API signature & Data required

1. Extract the zip folder and you will find the Final_code folder.
2. Open the terminal inside of Final_code and run the below instructions
    a. Pip install -r requirements.txt
    b. Uvicorn main:app –reload
3. **main.py**
    a. First it will load the .env file and look for database connection details
    b. Then it will connect with DB to check whether books_db is available or not. If not available then it will create the database
    c. Then it will look for all 3 tables (books, reviews and users table) and if they are not available, it will create them and ready to take the queries.

Rest API signature and required data:

1. **User registration (POST method)**
    a. `api_url = "http://localhost:8000/register/"`
    b.
```
users = [
    {"user_id": "user1", "username":"John", "password": "pass123"},
    {"user_id": "user2", "username":"Smith", "password": "pass234"},
    {"user_id": "user3", "username":"Linda", "password": "pass456"}]
```
    c. `response = requests.post(api_url, json=user_data)`
    d. `You can find the python client code in` **`Fast_api_clinet_code /user_reg_client.py`**

2. **Book Summary creation & push the data into DB (POST method)**
    a. login_url = "http://localhost:8000/login/"
```
login_data = {
   "user_id": "user1",
   "password": "pass123"
}
response = requests.post(login_url, json=login_data)
```
    b. books_urll = "http://localhost:8000/books_summary/"
```
data = {
        "book_id": int(row["book_id"]),
        "title": row["title"],
        "author": row["author"],
        "genre": row["genre"],
        "year_published": row["year_published"],
        "summary": row["summary"]
    }
headers = {"Authorization": f"Bearer {token}"}
response = requests.post(books_url, json=data, headers=headers)
```
`You can find the python client code in` **`Fast_api_clinet_code /client_books_summary.py`**

3. **Review summarization and push the data into DB(POST Method)**
    a. login_url = "http://localhost:8000/login/"
       login_data = {
          "user_id": "user1",
          "password": "pass123"
       }
       response = requests.post(login_url, json=login_data)
    b. review_url = "http://localhost:8000/reviews/"
    c. review_data = {
          "book_id": int(row["book_id"]),
          "user_id": row["user_id"],
          "review_text": row["review_text"],
         "rating": int(row["rating"])
       }
       headers = {"Authorization": f"Bearer {token}"}
       response = requests.post(review_url, json=review_data, headers=headers)

   You can find the python client code in **Fast_api_clinet_code /client_review.py**

4. **Book Recommendation API (GET Method)**
    a. login_url = "http://localhost:8000/login/"
       login_data = {
          "user_id": "user1",
          "password": "pass123"
       }
       response = requests.post(login_url, json=login_data)

   recommendation_url = "http://localhost:8000/recommendations/"
   headers = {"Authorization": f"Bearer {token}"}
   response = requests.get(recommendation_url, headers=headers, params={"n": 5})
   Note: it will get the recommendations for logged in user
   You can find the python client code in **Fast_api_clinet_code /client_recommendations.py**

5. **Get All books from the Database (GET method)**
    a. login_url = "http://localhost:8000/login/"
       login_data = {
          "user_id": "user1",
          "password": "pass123"
       }
       response = requests.post(login_url, json=login_data)

   get_books = "http://localhost:8000/books/"
   headers = {"Authorization": f"Bearer {token}"}
   response = requests.get(get_books, headers=headers)
   You can find the python client code in **Fast_api_clinet_code /client_all_endpoints.py**

6. **Get All books from the Database (GET method)**
    a. login_url = "http://localhost:8000/login/"
    login_data = {
    "user_id": "user1",
    "password": "pass123"
    }
    response = requests.post(login_url, json=login_data)

get_books = "http://localhost:8000/books/{book_id}"
    data = { 'book_id':234}
headers = {"Authorization": f"Bearer {token}"}
response = requests.get(get_books,data=data, headers=headers)
`You can find the python client code in` **`Fast_api_clinet_code/client_all_endpoints.py`**

7. **Delete a book from the Database (DELETE method)**
    a. login_url = "http://localhost:8000/login/"
    login_data = {
    "user_id": "user1",
    "password": "pass123"
    }
    response = requests.post(login_url, json=login_data)

delete_book = "http://localhost:8000/books/{book_id}"
    data = { 'book_id':234}
headers = {"Authorization": f"Bearer {token}"}
response = requests.delete(delete_book, data=data, headers=headers)
`You can find the python client code in` **`Fast_api_clinet_code/client_all_endpoints.py`**

8. **Add a review for a book in the Database (POST method)**
    a. login_url = "http://localhost:8000/login/"
    login_data = {
    "user_id": "user1",
    "password": "pass123"
    }
    response = requests.post(login_url, json=login_data)

add_review = "http://localhost:8000/books`/{book_id}/reviews`"
    data = {
    "book_id": 1,
    "user_id": 'user3',
    "review_text": "This is a testing review.",
    "rating": 5
    }

headers = {"Authorization": f"Bearer {token}"}
response = requests.post(add_review,data=data, headers=headers)
`You can find the python client code in` **`Fast_api_clinet_code/client_all_endpoints.py`**

9. **Get a review for a book from the Database (GET method)**
    a. login_url = "http://localhost:8000/login/"
       login_data = {
          "user_id": "user1",
          "password": "pass123"
       }
       response = requests.post(login_url, json=login_data)

get_review = "http://localhost:8000/books/{book_id}/reviews"
       data = { "book_id": 1}
headers = {"Authorization": f"Bearer {token}"}
response = requests.get(get_review,data=data, headers=headers)
You can find the python client code in **Fast_api_clinet_code/client_all_endpoints.py**

10. **Get a review for a book from the Database (GET method)**
    a. login_url = "http://localhost:8000/login/"
       login_data = {
          "user_id": "user1",
          "password": "pass123"
       }
       response = requests.post(login_url, json=login_data)

get_review = "http://localhost:8000/books/{book_id}/summary"
       data = { "book_id": 1}
headers = {"Authorization": f"Bearer {token}"}
response = requests.get(get_review,data=data, headers=headers)
You can find the python client code in **Fast_api_clinet_code/client_all_endpoints.py**