

CLOUD DEPLOYMENT ON HEROKU

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The same app.py and model was used along with the same data(real estate.csv)

```
app.py > home
1  import numpy as np
2  from flask import Flask, request, jsonify, render_template
3  import pickle
4
5  app = Flask(__name__)
6  model = pickle.load(open('model.pkl', 'rb'))
7
8  @app.route('/')
9  def home():
10
11      return render_template('index.html')
12
13  @app.route('/predict',methods=['POST'])
14  def predict():
15
16      float_features = [float(x) for x in request.form.values()]
17      final_features = [np.array(float_features)]
18      prediction = model.predict(final_features)
19      output = prediction[0]
20      return render_template('index.html', prediction_text='ESTIMATED PRICE IS {}'.format(output))
21
22  @app.route('/predict_api',methods=['POST'])
23  def predict_api():
24
25      data = request.get_json(force=True)
26      prediction = model.predict([np.array(list(data.values()))])
27      output = prediction[0]
28      return jsonify(output)
29
30  if __name__ == "__main__":
31      app.run(debug=True)
```

A Procfile was created, and the meaning of the present text is as follows: web means it's a web app, gunicorn is a gateway server interface. The first app is the app.py and the second app is the name of the variable.

```
Procfile
1  web: gunicorn app:app
```

Next we need a requirements.txt file containing all the libraries we need download through Heroku. Heroku reads this file and downloads the required libraries to run the app.

```
requirements.txt
1  Flask==1.1.1
2  gunicorn==19.9.0
3  itsdangerous==1.1.0
4  Jinja2==2.10.1
5  MarkupSafe==1.1.1
6  Werkzeug==0.15.5
7  numpy>=1.9.2
8  scipy>=0.15.1
9  scikit-learn>=0.18
10 matplotlib>=1.4.3
11 pandas>=0.19
```


Now I created the github repository where I saved the all the files in the repository.


Now we need to create an account on Heroku, after signing up, click on new and create an app and follow as shown below. The region could be left as US.

App name

diabetesprogression is available

Choose a region

 United States

 Add to pipeline...

Create app

Now, when asked for deployment, just choose GitHub and connect with your repository.



Heroku Git
Use Heroku CLI



GitHub
Connect to GitHub



Container Registry
Use Heroku CLI

After getting connected, they will ask for deploy branch manually or automatically, I prefer manually. Click on manually. Once successful, click on View at the bottom as shown.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more.](#)

Choose a branch to deploy



main



Deploy Branch

Receive code from GitHub



Build main



Release phase



Deploy to Heroku



Your app was successfully deployed.



View

Finally a new tab will open containing your application.

Here we shall estimate the price of a house based on different factors presented below Please enter your values

transaction date

House age

Distance to MRT

Number of convenience sto

latitude

longitude

ESTIMATE!

ESTIMATED PRICE IS [47.1689389]

