6.170 Deployment Guide

At some point, you will want to deploy your applications on a server somewhere, so that all the world can access them! We are asking you to deploy somewhere for grading purposes, so that your code may be easily tested by the TAs. You are free to deploy anywhere you want that leads to a publicly accessible web site, but we are providing this guide for deploying through Heroku, which we recommend because it is free and supports the technology we are using.

Deploying your app with Heroku

Note: Make sure all your code (package.json, app.js, etc.) is in the root directory of your project. In other words, your assignment contents should be tests/, app.js, routes/, views/, etc., not tests/ and fritter/.

You can find the official instructions from Heroku here.

Sign up and install Heroku

Create a Heroku account at https://signup.heroku.com/ if you don't have one already.

Follow the instructions <u>here</u> to install the Heroku CLI, which will allow you to deploy your app from the command line. To verify your installation, use the heroku --version command. Next, run the heroku login command to log in with your Heroku account credentials.

Set up your code

Define a Procfile in the root directory of your application. A Procfile is a text file that declares how Heroku should run your app. Make sure to name your Procfile exactly as "Procfile" (without extensions). The Procfile specifies which process type Heroku should run (web, worker, clock, etc.) as well as any commands in the following format:

cprocess type>: <command>

We will be using a web process type and want to start the server, which is either in ./bin/www or app.js. The starter code by default starts the server in ./bin/www.

This is what your Procfile should contain if your server is started in ./bin/www:

web: node ./bin/www

This is what your Procfile should look like if your server is started in app.js:

web: node app.js

Create the Heroku app

In your terminal, cd into the directory containing the code for your assignment and run the following commands:

heroku create <kerberos>-fritter git push heroku master OR git push heroku main

Scale your Heroku app to run on one dyno. Note: Scaling to more than one dyno is not free. One dyno will be sufficient for this class. This is also done in the terminal.

heroku ps:scale web=1

Open your app

You can open your app by running the following in the terminal: heroku open

If your app doesn't show and says "Application Error: An error occurred in the application and your page could not be served. Please try again in a few moments.", check the logs first:

heroku logs --tail

Some common deployment issues are not including a required NPM module in package.json.

Re-deploying your app

Whenever you want to re-deploy your app, make sure that your changes have been added and committed to your repository before pushing to the Heroku server.

git push heroku master

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