Set up the Development Environment:

- Install Python 3.8.5 (or higher) if you haven't already.

- Create a new virtual environment using your preferred method (e.g., python -m venv env).

- Activate the virtual environment (e.g., source env/bin/activate on Unix-like systems, or env\Scripts\activate on Windows).

- Install the required dependencies from the requirements.txt file:

  ➢ **PIP INSTALL -R REQUIREMENTS.TXT**

  The required dependencies are:

    o Django==4.2.15

    o djangorestframework==3.15.2

    o Faker==27.0.0

    o psycopg2==2.9.9

Configure the Database:

- Done with sqlite itself , continue with default settings

Run Migrations:

Apply the initial database migrations:

➢ **python manage.py makemigrations**
➢ **python manage.py migrate**

Populate the Database with Sample Data:

- Run the provided management command to populate the database with sample data:

  ➢ **python manage.py generate_data**
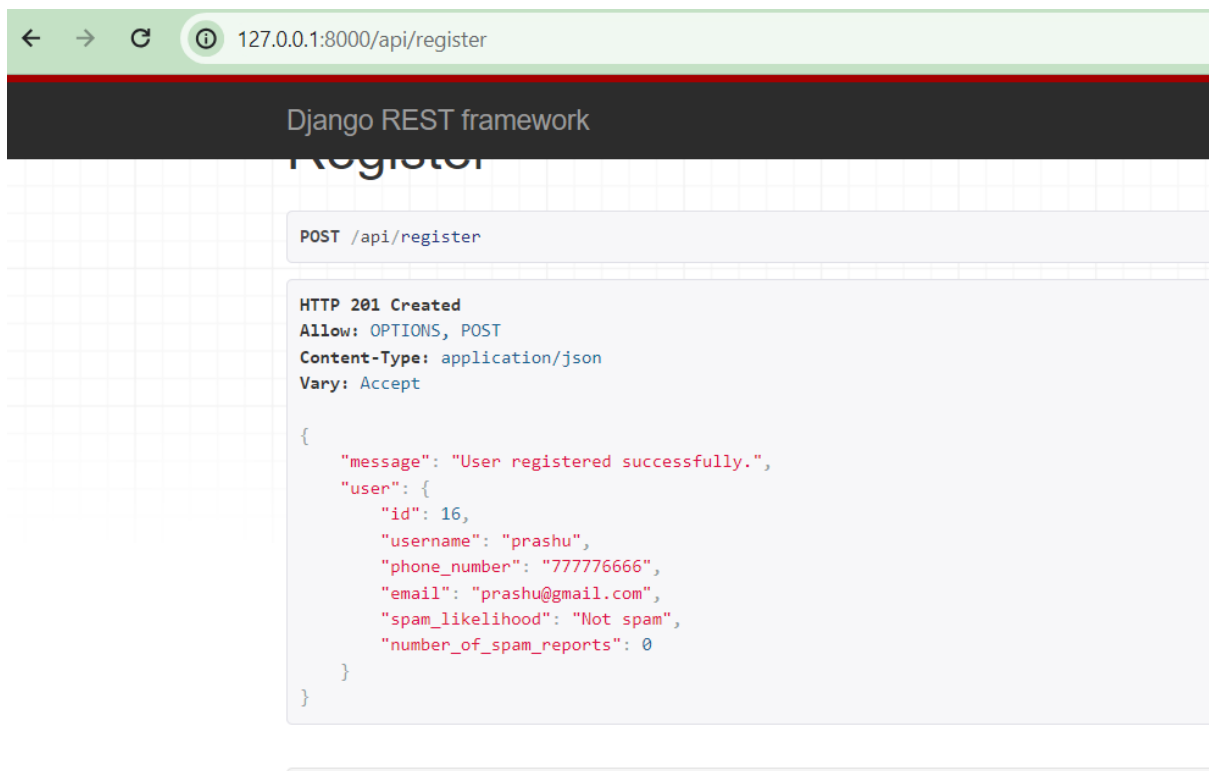
Start the Development Server:

- Run the Django development server:

  ➢ **python manage.py runserver**

- The server will start running at http://127.0.0.1:8000/.

Test the API Endpoints:

- You can use a tool like browser, Postman or curl to interact with the API endpoints.

- The available endpoints are:

    o /api/users/: CRUD operations for users

    o /api/contacts/: CRUD operations for contacts

    o /api/spam/: CRUD operations for spam reports

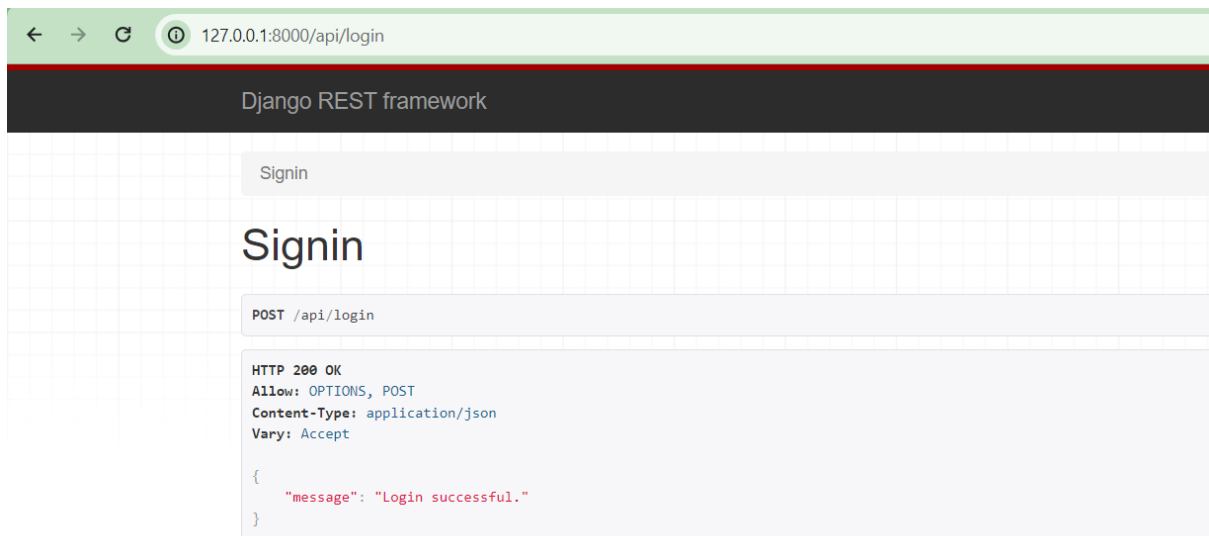   o /api/contacts/search/: Search for contacts by name or phone number
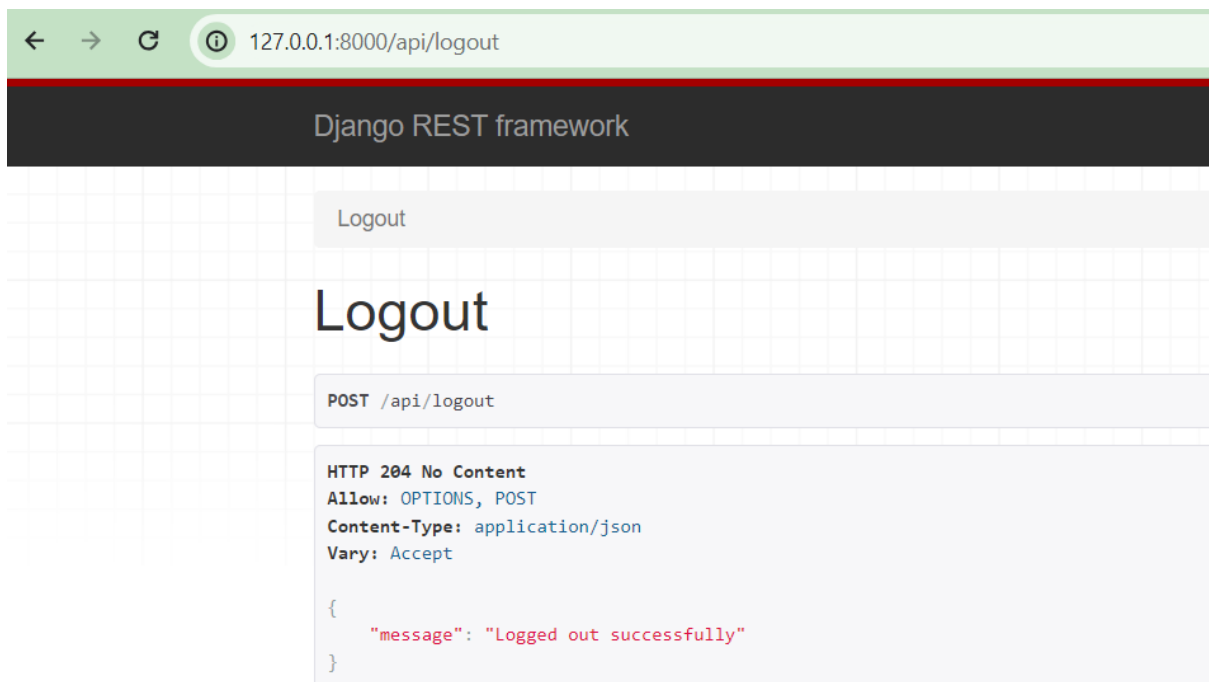
Register Endpoint :

http://127.0.0.1:8000/api/register

Login Endpoint :
http://127.0.0.1:8000/api/login

Django REST framework

Signin

Signin

POST /api/login

```
HTTP 200 OK
Allow: OPTIONS, POST
Content-Type: application/json
Vary: Accept

{
    "message": "Login successful."
}
```

Logout Endpoint :
http://127.0.0.1:8000/api/logout

Django REST framework

Logout

Logout

POST /api/logout

```
HTTP 204 No Content
Allow: OPTIONS, POST
Content-Type: application/json
Vary: Accept

{
    "message": "Logged out successfully"
}
```

Mark-as-spam:

http://127.0.0.1:8000/api/mark-spam

Search by name :

http://127.0.0.1:8000/api/search-contacts/?q=xyz&type=name

Search by phone number:

http://127.0.0.1:8000/api/search-contacts/?q=0000088888&type=phone

Click on a contact:

http://127.0.0.1:8000/api/search/8888899999/3