

## Assignment: Dockerize a Basic Django Project

### Objective

Your task is to **set up a basic Django application and Dockerize it** so that it can be easily run using Docker Compose.

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### Requirements

#### 1. Django Project

- Clone the basic Django project from <https://github.com/s2pl/RailSathiBE>
- run the django server in ur local.

#### 2. Dockerization

- Create a Dockerfile that:
- Uses an official Python base image.
- Installs dependencies from requirements.txt.
- Runs migrations and starts the Django development server.
- Create a docker-compose.yml file to:
- Run the Django app container.
- Run a PostgreSQL container as the database.
- Configure environment variables using .env file.

#### 3. Database Configuration

- Configure Django to connect to the PostgreSQL container via Docker Compose networking.

#### 4. Startup

- On running docker-compose up, the app should:
- Migrate the database.
- Be accessible at <http://localhost:8000/items/>.

## 5. **Bonus (Optional)**

- Add a wait-for-it.sh or similar script to handle database startup timing.
  - Add Django admin and create a superuser via Docker.
  - Include Swagger or simple auto-generated API docs.
  - Add volumes for code hot-reloading in development mode.
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## **Deliverables**

- A public GitHub repository with:
  - Django project and app
  - Dockerfile
  - docker-compose.yml
  - .env.example
  - README.md with:
  - Setup instructions
  - API usage or endpoints
  - Any assumptions or design decisions
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## **Submission Requirements:**

- Submit your code via GitHub or as a zip file.  
Screen record your assignment(either 2.a or 2.b. or 2.c) submission explaining your project features, technologies and stacks.
- Upload the Recording to your Drive.
- Rename your video file with your name as prefix in it. (e.g: rohan\_flutter\_assignment)  
Note: If multiple links are required, paste the links corresponding to their Label/Title

- Example:  
project-features : [https://drive.com/rohan\\_flutter\\_assignment\\_1.mp4](https://drive.com/rohan_flutter_assignment_1.mp4)  
project-technical : [https://drive.com/rohan\\_flutter\\_assignment\\_2.mp4](https://drive.com/rohan_flutter_assignment_2.mp4)
  - Include a README file explaining:
    - How to set up the project.
    - Key features implemented.
    - Any limitations or assumptions made.
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### **Evaluation Criteria:**

- Completeness of the implementation.
  - Code quality and adherence to best practices.
  - User experience and UI design.
  - Security and handling of sensitive information.
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**Deadline:** 5 Days.

If you have questions or need clarification!

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