# To-Do List REST API Documentation

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Overview

This is a RESTful API for managing tasks in a to-do list application. It allows you to:

- Create, read, update, and delete tasks

- Organize tasks into categories

- Mark tasks as complete

- Filter and sort your tasks

\*\*Base URL:\*\* `https://api.todo.example.com/v1`

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API Endpoints

Tasks

| Endpoint | Method | Description |

|--------------|-----------|-----------------|

| `/api/tasks` | GET | Get all tasks |

| `/api/tasks` | POST | Create new task |

| `/api/tasks/:id` | GET | Get single task |

| `/api/tasks/:id` | PUT | Update entire task |

| `/api/tasks/:id` | PATCH | Update part of task |

| `/api/tasks/:id` | DELETE | Delete a task |

Categories

| Endpoint | Method | Description |

|--------------|------------|-----------------|

| `/api/categories` | GET | Get all categories |

| `/api/categories` | POST | Create new category |

| `/api/categories/:id` | GET | Get single category |

| `/api/categories/:id` | PUT | Update category |

| `/api/categories/:id` | DELETE | Delete category |

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Request/Response Examples

Create a Task

\*\*Request (POST /api/tasks):\*\*

```json

{

"title": "Buy groceries",

"description": "Milk, eggs, bread",

"due\_date": "2025-04-22",

"priority": 2

}

```

\*\*Response (201 Created):\*\*

```json

{

"id": "task-789",

"title": "Buy groceries",

"completed": false,

"created\_at": "2025-04-17T14:30:00Z"

}

```

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❌ Error Handling

| Error Case | Status Code | Response Example |

|------------|------------|------------------|

| Missing required field | 400 Bad Request | `{"error": "Missing title field"}` |

| Task not found | 404 Not Found | `{"error": "Task not found"}` |

| Server error | 500 Internal Error | `{"error": "Something went wrong"}` |

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Setup Instructions

1. \*\*Requirements:\*\*

- Python 3.8+

- Flask

- SQLite (for development)

2. \*\*Installation:\*\*

```bash

pip install flask flask-sqlalchemy

```

3. \*\*Running the API:\*\*

```bash

python app.py

```

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Testing the API

1. \*\*Using Postman:\*\*

- Import the Postman collection

- Set base URL to `http://localhost:5000`

2. \*\*Using cURL:\*\*

```bash

curl -X GET http://localhost:5000/api/tasks

```