

Objective:

Create a basic To-Do list API using Django and Django Rest Framework (DRF). The API should support basic CRUD operations (Create, Read, Update, Delete) for tasks.

Requirements:

Task Model:

1. title: CharField (max length 200)
2. description: TextField (optional)
3. completed: BooleanField (default: False)
4. due_date: DateField (optional)

Endpoints:

1. Create Task: POST /api/tasks/
2. Retrieve Task List: GET /api/tasks/
3. Retrieve Single Task: GET /api/tasks/<id>/
4. Update Task: PUT/PATCH /api/tasks/<id>/
5. Delete Task: DELETE /api/tasks/<id>/

Validations:

1. Ensure the title is not empty.
2. If provided, due_date should be a future date.

Analytical Ability:

- Implement a filter to retrieve tasks that are due today. Endpoint: GET /api/tasks/due-today/.

Setup Django Project:

- Create a new Django project and app.
- Configure the settings for using DRF.

Submission:

1. Provide a link to the repository (e.g., GitHub) with your solution.
2. Ensure the repository includes clear instructions on how to set up and run the project locally.