

# Task Management API Documentation

- **Base URL**

`http://localhost:5000`

- **Endpoints**

## 1. Create Task

**Endpoint:** `/tasks`

**Method:** `POST`

**Description:** Creates a new task.

**Request Body:**

```
json
{
  "Title": "Task Title",
  "Description": "Task Description",
  "Status": "Not Started"
}
```

**Response:**

- **201 Created**

```
json
{
  "message": "Task created"
}
```

- **400 Bad Request:** If required fields are missing or invalid.

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## 2. Read Tasks

**Endpoint:** `/tasks`

**Method:** `GET`

**Description:** Retrieves a list of all tasks.

**Response:**

- **200 OK**

```
json
[
  {
    "Task_id": 1,
    "Title": "Task Title",
    "Description": "Task Description",
    "Status": "Not Started"
  },
  ...
]
```

- **500 Internal Server Error:** If there is an error retrieving the tasks.
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### 3. Update Task

**Endpoint:** /tasks/<task\_id>

**Method:** PUT

**Description:** Updates the details of an existing task.

**Request Body:**

```
json
{
  "Title": "Updated Task Title",
  "Description": "Updated Task Description",
  "Status": "In Progress"
}
```

**Response:**

- **200 OK**

```
json
{
  "message": "Task updated"
}
```

- **404 Not Found:** If the task ID does not exist.
  - **400 Bad Request:** If required fields are missing or invalid.
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### 4. Delete Task

**Endpoint:** /tasks/<task\_id>

**Method:** DELETE

**Description:** Deletes an existing task.

**Response:**

- **200 OK**

```
json
{
  "message": "Task deleted successfully"
}
```

- **404 Not Found:** If the task ID does not exist.
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## Error Handling

All endpoints may return the following error responses:

- **400 Bad Request:** Indicates that the server cannot or will not process the request due to a client error (e.g., malformed request syntax, invalid request message framing, or deceptive request routing).

```
json
{
  "message": "Bad Request"
}
```

- **404 Not Found:** Indicates that the server can't find the requested resource. This status code is returned if the requested resource does not exist.

```
json
{
  "message": "Not Found"
}
```

- **500 Internal Server Error:** Indicates that the server encountered an unexpected condition that prevented it from fulfilling the request.

```
json
{
  "message": "Internal Server Error"
}
```

## Example cURL Commands

### Create Task

```
curl -X POST http://localhost:5000/tasks -H "Content-Type: application/json" -d '{"Title": "New Task", "Description": "This is a new task", "Status": "Not Started"}'
```

### Read Tasks

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

### Update Task

```
curl -X PUT http://localhost:5000/tasks/1 -H "Content-Type: application/json" -d '{"Title": "Updated Task", "Description": "This is an updated task", "Status": "In Progress"}'
```

### Delete Task

```
curl -X DELETE http://localhost:5000/tasks/1
```

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## Notes

- Ensure your server is running before making requests to these endpoints.
- Replace `localhost:5000` with your server's actual base URL if it's different.
- Proper error handling should be implemented in the client application to handle various responses from these endpoints.