

# CMPUT 404 Lab 6 - Heroku

2017-02-13

## Install Heroku

1. Sign up for a free Heroku account
2. Download with `wget`  
<https://cli-assets.heroku.com/branches/stable/heroku-linux-amd64.tar.gz>
3. Unpack with `tar -xvzf heroku-linux-amd64.tar.gz`
4. Add it to your path with `export PATH="$PATH:$HOME /heroku/bin"`
5. Run the heroku tool with `heroku`

## Migrate Polls App

6. Follow the instructions at: <https://devcenter.heroku.com/articles/django-app-configuration> starting from "Migrating an Existing Django App" "The Basics"

**Question 1:** What does pip freeze do and how does it help heroku run your app?

**Question 2:** How does Heroku communicate the database connection details to your app?

**Question 3:** What is the webserver Heroku uses for Python apps? How does it communicate with the Django App?

7. Follow the instructions at: <https://devcenter.heroku.com/articles/deploying-python>
8. Make sure your Procfile contains

```
web: gunicorn lab4django.wsgi --log-file -
```

Except replacing "lab4django" with what you called your site.

9. Make sure your wsgi.py contains:

```
import os
```

```
from django.core.wsgi import get_wsgi_application
```

```
os.environ.setdefault("DJANGO_SETTINGS_MODULE",  
"lab4django.settings")
```

```

from whitenoise.django import DjangoWhiteNoise

application = get_wsgi_application()
application = DjangoWhiteNoise(application)

```

**Note the whitenoise import comes after `os.environ.setdefault!`**

#### **10. Make sure your settings.py contains:**

```

DATABASES = {'default': None}
import dj_database_url
db_from_env = dj_database_url.config(conn_max_age=500)
DATABASES['default'] = db_from_env

```

#### **11. Make sure your settings.py contain:**

```

PROJECT_ROOT = os.path.dirname(os.path.abspath(__file__))

STATIC_ROOT = os.path.join(PROJECT_ROOT, 'staticfiles')

STATIC_URL = '/static/'

# Extra places for collectstatic to find static files.
STATICFILES_DIRS = (
    os.path.join(PROJECT_ROOT, 'static'),
    os.path.join(PROJECT_ROOT, '../polls/static'),
)

STATICFILES_STORAGE =
'whitenoise.django.GzipManifestStaticFilesStorage'

```

#### **12. For heroku local web set your DB environment variable with:**

```

DATABASE_URL="sqlite:///`pwd`/sqlite3.db"

```

#### **13. Make sure your requirements.txt contains:**

```

Django==1.8
argparse==1.2.1
dj-database-url==0.4.2
gunicorn==19.6.0
psycopg2==2.6.2
whitenoise==3.3.0
wsgiref==0.1.2

```

14. You should be able to skip creating a virtualenv but make sure to activate it!
15. Before pushing to heroku add a file at mysite/mysite/static/keep. It can be empty but make sure it's in git.
16. At the "One-off dynos" step, you can use heroku run python manage.py migrate to create the database tables, and manage.py superuser to create the superuser login for the admin panel.
17. **Stop** at "Logging."

**Question 4:** What is the Procfile used for?

**Question 5:** How do you send your application code to Heroku?

**Question 6:** How do you run manage.py commands on Heroku?

**Question 7:** What is the address of your polls app on Heroku?

18. Shut down your dynos.