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Banking System



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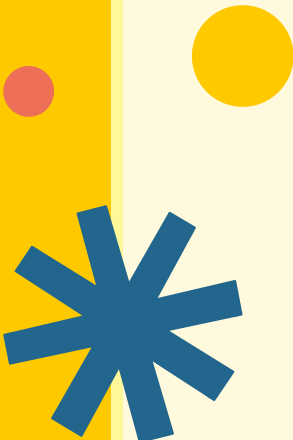
What is the project about?

A banking system in which the user creates an account with selecting its account number and password, and the following functionalities are available:

Create an account

After verification

- Deposit Amount
- Withdraw Amount
- Check Balance
- Exit the Portal

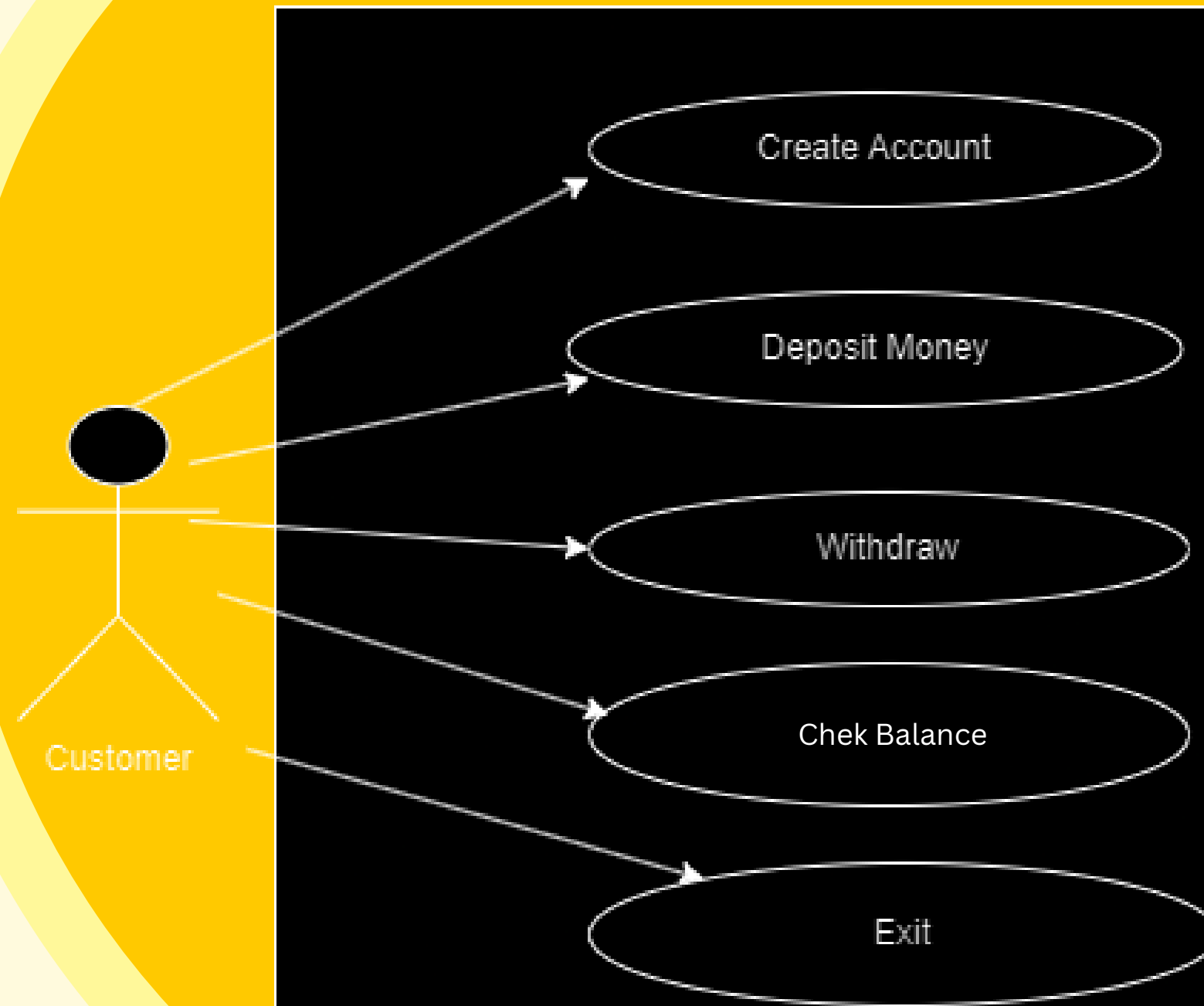


TECHNOLOGIES USED

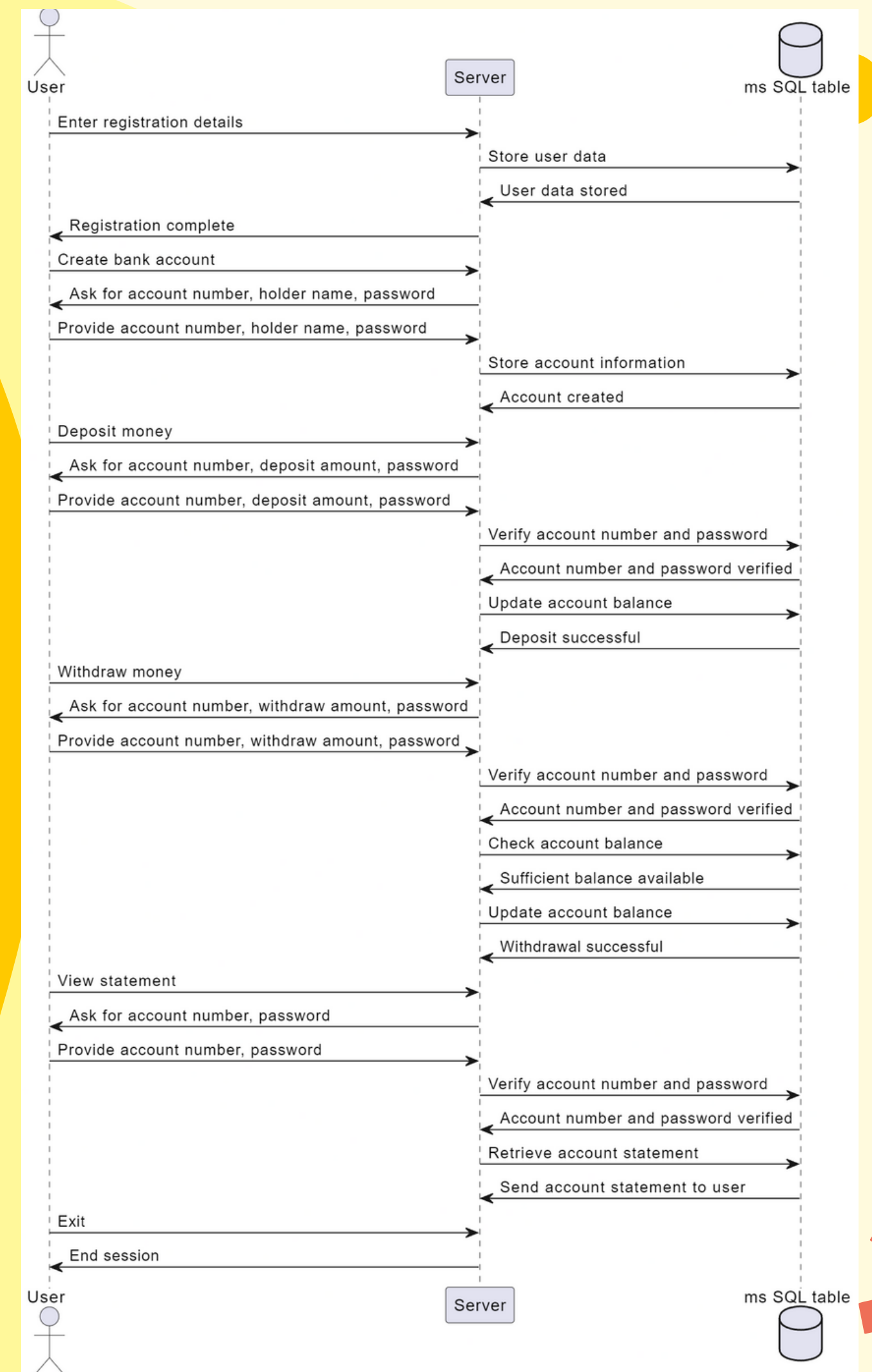
- Python 3.7 - For making the logic and implementing it.
- MS SQL Server - For making table and storing the customer details
- SQL Language - For applying the query as per requirements
- Pyodbc - pyodbc is a Python module that provides access to ODBC (Open Database Connectivity) databases.



USE CASE DIAGRAM

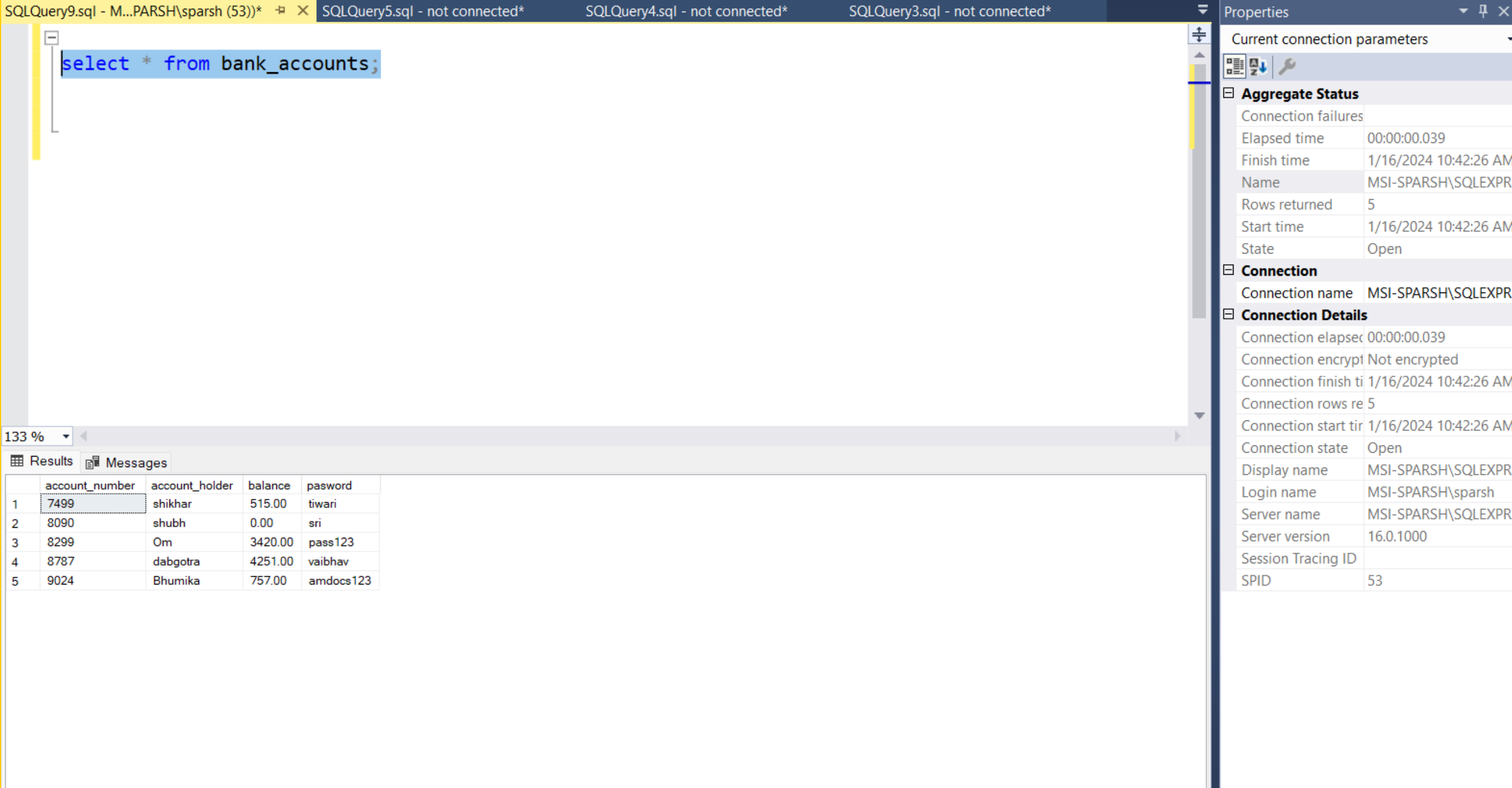


SEQUENCE DIAGRAM



SQL TABLE

The customer information is stored in the bank_accounts table where all the information is updated after each transaction



The screenshot displays the SQL Server Enterprise Manager interface. The main query window shows the following SQL statement:

```
select * from bank_accounts;
```

The Results pane at the bottom shows the output of the query, which is a table with 5 rows and 5 columns:

	account_number	account_holder	balance	password
1	7499	shikhar	515.00	tiwari
2	8090	shubh	0.00	sri
3	8299	Om	3420.00	pass123
4	8787	dabgotra	4251.00	vaibhav
5	9024	Bhumika	757.00	amdocs123

The Properties pane on the right shows the current connection parameters and status:

- Aggregate Status**
 - Connection failures: 0
 - Elapsed time: 00:00:00.039
 - Finish time: 1/16/2024 10:42:26 AM
 - Name: MSI-SPARSH\SQLEXPRESS
 - Rows returned: 5
 - Start time: 1/16/2024 10:42:26 AM
 - State: Open
- Connection**
 - Connection name: MSI-SPARSH\SQLEXPRESS
- Connection Details**
 - Connection elapsed: 00:00:00.039
 - Connection encrypted: Not encrypted
 - Connection finish time: 1/16/2024 10:42:26 AM
 - Connection rows returned: 5
 - Connection start time: 1/16/2024 10:42:26 AM
 - Connection state: Open
 - Display name: MSI-SPARSH\SQLEXPRESS
 - Login name: MSI-SPARSH\spars
 - Server name: MSI-SPARSH\SQLEXPRESS
 - Server version: 16.0.1000
 - Session Tracing ID: SPID
 - SPID: 53

Create Account

For Creating an account the customer has to provide an account number and also add password for security reasons:

```
PROBLEMS  OUTPUT  TERMINAL  PORTS

▼ TERMINAL

C:\Users\sparsh\Desktop\python project>python -u "c:\Users\sparsh\Desktop\python project

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: 1
Enter Account Number: 8299
Enter Account Holder Name: Om
Enter the password: pass123
Account created successfully!
```



Deposit Money

The customer can deposit money after giving the account no, password, and deposit amount, the deposit money will also have an extra 3% interest

```
PROBLEMS OUTPUT TERMINAL PORTS
> ✓ TERMINAL
C:\Users\sparsh\Desktop\python project>python -u "c:\Users\sparsh\Desktop\python project\new2.py"

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: 2
Enter Account Number: 8299
Enter the password: pass123
Enter deposit amount: 1500
Deposit successful! Amount credited with after 3% interest: Rs. 1545.00 and your cuurent balance is 4120.00

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: █
```



Withdraw Money

The customer can withdraw money after giving the account no, password, and withdrawal amount, the withdraw fee of 200 is also deducted

```
PROBLEMS OUTPUT TERMINAL PORTS
> ✓ TERMINAL
C:\Users\sparsh\Desktop\python project>python -u "c:\Users\sparsh\Desktop\python project\new2.py"

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: 3
Enter Account Number: 8299
Enter the password: pass123
Enter withdrawal amount: 500
Amount Debited with 200 withdrawal fee: 700 your current balance : 3420.00

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: █
```



View Balance

The user can check the total balance after all the transactions:

```
PROBLEMS OUTPUT TERMINAL PORTS
> ✓ TERMINAL
C:\Users\sparsh\Desktop\python project>python -u "c:\Users\sparsh\Desktop\python project\new2.py"

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: 4
Enter the account number: 8299
Enter the password: pass123
Current Balance for account number 8299 and holder (Om is):
3420.00

1. Create Bank Account
2. Deposit Money
3. Withdraw Money
4. View Balance
5. Exit
Enter your choice: █
```



Thank you

For your attention



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