### **Todo App README**

#### **Prerequisites**

* Python
* Django
* Docker
* Postman

#### **Getting Started**

1. Clone the repository to your local machine.

bash

git clone <https://github.com/dev03261/todoApp.git>

cd todo-app

1. Create a virtual environment (optional but recommended).

bash

python -m venv virt

source venv/bin/activate # On Windows: venv\Scripts\activate

1. Install project dependencies.

bash

pip install -r requirements.txt

#### **Database Configuration**

This app uses SQLite by default, but you can configure other databases in the settings.py file if needed.

#### **Migrations**

Run the initial migrations to set up the database.

bash

python manage.py migrate

#### **User Authentication**

##### **Sign Up**

To create a user, send a POST request to /api/signup/ with the following JSON data:

json

{

"username": "your\_username",

"password": "your\_password"

}

##### **Log In**

To obtain a token for authentication, send a POST request to /api/login/ with the following JSON data:

json

{

"username": "your\_username",

"password": "your\_password"

}

You will receive a token in the response, which you need for accessing protected endpoints.

#### **Task Management**

##### **View All Tasks**

Send a GET request to /api/tasks/ to retrieve all tasks for the authenticated user.

##### **Create Task**

Send a POST request to /api/tasks/ with the following JSON data:

json

{

"title": "Task Title",

"description": "Task Description"

}

##### **Edit Task**

Send a PUT request to /api/tasks/<task\_id>/ with the following JSON data to update a task:

json

{

"title": "Updated Task Title",

"description": "Updated Task Description"

}

##### **Delete Task**

Send a DELETE request to /api/tasks/<task\_id>/ to delete a task.

##### **Mark Task as Complete**

Send a POST request to /api/tasks/<task\_id>/complete/ to mark a task as complete.

#### **Running the App**

To run the app locally:

bash

python manage.py runserver

The app will be accessible at http://127.0.0.1:8000/.

#### **Dockerization**

If you prefer to run the app in a Docker container:

1. Build the Docker image.

bash

docker build -t todo-app .

1. Run the Docker container.

bash

sudo docker-compose up