

[Open in app](#)

Moses Gitau

[Follow](#)

50 Followers

[About](#)

Deploying a Flask application on Heroku



Moses Gitau May 31, 2018 · 3 min read

Andela Bootcamp day 4, and I got the chance to deploy my first application to Heroku, and I would say, it was one of the challenging issues I have faced so far. It all began when my application was ready for deployment, I did my research as usual and had a few resources helping me out in the process, watching YouTube tutorials and reading medium blogs. After hours browsing relentlessly, I managed to pick up a few crucial instructions that I will discuss in the following section.

[Open in app](#)

Installing Heroku CLI

This will help you manage your application directly from command line.

Download and Install Heroku CLI

Creating a Heroku Account

If you don't have a Heroku account yet, don't worry it's free, you will head over to [Heroku](#) and get yourself a free account.

Getting started

You will need to have basic knowledge of git commands, using terminal (command line), running virtual environments in Python and creating Flask applications.

Login to heroku in your terminal with the following command.

```
heroku login
```

You will be prompted to enter your email and password.

[Open in app](#)

```
[moses@surblime] - [~/PycharmProjects/test] - [Thu May 31, 19:48]
[$] <> heroku login
heroku: Enter your login credentials
Email [gitaumoses4@gmail.com]:
Password: *****

Logged in as gitaumoses4@gmail.com
[moses@surblime] - [~/PycharmProjects/test] - [Thu May 31, 19:49]
[$] <> [
```

Initializing a git repository

Run the following command to initialize a git repository. Skip this step if you already have a git repository.

```
git init
```

Create a heroku application

You will be required to create a heroku application. In this example, I will create an application called **your-first-heroku-app**, which will be accessed from the link: <https://your-first-heroku-app.herokuapp.com>. Feel free to name your application as you wish.

```
heroku create your-first-heroku-app --buildpack heroku/python
```

Add the remote heroku git repository. (remember to replace **your-first-heroku-app** with the name of the heroku app you chose):

```
heroku git:remote -a your-first-heroku-app
```

Install gunicorn

Gunicorn is a python WSGI HTTP server that will serve your Flask application at heroku.

[Open in app](#)

Finally you will need to create **requirements.txt** file in your project root folder in order for heroku to detect it as a Python project. Run the following command within the project root folder.

```
pip freeze > requirements.txt
```

Ensure your requirements.txt is in the project root folder, else your heroku application will fail to deploy.

Adding a Procfile

Create a `Procfile` in the project root folder and add the following line:

```
web: gunicorn app:app
```

The first `app` represents the name of the python file that runs your application or the name of the module it is in. The second `app` represents your app name. For example if your application runs from a `run.py` file that looks like this:

```
from flask import Flask

my_awesome_app = Flask(__name__)

@my_awesome_app.route('/')
def hello_world():
    return 'Hello World!'

if __name__ == '__main__':
    my_awesome_app.run()
```

Then you will add the following line in your Procfile

[Open in app](#)

Committing the files to Heroku's repository master branch

Stage the files for a commit and commit them

```
git add .  
git commit -m "First commit for heroku"
```

Push the changes from your local `master` branch to heroku's `master` branch.

```
git push heroku master
```

If you want to push from a different branch, say `develop` branch, you can use the following command

```
git push heroku develop:master
```

```
moses@surblime: ~/PycharmProjects/test  
File Edit View Search Terminal Help  
(venv) [moses@surblime] - [~/PycharmProjects/test] - [Thu May 31, 20:26]  
[!] <git:(master)> git push heroku master  
Counting objects: 3, done.  
Delta compression using up to 8 threads.  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 287 bytes | 287.00 KiB/s, done.  
Total 3 (delta 1), reused 0 (delta 0)  
remote: Compressing source files... done.  
remote: Building source:  
remote:  
remote: -----> Python app detected  
remote: -----> Installing requirements with pip  
remote:  
remote: -----> Discovering process types  
remote: Procfile declares types -> web  
remote:  
remote: -----> Compressing...  
remote: Done: 43.4M  
remote: -----> Launching...  
remote: Released v5  
remote: https://your-first-heroku-app.herokuapp.com/ deployed to Heroku  
remote:
```

[Open in app](#)

```
~[~] <git:(master)> |
```

Almost there

Now fire up your browser and got to: (remember to replace **your-first-heroku-app** with the name of the app you created.)

<https://your-first-heroku-app.herokuapp.com>

[Web Development](#)[Flask](#)[Heroku](#)[About](#)[Write](#)[Help](#)[Legal](#)

Get the Medium app

