

# Task Management API Documentation

This document provides detailed documentation for the Task Management API. The API allows users to perform CRUD operations (Create, Read, Update, Delete) on tasks, as well as upload tasks from Excel files and attach PDF files to tasks.

## Base URL

The base URL for all endpoints is `http://localhost:5001`.

## Endpoints

### List Tasks

- Endpoint: `/tasks`
- Method: GET
- Description: Retrieves a list of all tasks.
- Request Body: None
- Response: An array of task objects.

### Retrieve One Task

- Endpoint: `/task/{id}`
- Method: GET
- Description: Retrieves details of a specific task by its ID.
- Request Body: None
- Response: Details of the task with the specified ID.

### Update Task

- Endpoint: `/tasks/{id}`
- Method: PUT
- Description: Updates details of a specific task.
- Request Body:
  - `title` (string): The updated title of the task.
  - `description` (string): The updated description of the task.
  - `status` (string): The updated status of the task.
  - `pdf_path` (file): The updated PDF file attached to the task.
- Response: Details of the updated task.

### Delete Task

- Endpoint: `/tasks/{id}`
- Method: DELETE
- Description: Deletes a specific task by its ID.
- Request Body: None
- Response: Success message indicating the task has been deleted.

### Create Task with PDF Upload

- Endpoint: `/tasks`
- Method: PATCH
- Description: Creates a new task with an attached PDF file.
- Request Body:
  - `title` (string): The title of the task.
  - `description` (string): The description of the task.
  - `status` (string): The status of the task.
  - `pdf_path` (file): The PDF file attached to the task.
- Response: Details of the newly created task.

### Create Bulk Task with Excel

- Endpoint: `/upload`
- Method: POST
- Description: Uploads an Excel file containing multiple tasks and creates them in bulk.
- Request Body:
  - `excel_path` (file): The Excel file containing task data.
- Response: Success message indicating the tasks have been created successfully.

### Example Usage

#### List Tasks:

- Request: `GET http://localhost:5001/tasks`
- Response: An array of task objects.

#### Retrieve One Task:

- Request: `GET http://localhost:5001/task/95`
- Response: Details of the task with ID 95.

#### Update Task:

- Request: `PUT http://localhost:5001/tasks/95`
- Request Body:
  - json
  - Copy code

```
"title"    "Updated Task Title"
"description" "Updated task description."
"status"    "Completed"
```

```
"pdf_path"    "/path/to/updated.pdf"
```

- 
- Response: Details of the updated task.

#### Delete Task:

- Request: DELETE http://localhost:5001/tasks/96
- Response: Success message indicating the task has been deleted.

#### Create Task with PDF Upload:

- Request: PATCH http://localhost:5001/tasks
- Request Body:
- json
- Copy code

```
"title"      "New Task"
```

```
"description" "Description of the new task."
```

```
"status"     "Incomplete"
```

```
"pdf_path"   "/path/to/new.pdf"
```

- 
- Response: Details of the newly created task.

#### Create Bulk Task with Excel:

- Request: POST http://localhost:5001/upload
- Request Body: Attach Excel file containing task data.
- Response: Success message indicating the tasks have been created successfully.