

Subject: Task Assignment for Django Developer Evaluation

As part of our evaluation process, we would like to give you an opportunity to demonstrate your familiarity and expertise with Django, specifically in the context of Docker containerization and database integration.

Your task is to create a Docker Compose file that sets up a Django application container and a PostgreSQL container with PostGIS support. This exercise aims to assess your skills in integrating Django with databases in a containerized environment, a crucial aspect for our projects at Fractal Networks.

Requirements:

Django Container:

Set up a container for a Django application.
Ensure the Django app is accessible on a specified port.
PostgreSQL with PostGIS Container:

Create a PostgreSQL database container.
The database should have PostGIS extension enabled for geospatial data support.
Configuration:

Configure the Django app to connect to the PostgreSQL database.
Use environment variables for database credentials to enhance security.
Documentation:

Briefly document the steps to run the containers and any necessary configuration.
Include any assumptions or decisions you made that you think we should be aware of.
Bonus (Optional):

Demonstrate a simple Django model that utilizes PostGIS features.
Write a simple test to validate the model's functionality.
Submission:

Please complete this task within 24 hours. Submit your Docker Compose file and any associated files by emailing them back to this address. If you use any version control system like Git for this task, a link to the public repository is requested.

This task is designed to be straightforward yet reflective of the real-world scenarios you might encounter in our projects. We are looking forward to seeing your approach and understanding how you tackle challenges in a Dockerized Django environment.

If you have any questions or need further clarification, please don't hesitate to reach out.

Best regards,

Mo Balaa
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<https://docs.djangoproject.com/en/5.0/ref/contrib/gis/install/postgis/>