of completing the write up along with creating the finalized versions of the ERD and Schema. Along with that he also helped where he was needed.

**2. What your project is about (general description of the project and the organization)**

The project that we chose to do was a database for a Bank, we choose to solve the problem of how a bank would set up their general database, to help better serve customers and to better keep track of corporate data. Our project is made to help keep track of day to day banking activities such as ATM usage, as well as longer term data like Employee and Customer information.

**3. The tables that you created**

The tables we have created for this project help with vital day to day tasks at The Bank. All together we have seven tables. The first table I want to bring up is the ATM table this records vital information about the ATM machine which allows for it to be identified and located, also have its inventory on file and when it needs service. Next, we have the Branch table the branch table is very important because it is the general place of business for a bank. This table stores all information pertaining to a Branch such as physical attributes like address and non-physical attributes like quota goals and ranking. Then we have the employee table which is also very important because employees are needed to operate a branch and to serve employees so attribute about them need to be recorded. Now we have the customer table which is needed because without customers a bank could not operate, employees need customers to assist. Accounts are the next table I want to bring up because customers need accounts and a bank is there for this reason to provide bank accounts, we need to know when an account was opened what the lowest balance is allowed etc. How do we know what actions employees are taking and who they are assisting we have a table called assist for this, it records the date, time and outcome of an employee, customer interaction by linking account number and customer ids.

Then we have our Owns table which tells us the type for account a customer opened and when, how much was deposited on that day. Last, we have the Uses table which records when an ATM was used and by which customer and what they used it for.

**4. The queries that you created**

We have compiled a set of 12 queries. These queries can help anywhere in the bank from finding out the average salary of an employee to finding potential data that could be used to market a new product at the bank. The first query was designed to check if the bank had any female customers with a sum of 250k or more in their account. The reason this query could be potentially used for marketing a new investment the bank offers that might interest women who have the potential cash to invest. The second query shows how a regional manager who is in charge of a particular area can look up and see all the balances of a particular brand of atm. This information can be used to see if the public likes using a particular type of atm over another or if a particular brand gets used in one area more than it would in another. The third query can be used to quickly pull up all employees in a particular branch. The fourth query can be used to pull up customers who have not updated their account information in a long time and need to update their information. The fifth query can be used as potential data for future promotions as it checks to see how much people with student accounts typically have when they initially open their accounts. The sixth query can be used to find the average salary of a certain job title. The seventh query counts the cards collected from a certain ATM. This can be used to quickly pull up if a certain ATM needs to be checked for ATM card removals. The eighth query can be used to grab a particular age group of customers by look and mail them advertisements they may be interested in. The ninth query counts how many branches status is closed by using the count function. The tenth query can be used to see employees with certain benefits they have. This can be used to see what is popular among employees. The eleventh query pulls basic customer information such as name, id, gender and city, and it only pulls the customers file if their first name starts with a K, and their last name starts with an M. This is done by using the LIKE function and putting ‘K%’ for the first name and ‘M%’.