# Bankloans Project

# Assumptions:

1. The bank has a database of all the customers with their details.

2. The bank has a database of all the previous loan applicants with their details.

3. The bank has a database of all the previous fund transactions with their details.

4. The bank has a database of all the previous loan transactions with their details.

5. only Loan providers can access the funds amortization schedule.

6. bank personnel can't delete the loan application once it is submitted.

7. bank personnel can't delete the loan once it is approved.

8. bank personnel can't delete the loan once it is rejected.

9. customers pay their loans on time.

10. customers pay their loans in full.

11. customers pay their loans in installments.

12. once loans are approved, they are transferred to the customer.

13. once fund applications are approved, they are transferred to the bank.

14. only customers can delete the loan application.

15. only Loan providers can delete the fund application.

# Loan Application Workflow:

1. customer applies for a loan.

a. Loan amount must be greater than the minimum amount.

b. loan amount must be less than the maximum amount.

c. loan amount must be less than the bank's total funds.

2. bank personnel reviews the application.

3. bank personnel approves the application.

4. bank personnel rejects the application.

# Fund Application Workflow:

1. Loan provider applies for a fund.

a. Fund amount must be greater than the minimum amount.

2. bank personnel reviews the application.

3. bank personnel approves the application.

4. bank personnel rejects the application.

# steps to run the project:

pip install -r requirements.txt

python manage.py makemigrations loans

python manage.py migrate

python manage.py runserver

# APIs to test the project:

1. /fund-application/ - POST,GET

for POST request, send the following data in the body:

{

"fund\_amount": 100000

}

for GET request, no data is required.

2. /fund-application/<int:pk>/ - DELETE

for DELETE request, no data is required, just the id of the fund application in the URL.

3. /loan-application/ - POST,GET

for POST request, send the following data in the body:

{

"loan\_amount":5000,

"loan\_tenure":12

}

for GET request, no data is required.

4. /loan-application/<int:pk>/ - DELETE

for DELETE request, no data is required, just the id of the loan application in the URL.

5. /transaction/ - POST,GET

for POST request, send the following data in the body:

{

"transaction\_type": "fund",

"transaction\_amount": 100000

}

for GET request, no data is required.

6. /bank-panel-fund/ - GET,POST

for POST request, send the following data in the body:

{

"id":4,

"application\_status":"approved"

}

for GET request, no data is required.

7. /bank-panel-loan/ - GET,POST

for POST request, send the following data in the body:

{

"id":4,

"loan\_interest\_rate":2.5,

"application\_status":"approved"

}

for GET request, no data is required.

9. /amortization/<int:pk>/ - GET

for GET request, no data is required, just the id of the loan application in the URL.