A Simple Task tracker Application

Objective

Build a simple web application which helps **users** to create a **task** and associate it with a **team**. The **team leader** of the team will assign the **team member or team members** to the task. The **team member** will update the status of the task.

Note: Only **Users** will be able to create **tasks** and **teams**.

ORM guidelines:

- Custom User model with roles User, Team leader, Team member (hint: use AbstractUser model of django)
- Create a Task model (hint: model fields - id, name, team, team members, status, started_at, completed_at)
- 3. Create a Team model (hint: model fields id, name, team leader, team members)

Note: If you need to create any other models or database tables feel free to do so. Above 3 are just the basic requirements.

Backend flow:

Users/team leaders/team members can be created using the django admin interface or command line and assign them specific roles mentioned above.

Use Token Authentication for all the APIs provided by DRF.

- 1. Create Team API with necessary fields (name, team leader and team members)
- 2. Create Task API with necessary fields (name and team) Once task is created, send an email to the team leader of the associated team with task details (async background task)
- 3. Update Task API
 - team leaders will be able to update all task fields
- team members will be able to update the status only (status can be "Assigned", "In progress", "Under Review" and "Done")
- 4. Retrieve Tasks API
 - Retrieve a list of all tasks (all fields of Task model included)

Requirements:

Use Django as the project framework and Django rest framework for building RESTful APIs. Use <u>Celery</u> for any background tasks and console backend for sending email Maintain the proper code structure, naming conventions etc.