

To-Do List Full-Stack App – Documentation

1. Project Overview

This project is a full-stack To-Do List application that allows users to manage tasks, mark them as completed, and filter tasks based on their completion status.

It consists of a React frontend and a FastAPI + SQLite backend.

2. Setup Instructions

1. Clone the repository:

```
git clone <your-repo-url>
```

2. Navigate to the project directory:

```
cd todo-fullstack
```

3. Create a virtual environment:

```
python -m venv venv
```

```
source venv/bin/activate (or venv\Scripts\activate on Windows)
```

4. Install the backend dependencies:

```
pip install -r requirements.txt
```

5. Run the FastAPI server:

```
uvicorn backend.main:app --reload
```

6. In a new terminal, install frontend dependencies:

```
cd frontend
```

```
npm install
```

7. Run the React frontend:

```
npm run dev
```

8. Open your browser at <http://localhost:5173> to use the app.

3. Backend API Endpoints

- GET /

- Description: Get all tasks

- Response: [{ id: int, title: str, completed: bool }, ...]

- GET /{task_id}

- Description: Get a specific task by ID

- Response: { id: int, title: str, completed: bool }

- POST /

- Description: Create a new task

- Request Body: { title: str, completed: bool }

- Response: { id: int, title: str, completed: bool }

- PATCH /{task_id}/

- Description: Update an existing task

- Request Body: { title?: str, completed?: bool }

- Response: { id: int, title: str, completed: bool }

- DELETE /{task_id}/

- Description: Delete a task

- Response: { message: 'Task deleted' }

- GET /filter/{status}

- Description: Filter tasks by status (completed or pending)

- Response: [{ id: int, title: str, completed: bool }, ...]