Task Management API Documentation

Base Path

/api

Project API

Get All Projects

- **Method:** GET

- **Endpoint:** `/api/projects`

- **Description:** Retrieves a list of all projects.

- **Request Body:** None

- **Responses:**

`200 OK`: Successfully retrieved the list of projects.

```
[
 {
  "id": 1,
  "name": "Project Alpha",
  "description": "First project description",
  "created_at": "2025-04-01T10:00:00Z"
 }
]
```

   -
   - `500 Internal Server Error`: Server error.

Get Project by ID

- **Method:** GET

- **Endpoint:** `/api/projects/:id`

- **Description:** Retrieves details of a specific project.

- **Parameters:**

  - `id` (integer): Project ID

- **Responses:**

  - `200 OK`: Project details.

  - `404 Not Found`: Project not found.

  - `500 Internal Server Error`: Server error.

Create New Project

- **Method:** POST

- **Endpoint:** `/api/projects`

- **Description:** Adds a new project.

Request Body:

```
{
 "name": "Project Alpha",
 "description": "First project description"
}
```

  -
  - **Responses:**

    - `201 Created`: Project created.

    - `400 Bad Request`: Invalid input.

- ○ `500 Internal Server Error`: Server error.

Update Project

- **Method:** PUT

- **Endpoint:** `/api/projects/:id`

- **Description:** Updates an existing project.

Request Body:

```
{
 "name": "Updated Name",
 "description": "Updated Description"
}
```

- ●
- **Responses:**

    - ○ `200 OK`: Project updated.

    - ○ `404 Not Found`: Project not found.

    - ○ `500 Internal Server Error`: Server error.

Delete Project

- **Method:** DELETE

- **Endpoint:** `/api/projects/:id`

- **Description:** Deletes a project.

- **Responses:**

    - ○ `204 No Content`: Successfully deleted.

    - ○ `404 Not Found`: Project not found.

     ○   `500 Internal Server Error:` Server error.

Task API

Get All Tasks

- **Method:** GET

- **Endpoint:** `/api/tasks`

- **Description:** Retrieves all tasks.

- **Responses:**

`200 OK:` List of tasks.

```
[
 {
  "id": 1,
  "title": "Design UI",
  "description": "Design the user interface",
  "status": "To Do",
  "priority": "High",
  "project_id": 1,
  "due_date": "2025-04-25"
 }
]
```

     ○

     ○   `500 Internal Server Error:` Server error.

Get Task by ID

- **Method:** GET

- **Endpoint:** `/api/tasks/:id`

- **Description:** Retrieves a specific task.

- **Responses:**

    - `200 OK`: Task details.

    - `404 Not Found`: Task not found.

    - `500 Internal Server Error`: Server error.

Create New Task

- **Method:** POST

- **Endpoint:** `/api/tasks`

- **Description:** Adds a new task to a project.

Request Body:

```
{
 "title": "New Task",
 "description": "Task details",
 "status": "To Do",
 "priority": "Medium",
 "project_id": 1,
 "due_date": "2025-05-01"
}
```

-
- **Responses:**

    - `201 Created`: Task created.

    - `400 Bad Request`: Invalid data.

    - `500 Internal Server Error`: Server error.

Update Task

- **Method:** PUT

- **Endpoint:** `/api/tasks/:id`

- **Description:** Updates an existing task.

Request Body:

```
{
 "status": "In Progress",
 "priority": "High"
}
```

-
- **Responses:**

    - `200 OK`: Task updated.

    - `404 Not Found`: Task not found.

    - `500 Internal Server Error`: Server error.

Delete Task

- **Method:** DELETE

- **Endpoint:** `/api/tasks/:id`

- **Description:** Deletes a task.

- **Responses:**

    - `204 No Content`: Task deleted.

    - `404 Not Found`: Task not found.

    - `500 Internal Server Error`: Server error.

Task Filters (Optional Advanced API)

Get Tasks by Project

- **Method:** GET

- **Endpoint:** `/api/projects/:id/tasks`

- **Description:** Retrieves all tasks for a given project ID.

- **Responses:**

    - `200 OK`: Tasks for the project.

    - `404 Not Found`: Project not found.

    - `500 Internal Server Error`: Server error.

Filter Tasks by Status/Priority

- **Method:** GET

- **Endpoint:** `/api/tasks?status=In%20Progress&priority=High`

- **Description:** Filters tasks by status and/or priority.

- **Responses:**

    - `200 OK`: Filtered list of tasks.

    - `500 Internal Server Error`: Server error.