# Deploying Rails to Heroku

#### To prepare

- 1. Create a heroku account

  If you don't already have one .. it's free
- 2. Install the heroku CLI <a href="https://devcenter.heroku.com/articles/heroku-cli#download-and-instal">https://devcenter.heroku.com/articles/heroku-cli#download-and-instal</a>
- 3. Login to heroku (from the CLI)

  heroku login

### You need an app to deploy

#### 1. Create the app

Create your basic running application

#### 2. **Git it**

Initialise a git repository (git init) and commit your work (git add . && git commit -m "initial commit")

It's also a good idea to push it up to a repo on github. This isn't required for deployment, but it is needed for a healthy development process (more about this later)

#### Create the heroku app

heroku create <app-name>

- app-name is optional heroku will make up a name if you don't give one
- You can update the app name later

After running heroku create, you should see the connection to the repository hosted on heroku with **git remote -v** 

### **Set the master key**

Rails uses a master key for decryption of its credentials. You never want to push this up to your repository, but you need to let heroku know the key value for your app to work

The master key is in the config directory of your app in a file called master.key

heroku config:set RAILS\_MASTER\_KEY=<your-key>

Now push to heroku master

git push heroku master

## Set up the database

### Heroku runs its own postgresql server instance

Just like when you set up the app to run in your local development environment, you need to set up the database to run in the heroku (production) environment, which also has a postgresql server instance deployed for your app to use

For initial setup, some commands don't work in the heroku environment (db:setup, db:create) because we don't have access to the postgres user password, but we can accomplish what we need with other db commands

We can run rails commands in the heroku environment from the heroku CLI using the **heroku run** command

#### Heroku rails db commands

#### We will use:

- heroku run rails db:schema:load to initially create our tables from the db/schema.rb file
   This will clear all data, so only use it for initial setup
- heroku rails db:migrate if we make any changes to our db structure (tables, columns) after we
  deploy to produce
- heroku rails db:seed to seed any data we need in production (not always necessary but sometimes makes sense)
  - We will use seed to create our menu items

#### Check the database.yml

You should be using postgresql, and if you created your app with -d postgresql, the database.yml file will already be properly set up to run in production. You should see something like this for production in your database.yml file:

```
production:
    <<: *default
    database: cafe_production
    username: cafe
    password: <%=
    ENV['CAFE_DATABASE_PASSWORD'] %>
```

#### Issue db:schema:load and db:seed

Initialise the database tables (create them) from our db/schema.rb heroku run rails db:schema:load

Seed the menuitems data heroku run rails db:seed

### Open the app in heroku

You can open the heroku app from heroku, or from the heroku cli in the app directory

heroku open

If there have been no errors, you should see your app open in a browser window - deployed on heroku! You will be able to access this deployed version of your app from any network connected device.

#### Resources

Deploying Rails5 to Heroku

Project workflow