Django

Working with the Django web framework and associated libraries

- Deploying Django Apps
- Django and PostgreSQL

Deploying Django Apps

Packaging a Django App in Docker

I wrote a blog about packaging django apps up for shipping in docker.

Check Utility

Use the `manage.py check` command to ensure that your site is ready for prod usage.

Resources

Deploy A Site Live - Matt Layman (mirror)

Django and PostgreSQL

When working with Django and PostgreSQL it is typically best to use the `psycopg[binary]` package:

```
pip install psycopg[binary]
```

Migrating From Integer to Duration

If you need to migrate from an integer to a duration column you need to manually tell Postgres what unit of time to use - it won't assume that you mean seconds or minutes etc. Here is an example excerpt from a Gastronaut migration.

```
class Migration(migrations.Migration):

    dependencies = [
        migrations.swappable_dependency(settings.AUTH_USER_MODEL),
        ('recipe_app', '0002_nurishifyprofile'),
    ]

    operations = [
        migrations.AlterField(
            model_name='nurishifyprofile',
            name='user',
            field=models.OneToOneField(on_delete=django.db.models.deletion.CASCADE,
related_name='profile', to=settings.AUTH_USER_MODEL),
        ),
        # workaround for migrating postgres
        migrations.RunSQL(
            "ALTER TABLE recipe_app_recipe ALTER COLUMN cooking_time TYPE interval USING
cooking_time * interval '1 second'",
            reverse_sql=migrations.RunSQL.noop
        ),
        migrations.AlterField(
            model_name='recipe',
            name='cooking_time',
            field=models.DurationField(),
        ),
```

Testing with Django and Postgres in Gitea Actions

I wrote a blog post about testing Postgres-based django apps in Gitea. The TL;DR is effectively to install and configure the postgresql server in the runner image like so:

```
name: Run Tests
run-name: ${{ gitea.actor }} is testing out Gitea Actions □□
on: [push]
jobs:
  run_tests:
    runs-on: ubuntu-latest
    container: catthehacker/ubuntu:act-latest
    steps:
      - name: Checkout Codebase
        uses: actions/checkout@v3
      - name: Configure and install postgres
        run: |
         apt update
         apt install -y postgresql
         service postgresql start
         sudo -u postgres -s psql -U postgres -d postgres -c "alter user postgres with
password 'test123';"
      - uses: pdm-project/setup-pdm@v3
        with:
          python-version: 3.10
          token: ${{ secrets.GH_TOKEN }}
      - name: Install dependencies
        run: cd ${{ gitea.workspace }} && pdm install


      - name: Run Django tests
        env:
          DB_HOST: 127.0.0.1
          DB_NAME: gastronaut
          DB_USER: postgres
          DB_PASSWORD: test123
        run: |
          cd ${{ gitea.workspace }} && pdm run manage.py test
```