# Lending API – Django

In this challenge you have to create a Rest API to manage the Lending data using Django.

# **Step – 1:**

To install all the required packages. Open Terminal, go to **kickoffs-django-Lending-api** directory, type "**python3 -m pip install -r requirements.txt"** (or) "sh install.sh".

# **Step –2:**

Models.py- Create models with appropriate fields as mentioned below

# **Borrower:**

Column Name	Constraints	DataType	Comments
name		String	
email		email	Unique=True

# Loan:

Column Name	Constraints	DataType	Comments
id	Primary key	Integer	
amount		Float	
Interest_rate		Float	
Borrower_id	Foreign Key	Integer	One to many
			relationships with
			borrower model

# **Payment:**

ColumnName	Constraints	DataType	Comments	
id	Primary_key	Integer		
amount		Float		
date		Date	Default=" today date"	
Loan_id	Foreign Key	Integer	One to many	
			relationships with	
			loan model.	

# **End Points:**

In lendingapi/urls.py assign URL for your endpoints.

# "/lends/borrower":

# **Post Method:**

Get all the details (name,email) from the borrower and store it in the borrower model, then return it as a response with status code 201.

Name	john	
Email	john@gmail.com	
		POST

### Request

```
POST /lends/borrower/

HTTP 201 Created
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

{
    "id": 1,
    "name": "john",
    "email": "john@gmail.com"
}
```

Response

#### **Get Method:**

Return all data from the borrower model as a response with status code 200.

Response

# "/lends/borrower/{id}/":

#### **Put Method:**

Get the detail from the borrower to be patched and update the data in the crop object with given id and return it as a response with status code 200.

#### **Delete Method:**

Delete the crop object with given id from the crop model and return 204 as status code.

# "lends/loan/":

#### **Post Method:**

Get details (amount,interest\_rate,borrower\_id) from the loan and store it in the loan model then return it as a response with status code 201.

```
POST /lends/loan/

HTTP 201 Created
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

{
    "id": 1,
    "amount": 2000.0,
    "interest_rate": 10.0,
    "borrower_id": 1
}
```

Response

# **Get Method:**

Return all data from the loan model as a response with status code 200.

Response

# "lends/loan/{int:id}":

### **Patch Method:**

Get the detail from the loan to be patched and update the data in the loan object with given id and return it as a response with status code 200.

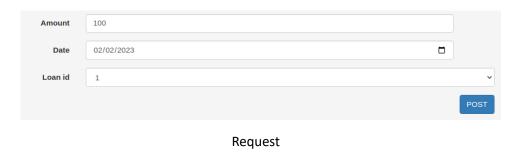
# **Delete Method:**

Delete the loan object with given id from the loan model and return 204 as status code.

# "lends/payment/":

# **Post Method:**

Get the details (amount,date,loan\_id) from the payment and store it in the payment model then return it as a response with status code 201.



POST /lends/payment/

HTTP 201 Created
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

{
 "id": 1,
 "amount": 100.0,
 "date": "2023-02-02",

Response

"loan\_id": 1

### **Get Method:**

Return all data from the payment model as a response with status code 200.

Response

# "lends/payment/{int:id}":

### **Patch Method:**

Get the detail from the payment to be patched and update the data in the payment object with given id and return it as a response with status code 200.

### **Delete Method:**

Delete the payment object with given id from the payment model and return 204 as status code.

# Step-3:

# **Instructions:**

**Note:** Before run the application make sure to run the following migration commands.

- Go to kickoffs-django-lending-api and type "python3 manage.py makemigrations" and type "python3 manage.py migrate" "python3 manage.py runserver".
- **To test the application:** Open terminal go to **kickoffs-django-lending-api** folder, type as "python3 manage.py test".

**To preview the application:** Open the browser and type <a href="http://localhost:8000/">http://localhost:8000/</a> in address bar and hit enter.

Click Submit to complete the test