

INNOVATIVE PROJECT

TOPIC :- **BANK MANAGEMENT SYSTEM**

By:-

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Packages required for program execution :

Note: All the packages to be installed in terminal (command prompt)

- Matplotlib - pip install matplotlib
- Pandas – pip install pandas
- Openpyxl – pip install openpyxl
- Tkinter – pip install tkinter
- Bcrypt – pip install bcrypt

File to be executed :

Note: Python file to be executed in terminal (command prompt)

File name: BankApp.py – python3 BankApp.py or python BankApp.py

Supporting Files:

Note: To be saved in the same directory as BankApp.py

File names:

- BankFunction.py
- MNMBankDatabase.xlsx

Salient Features:

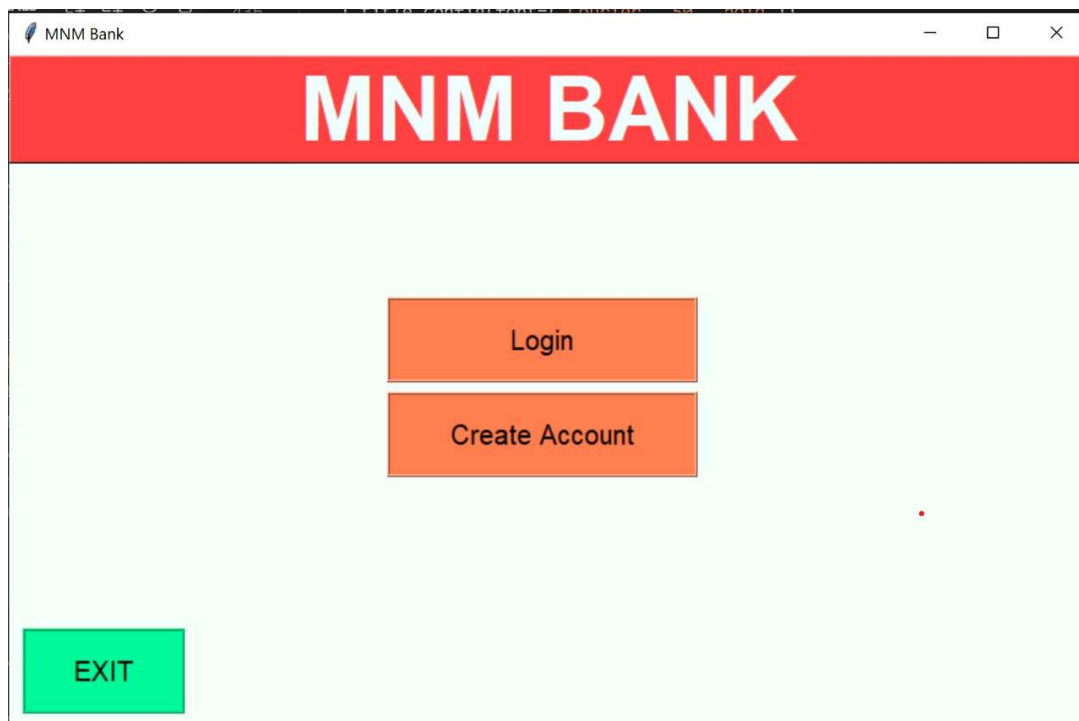
- Dynamic User Interface
- Secure account Login (use of password encryption)
- Use of excel and csv files for data management.
- Use of Tkinter GUI modelling
- Graphical representation of transactions using matplotlib package

Technical Features:

- Account creation and login
- Deposit and withdrawal of funds along with transaction notes.
- View Passbook
- View personal details
- User can also take loan, pay installments and also view loan details
- User can also create a FD ,view details and break their FDs

Process of execution:

1. First create an account.



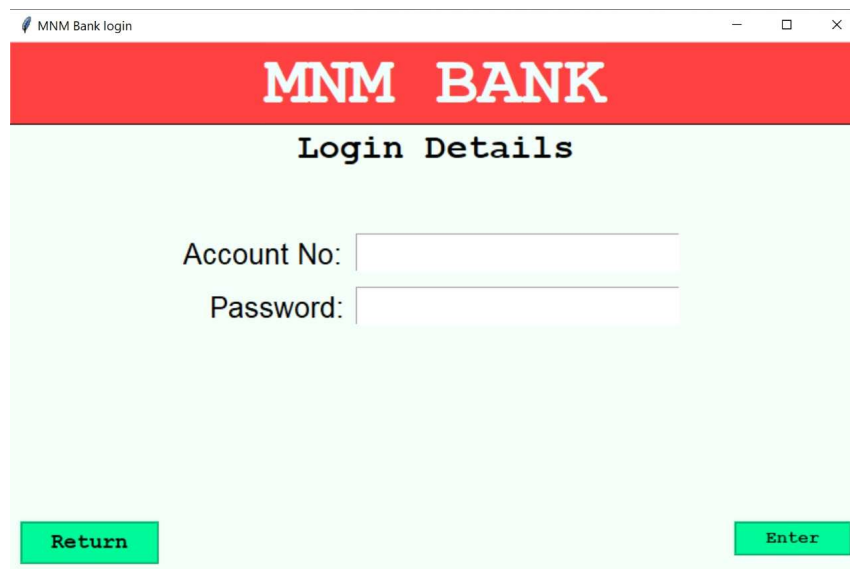
The image shows a web browser window titled "MNM Bank". The header is a red bar with "MNM BANK" in white. The main content area is light green and contains two orange buttons: "Login" and "Create Account". In the bottom left corner, there is a green button labeled "EXIT".

2. Add your personal details and password.



The image shows a web browser window titled "MNM Bank login". The header is a red bar with "MNM BANK" in white. Below the header, the text "Account creation details" is displayed. The form contains the following fields: Name, DOB (with a placeholder "DD/MM/YYYY"), Email, Contact, Aadhar No, PAN No, Initial Balance, Address, and Password. At the bottom, there are two green buttons: "Return" on the left and "Create Account" on the right.

3. After account creation a message will pop up showing your account number. Note the account number to login.



MNM Bank login

MNM BANK

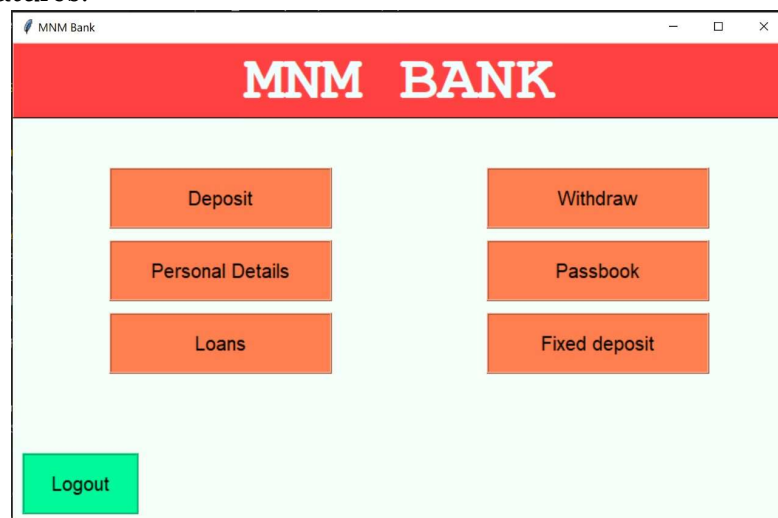
Login Details

Account No:

Password:

Return **Enter**

4. After entering login details, Account home page will be seen from where you can access the technical features.



MNM Bank

MNM BANK

Deposit

Personal Details

Loans

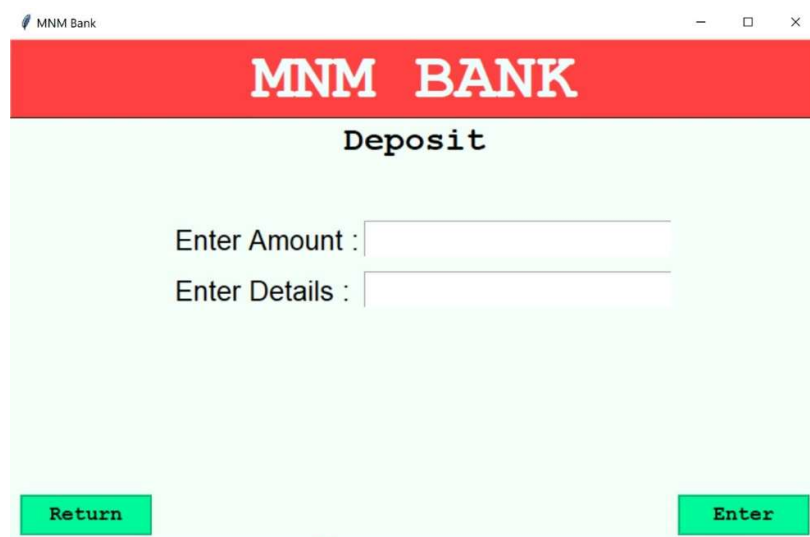
Withdraw

Passbook

Fixed deposit

Logout

5. Deposit:



MNM Bank

MNM BANK

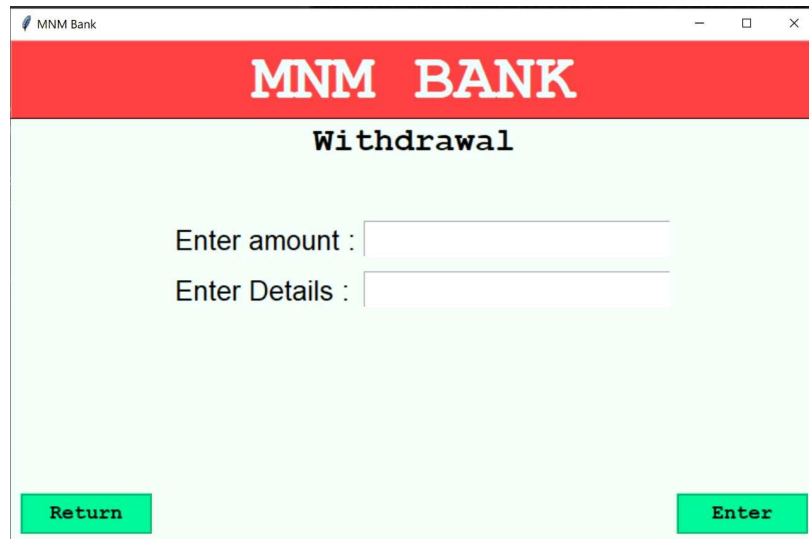
Deposit

Enter Amount :

Enter Details :

Return **Enter**

6. Withdraw:



MNM Bank

MNM BANK

Withdrawal

Enter amount :

Enter Details :

Return
Enter

7. Personal Details:



MNM Bank login

MNM BANK

Personal Information

Accno: 62501291310

Name: Mitul Nakrani

DOB: 30/10/2002

Aadhar No: 8888 8888 8888

PAN No: L0000000

Email: mitulnakrani003@gmail.com

Contact: 99999 99999

Address: Ahmedabad

Return

8. Passbook:



MNM Bank login

MNM BANK

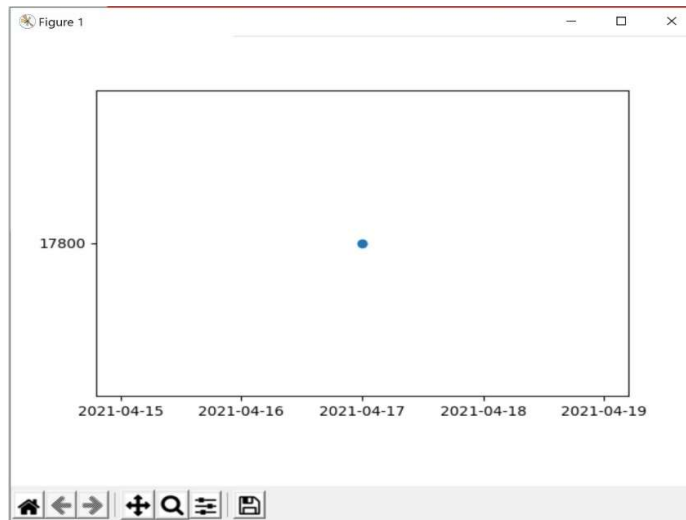
Transaction details

Current Balance: Rs. 17800

| Date-Time | Note | Credit | Debit | Balance |
|---------------------|------------------------------|--------|-------|---------|
| 17-04-2021 14:03:07 | Initial Balance | 20000 | 0 | 20000 |
| 17-04-2021 14:04:13 | Rent | 1000 | 0 | 21000 |
| 17-04-2021 14:04:31 | Lunch | 0 | 2000 | 19000 |
| 17-04-2021 14:04:56 | New Loan: 4180143716 | 5000 | 0 | 24000 |
| 17-04-2021 14:05:55 | Loan Installment: 4180143716 | 0 | 200 | 23800 |
| 17-04-2021 14:06:08 | Loan Installment: 4180143716 | 0 | 6000 | 17800 |
| 17-04-2021 14:07:01 | New FD: 2850171363 | 0 | 3000 | 14800 |
| 17-04-2021 14:07:53 | Break FD: 2850171363 | 3000 | 0 | 17800 |

Return
View Graph

9. View Graph: (Graph will display the balance at the end of each day)



10.Loans:

The screenshot shows the "MNM BANK" login page with a "Loan Menu" section. The menu contains three orange buttons: "Take a Loan", "Payback Loan", and "View Loan Details". A green "Return" button is located at the bottom left of the menu area.

11.Take a Loan: (After clicking on confirm you will get a unique Loan no.)

The screenshot shows the "MNM BANK" Loan Application form. It includes input fields for "Loan Amount:", "Loan type :", and "Time period :". The interest rate is displayed as "Interest : 8% SI". At the bottom, there are two green buttons: "Return" on the left and "Enter" on the right.

12.Payback Loan: (Paying loan installments)

MNM Bank login

MNM BANK

Loan Details

Loan No:

Enter Amount to pay:

[Return](#) [Enter](#)

13. View Loan details: (All your Loan details)

MNM Bank login

MNM BANK

Loan details

| Loan No. | Loan Type | Amount Paid | Amount Remaining | Time Period | Loan Amount |
|----------|-----------|-------------|------------------|-------------|-------------|
|----------|-----------|-------------|------------------|-------------|-------------|

[Return](#)

14. Fixed Deposits:

MNM Bank login

MNM BANK

FD Menu

[Create FD](#)

[View FD Details](#)

[Break FD](#)

[Return](#)

15.Create FD: (After clicking on confirm you will get a unique FD no.)



MNM Bank

MNM BANK

Fixed Deposit Application

Enter Amount :

Maturity period :

Interest : 6 % SI

Return **Confirm**

16.View FD Details:



MNM Bank login

MNM BANK

FD details

| FD No. | Maturity Period | Interest Rate | FD Amount | Amount at Maturity |
|--------|-----------------|---------------|-----------|--------------------|
|--------|-----------------|---------------|-----------|--------------------|

Return

17.Break FD:



MNM Bank login

MNM BANK

Break Existing FD

FD No:

Return **Enter**

18. On clicking enter in every section a suitable message will pop providing you information.
19. All Account data will be stored in MNMBankDatabase.xlsx so the admin can access the user database.