

# DIAMOND PRICE PREDICTION APPLICATION

STEPS FOR DEPLOYING APPLICATION ON  
HERUKO CLOUD PLATFORM FROM SCRATCH

# INTRODUCTION TO HEROKU

- **Heroku** is a cloud [platform as a service](#) (PaaS) supporting several [programming languages](#).
- One of the first [cloud platforms](#), Heroku has been in development since June 2007, when it supported only the [Ruby](#) programming language, but now supports [Java](#), [Node.js](#), [Scala](#), [Clojure](#), [Python](#), [PHP](#), and [Go](#).<sup>[3]</sup>
- For this reason, Heroku is said to be a [polyglot platform](#) as it has features for a [developer](#) to build, run and scale applications in a similar manner across most languages. Heroku was acquired by [Salesforce](#) in 2010 for \$212 million.<sup>[4]</sup>

## STEP 1:

- Along with your application files you need to take care of below mentioned steps:

1 You need all below mentioned files for deployment:

a. requirements.txt

b. Procfile

c. setup.sh(You need setup.sh only for streamlit)

2 Auto detect the app type.

3 git push & start running.

## STEP 2:

- Create a Python Virtual environment in command prompt.
  - a. `pip list`
  - b. `Python -m venv\my_env`
  - c. `.\my_env\Scripts\activate` (Activate virtual environment in windows)
  - d. Deactivate
- Install these packages in virtual environment:  
`pip install matplotlib seaborn plotly sklearn nltk WordCloud`
- Create requirement.txt file using below mentioned command:  
`pip freeze > requirements.txt`

## STEP 3:

- This part is required for NLP Projects

```
import nltk
nltk.download('stopwords')
nltk.download('wordnet')
```

- Procfile(For Flask):

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

web - Create a Web Dynos

gunicorn app - I want to run a gunicorn app. If multiple people use my app, gunicorn make sure of multi threading and processing  
app - code is in app.py

- Procfile(For streamlit):

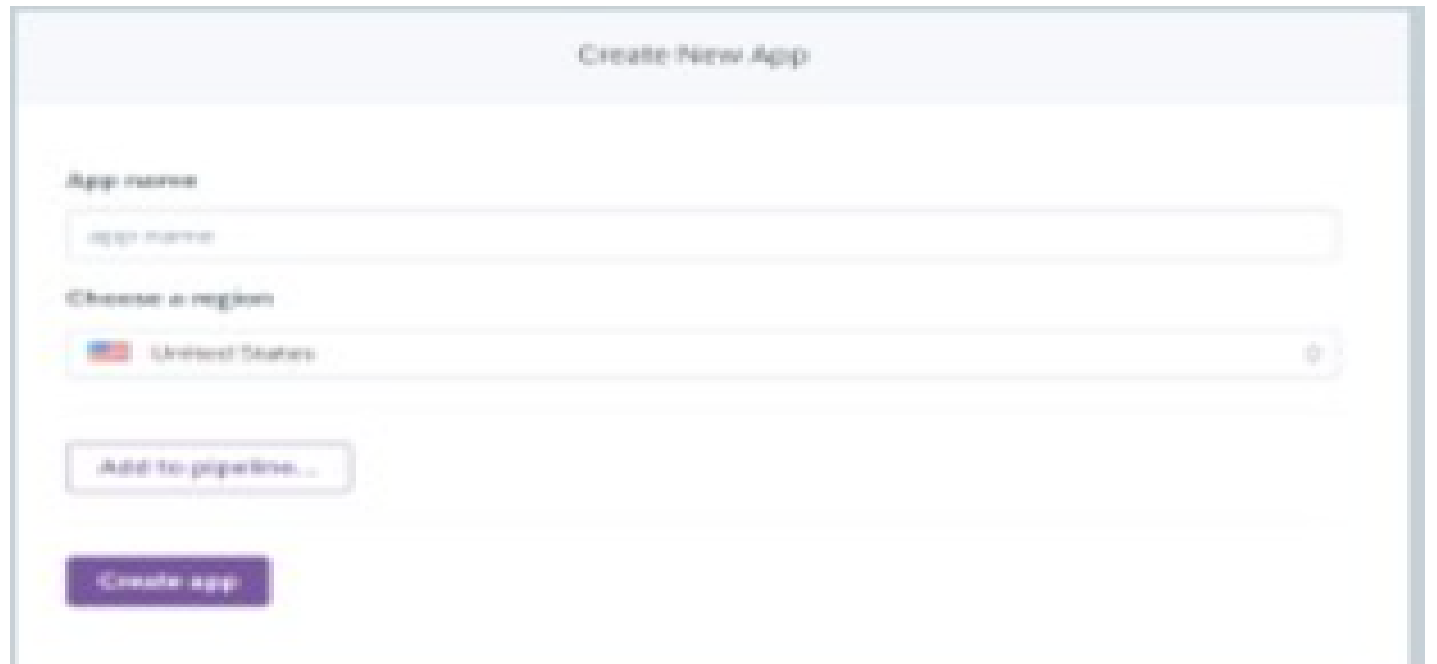
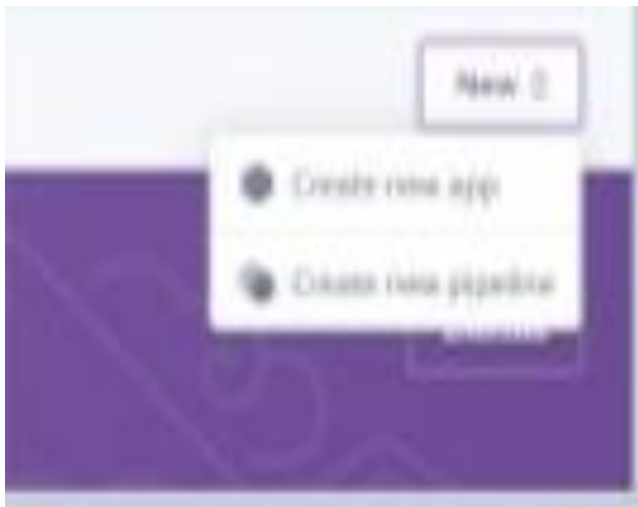
```
web: sh setup.sh && streamlit run project.py
```

## STEP 4:

- First of all you have to create an account on Heroku.

[www.Heroku.com](https://www.Heroku.com)

After Successfully creating account on Heroku, create new app.

A screenshot of the 'Create New App' form on Heroku. The form has a title 'Create New App' at the top. Below the title, there are two input fields: 'App name' and 'Choose a region'. The 'App name' field contains the text 'app name'. The 'Choose a region' field shows a dropdown menu with 'United States' selected. Below these fields, there is a button labeled 'Add to pipeline...' and a purple button labeled 'Create app'.

# STEP 5:

➤ After creating new app go to command prompt and follow the commands given:

➤ Install Heroku CLI and Git  
heroku login

➤ Create a git repo and commit it locally

```
git init.  
git add*  
git commit -m "My First Commit"
```

```
heroku git:remote -a diamond-price--prediction—app (This IS NAME OF MY APP THAT I BUILT ON HEROKU)  
git push heroku master
```

➤ RUN:  
heroku run bash -a diamond-price--prediction—app

➤ STOP:  
heroku ps:scale web=0 -a diamond-price--prediction—app

## STEP 6:

- Your code will run and the link of your app will be generated:  
My Application Link: <https://diamond-price--prediction--app.herokuapp.com/>
- Successfully deployed on heroku cloud platform



# My web app looks like this

