



API

Application Programming Interface

How To Create An API Endpoint

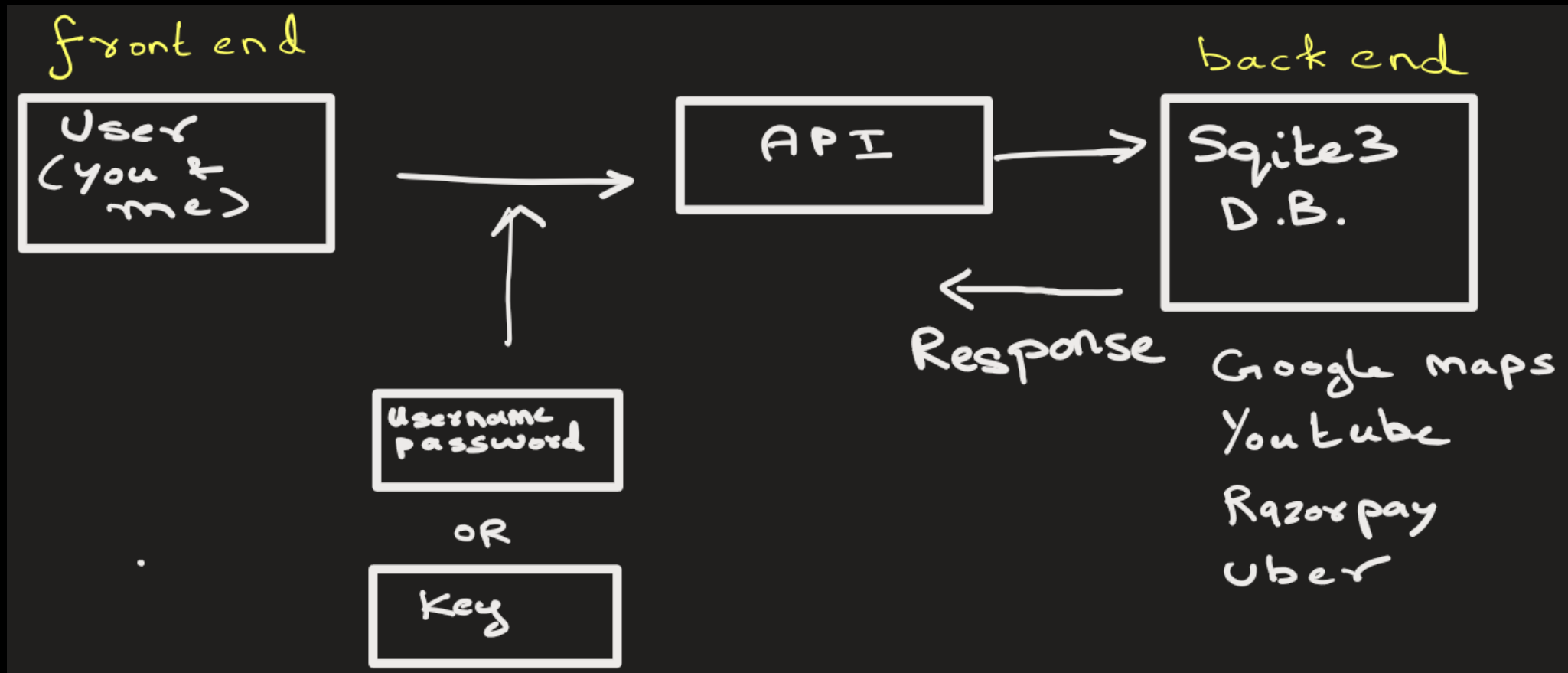
On Local Machine

And

Access The Endpoint

Workflow:

Client(User) → API Endpoint → SQLite DB → Response back to client

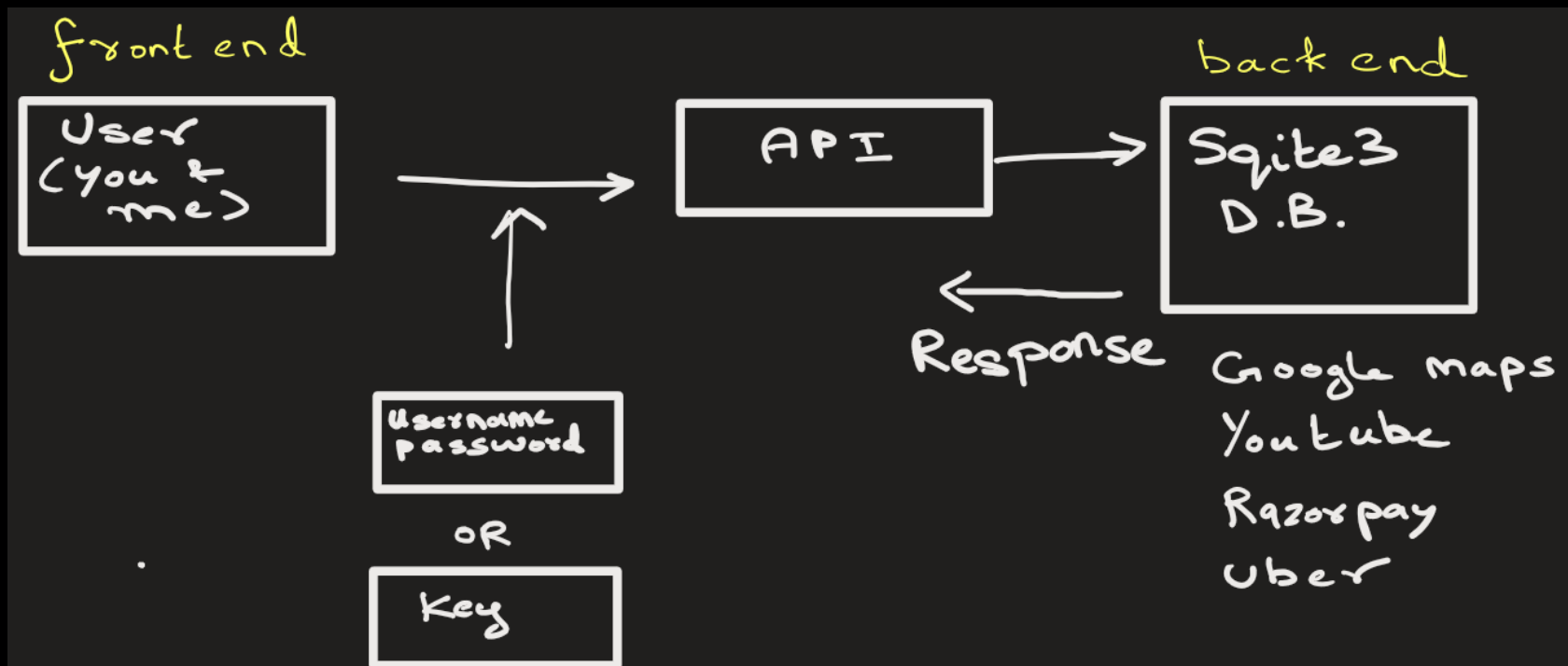




1. Install required packages:

```
python -m pip install fastapi uvicorn
```

(SQLite is built into Python — no install needed)

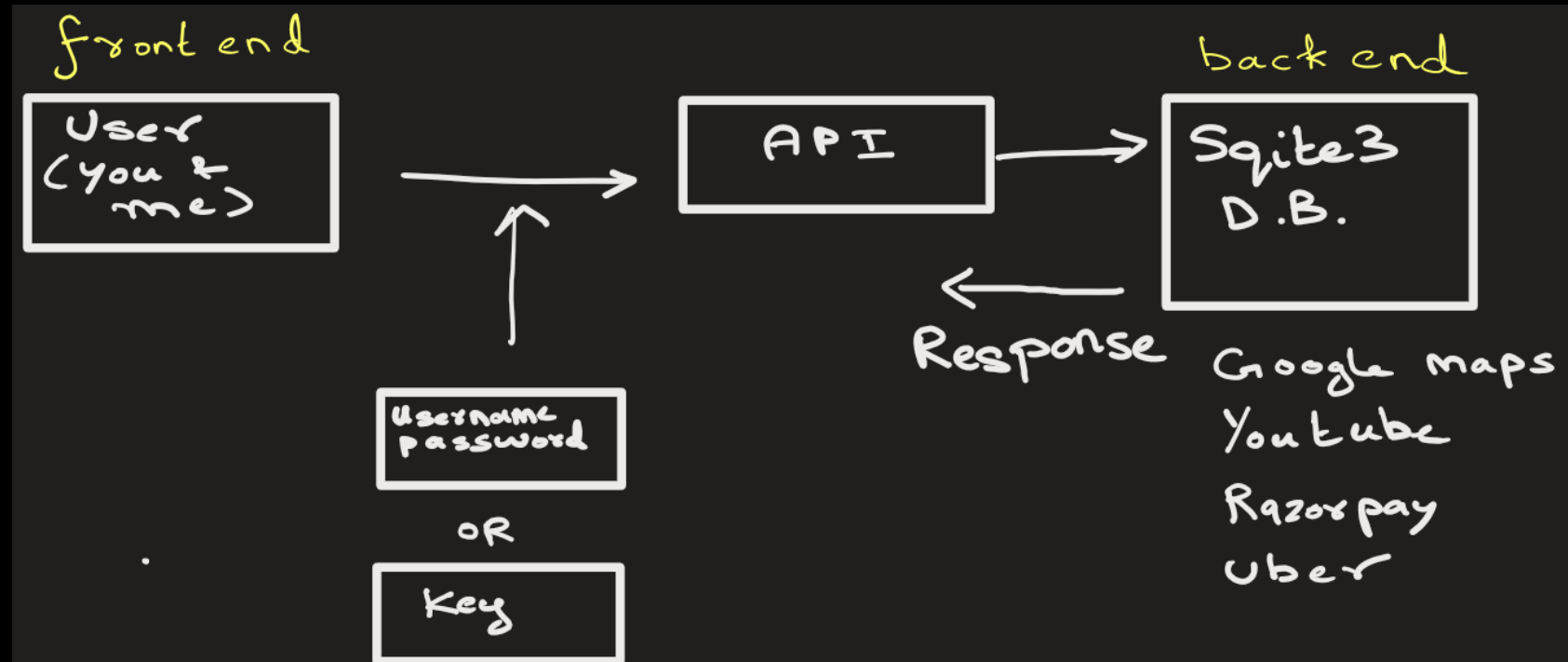


2. Simple Use Case

We will build:

- An API that stores **users**
- 2 endpoints to:
 - Add a user
 - Get user by ID

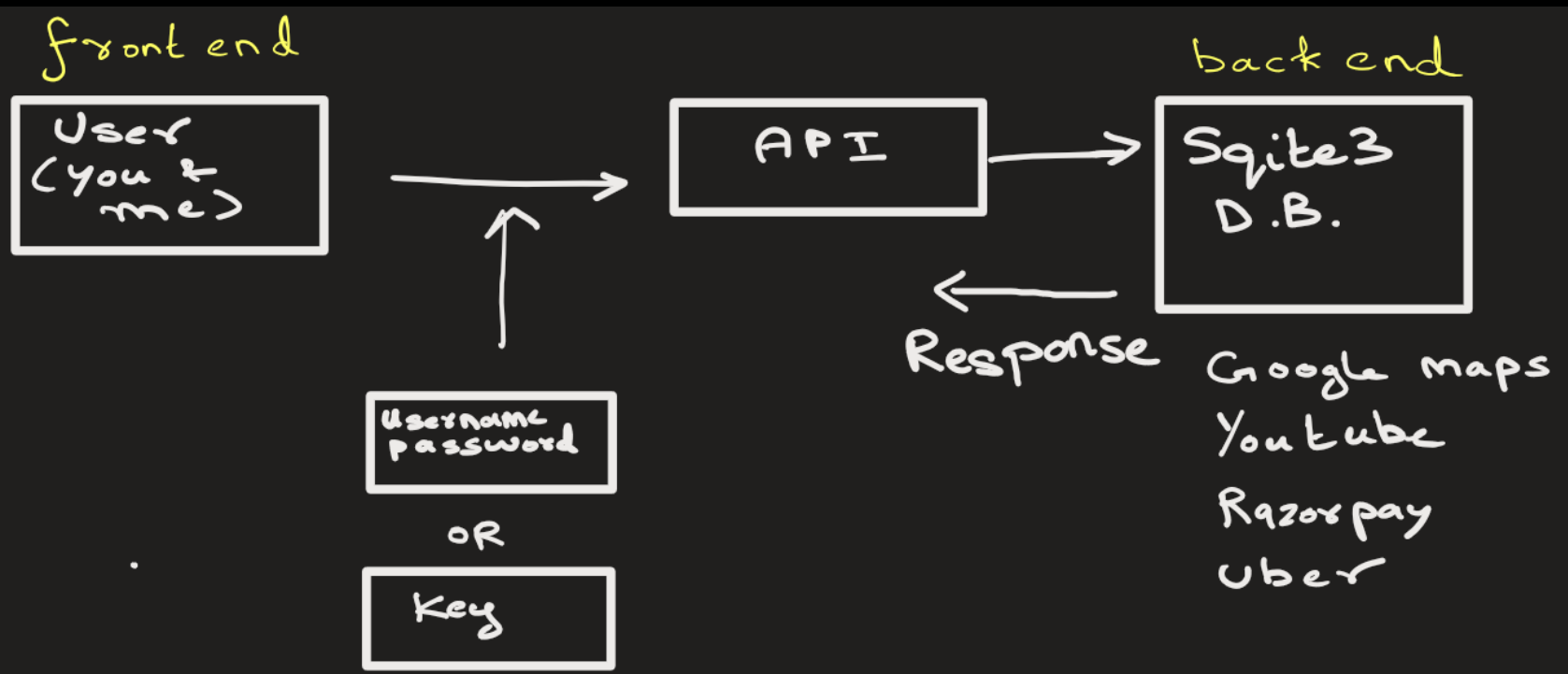
Database: **SQLite (users.db)**





3. Complete FastAPI Code (single file)

Save as: main.py

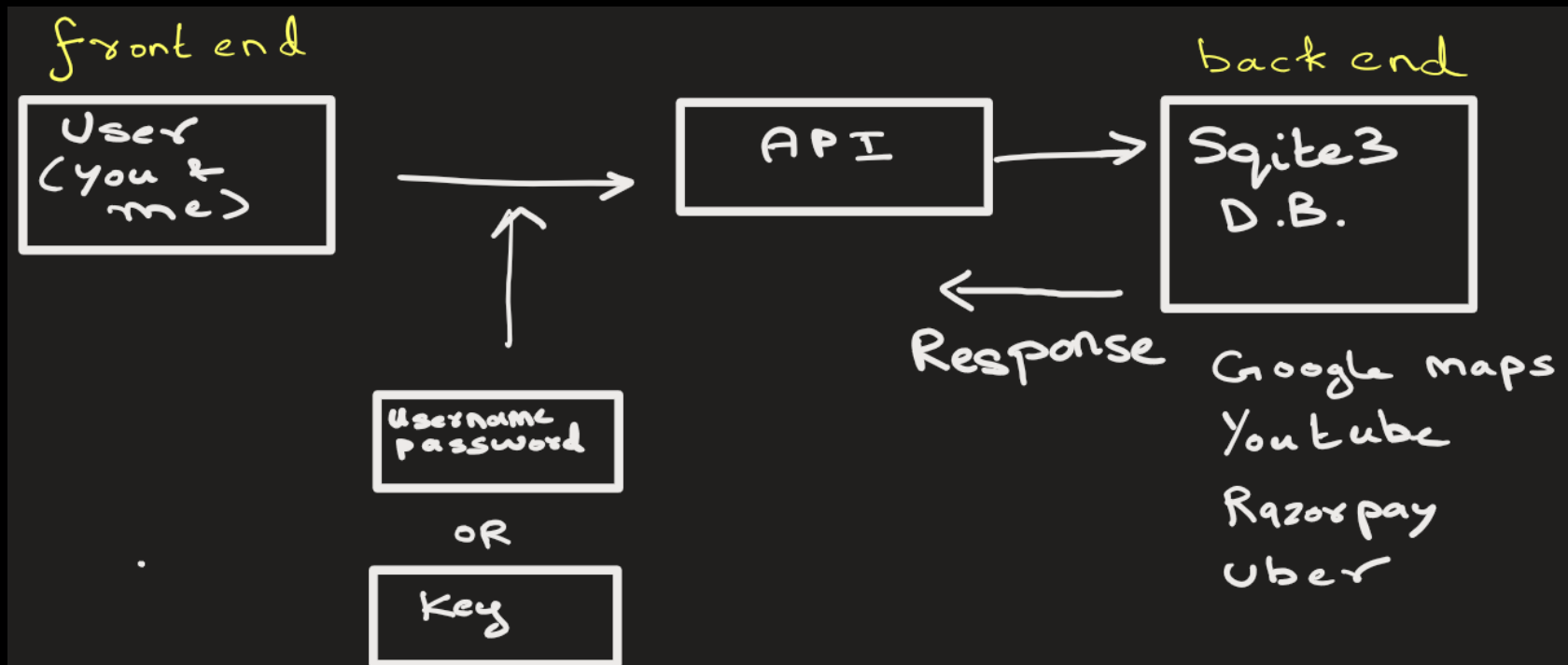


4. Run the API Server

In terminal (same folder as main.py):

```
python -m uvicorn main:app --reload
```

You'll see server running at
<http://127.0.0.1:8000>



5. Test Using Browser (Swagger UI)

Open:

<http://127.0.0.1:8000/docs>

This is an auto-generated UI to connect to API.

Add User

Request: POST /add-user

Parameters:

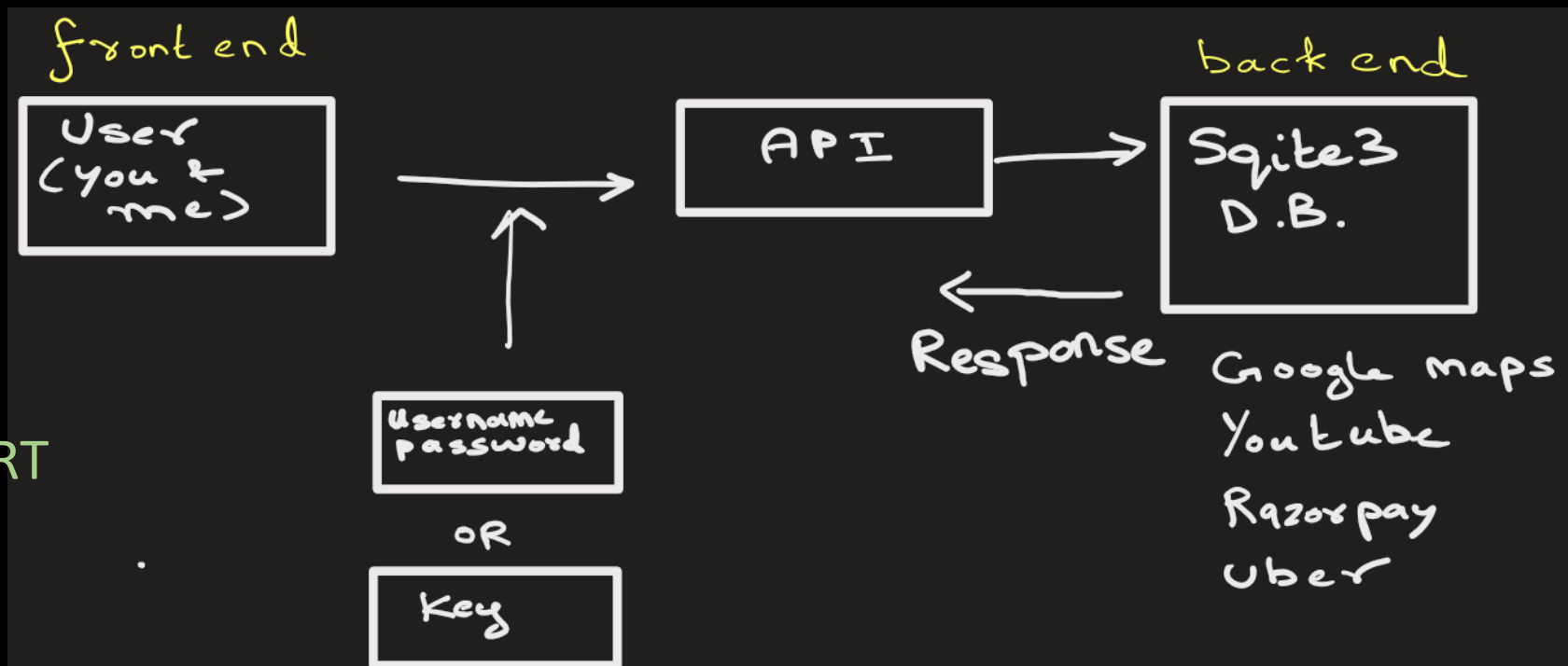
name = Ash

email = ash@gmail.com

What happens internally:

User → FastAPI → SQLite INSERT

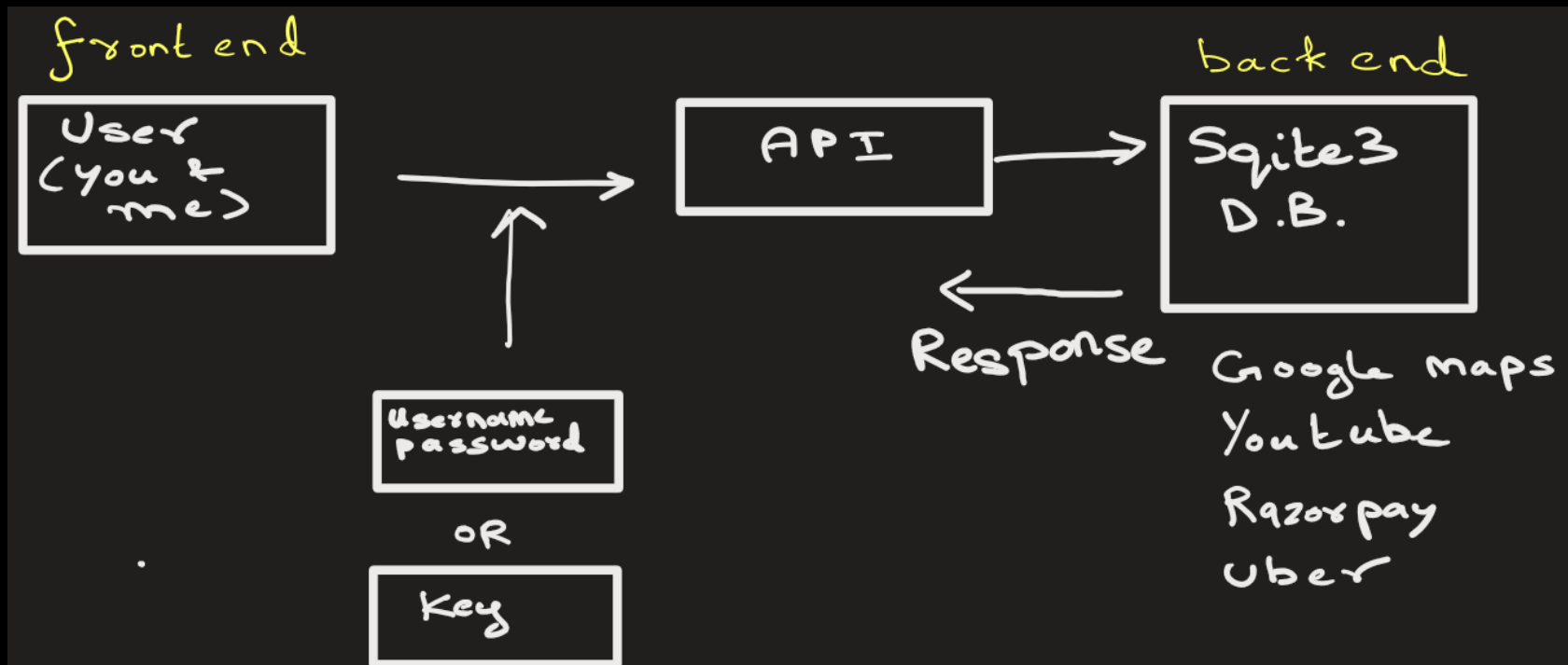
→ Response JSON





Response:

```
{  
  "status": "success",  
  "name": "Ash",  
  "email": "ash@gmail.com"  
}
```



5. Test Using Browser (Swagger UI)

Open:

<http://127.0.0.1:8000/docs>

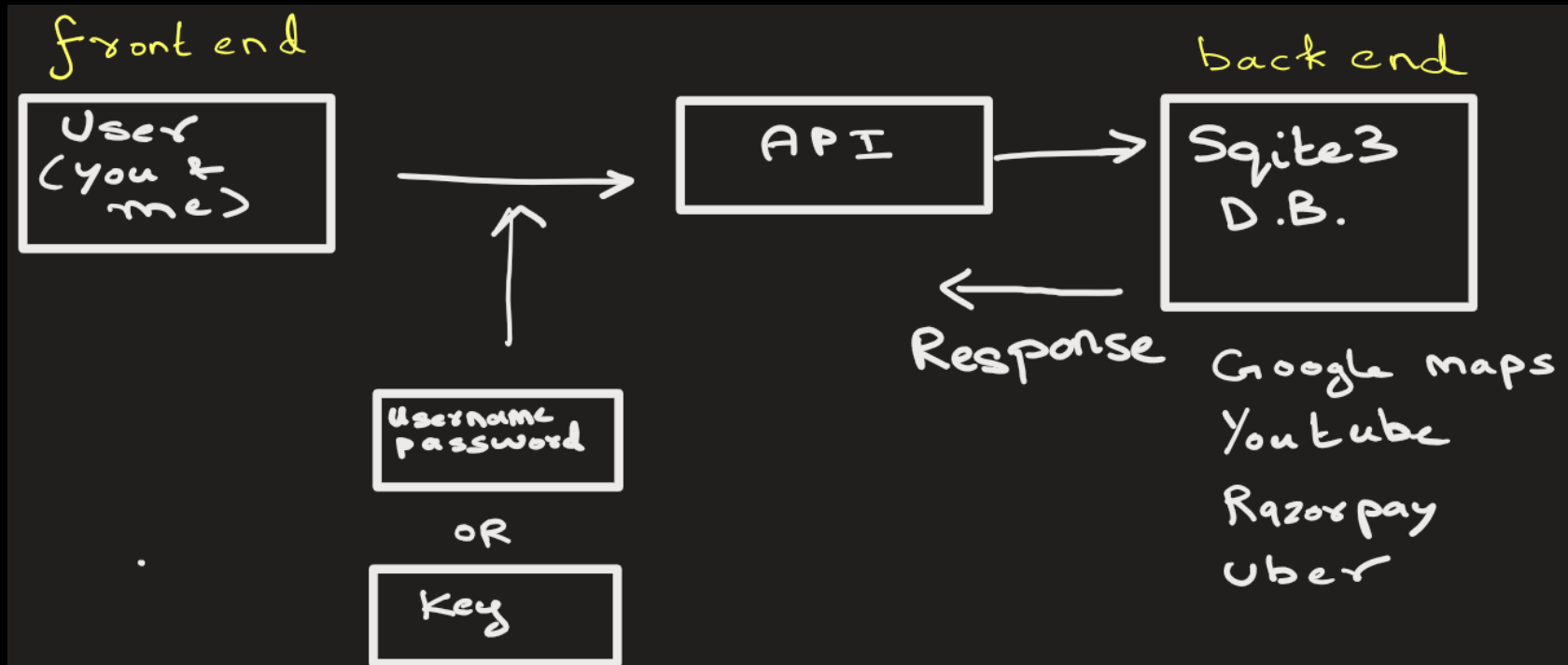
This is an auto-generated UI to connect to API.

Get User

Request: GET /get-user/1

Flow:

User → API → SQLite SELECT
→ JSON response



6. (ALTERNATIVE) Run client.py

Open command prompt and install requests:

python -m pip install requests

Run client: **python -m client**

This sends

- 1) POST request to add a user
- 2) GET request to retrieve a user by id

