COMPLETE BANKING SYSTEM

Sign Up Module:

This is used to register user in our application and for that the user should give the following details while registering their account

The Required details are:

1)Full Name

2)Date Of Birth

3)Age[Age will be validated i.e it should be greater than 18]

4)Email Address

5)Password[Password will be validated that it should have special characters,numbers and this to make that password strong]

Account Type:

This is used when the user wants to open the account.

There are different types of account and the user can select from those:

1)Saving Account Code:SAV

Minimum balance for saving account is Rs1000 and maximum withdraw amount is Rs40000 and interest rate is 7%

Account expiry date will be 50 years from date of opening.

2)Current Account Code:CUR

Minimum balance for current account is Rs1000 and Maximum Withdraw amount is Rs100000 and interest rate for current account is 10%

Account expiry date will be 50 years from the date of opening.

3)Fixed Deposit Account Code:FD

Minimum balance for current account is Rs1000 and interest rate for this account will be 13%

Account expiry date will be 50 years from the date of opening.

4)Recurring Account Code:RUC

Minimum balance for this account is Rs1000 and interest rate will be 16%

Account expiry date will be 50 years from the date of opening.

5)Loan Account Code:LOA

Minimum balance for this account is Rs1000

Interest rate will be 18%.

Account Expiry date will be 50 years from the date of joining.

Open Account Module:

After the sign up when the user goes for creating a new account the user will be getting types of accounts and after that the user need to select the type of account and need to give the following details:

1)FullName

2)Date Of Birth

3)Account Type

4)Age

5)PAN Card Number

6)Initial Deposit Amount

After giving these details we will be giving a 14 digit Account Number to the user and user can take a look at that.

BALANCE ENQUIRY:

Need to create an API

-user pass userId and account no.

--->if doesn't validate then throw an error --->> Account invalid/not link with that particular user

--->if everything is correct --->> balance present in that account no./available amount

ADMIN MODULE:

Need to create an API

-suppose password is locked after 3 wrong attempts

-create unlock

-user pass all below details :-

1.userId

2.emailId

3.PAN number

4.DOB

--->if all are correct --->> unlock password and user profile --->> share the password whatever over API

Loan Module:

Client requirements for Loan Module

1)Create an API to show the types of loan(Home loan, Personal loan, Education loan)

2)Create an API to calculate the EMI.

3)Create an API to apply for loan validations with age and salary of the user.

Description:-

//FIRST API

This API provides different types of loans that user can apply.

1.Types of Loans: This is used for user to choose loan type

for which loan the user want to apply for particular loan.

loan types are:

1.Education loan

Interest rate of the Education loan is to be 5%.

2.Home loan

Interest rate of the Home loan is to be 25%.

3.personal loan-

Interest rate of the personal loan is to be 12%.

//SECOND API

This API provides how to calculate EMI for all the loan types.

2.Calculating EMI: This is used to calculate the interest

on the loan which the user has taken

The required details of EMI calculator are:

1.Loan type

2.Ammount

3.Tennure

logic for calculating EMI calculator is:-

to calculate EMI is: EMI = P × r × (1 + r)n/((1 + r)n - 1)

where P= Loan amount, r= interest rate, n=tenure in number of months. ...

The higher the loan amount or interest rate, the higher is the EMI payments

//THIRD API

This API provides the required validations to apply for the loan.

3.Applying a loan: This is used for applying loan what the user has choosen the loan type

Required validations are:

1.age

user whose age should be greater than 22 can apply for loan if age is lessthan 22 bank will reject the

user loan

2.salary

user whose salary should be greater than 25% of user Home loan amount if lessthan that 25% bank will reject

user loan.

user whose salary should be greater than 10% of user Personal loan amount if lessthan that 10% bank will reject

user loan.

user whose salary should be greater than 5% of user Education loan amount if lessthan that 5% bank will reject

user loan.

3.amount

applied loan amount should be less than 100000 to accept it else it will reject the loan

show the loan application status.

Transaction Module:

1. Firstly check whether the sender account number is correct or not.

If incorrect ---> Display incorrect account details

If correct ---> Proceed to next step

2. Check whether the account number of the sender and receiver from the same bank.

If not same ---> Show Transaction is valid only for same bank customer

If same ---> Proceed to next step

3. Check whether the amount to be transferred is less than the available balance in sender account or not

If amount to be transferred is more than available balance ---> Display insufficient balance

If amount to be transferred is less than available balance ---> Proceed to next step

4. After the completion of the transaction, immediately it should display the Transaction Details.

Account History Module:

1. If user wants to get the details of the account history then user

has to select the type of account in response to which the transaction details

are shown to him.

2. A specific User ID will be validated to show the exact balance summary to user.

3. Create transaction table where each account no will store all the transaction (Credited/Debited)

related to user and a final summary of Account status

4. Create a user search to filter all transaction according to Date and Amount.

(Like start date - End date) (Amount < 5000 .. Amount > 5000)

5. Create API to to validate user through user ID

6. Create API to show transaction of a particular Account No.

7. Create API to search account transaction with datewise and amountwise