

## Heroku Deployment of Dummy Model













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**Batch Code:** LISUM10

**Submission Date:** July 2, 2022

**Submitted to:** Github (inside folder <https://github.com/rainbow31499/lisum-10/tree/main/week-5>)

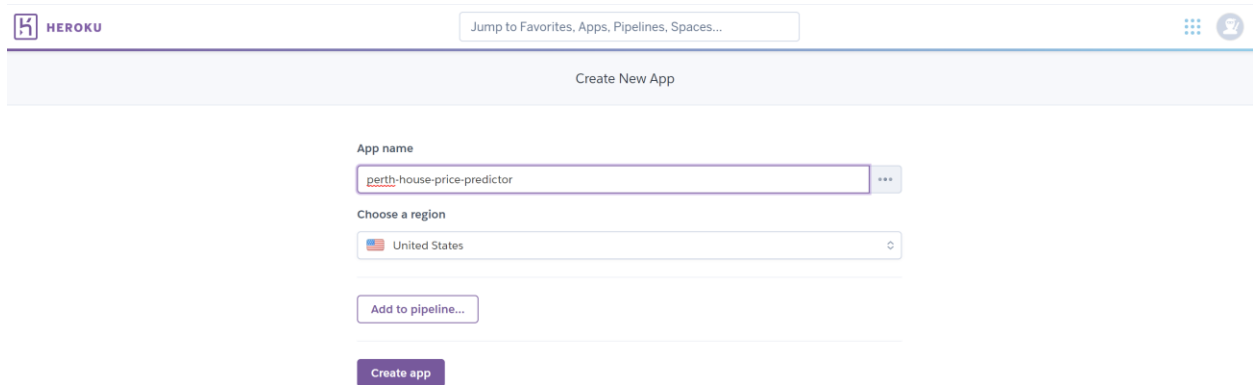
**Step 1.** Use the same program as used during the Flask deployment. However, the directory should include additional files, as follows:

 rainbow31499	Update requirements.txt	8cc87cf 21 hours ago	 3 commits
 static	Add files via upload		2 days ago
 templates	Add files via upload		2 days ago
 LICENSE	Add files via upload		2 days ago
 Procfile	Add files via upload		2 days ago
 README.md	Add files via upload		2 days ago
 all_perth_310121.csv	Add files via upload		2 days ago
 app.py	Add files via upload		2 days ago
 model.pickle	Add files via upload		2 days ago
 model.py	Add files via upload		2 days ago
 requirements.txt	Update requirements.txt		21 hours ago

Note that the requirements.txt file is modified and reads:

```
Flask>=1.1.1
gunicorn>=19.9.0
itsdangerous>=1.1.0
Jinja2>=2.10.1
MarkupSafe>=1.1.1
Werkzeug>=0.15.5
numpy>=1.9.2
scipy>=0.15.1
scikit-learn>=0.18
matplotlib>=1.4.3
pandas>=0.19
```

**Step 2.** Create a new app using Heroku (New -> Create new app). We choose the name perth-house-price-predictor for this app



HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Create New App

App name

perth-house-price-predictor

Choose a region

United States

Add to pipeline...

Create app

**Step 3.** Choose the buildpack through Settings -> Buildpacks -> Add buildpack and select Python

```
1 import numpy as np
2 from flask import Flask, request, render_template
3 import pickle
4
5 app = Flask(__name__)
6 model = pickle.load(open('model.pickle', 'rb'))
7
8 @app.route('/')
9 def home():
10     return render_template('index.html')
11
12 @app.route('/predict', methods=['POST'])
13 def predict():
14     '''
15     For rendering results on HTML GUI
16     '''
17     int_features = [float(x) for x in request.form.values()]
18     final_features = [np.array(int_features)]
19     prediction = model.predict(final_features)
20
21     output = round(prediction[0], 2)
22
23     return render_template('index.html', prediction_text='House price should be $ {}'.format(output))
24
25 if __name__ == "__main__":
26     app.run(debug=True)
```

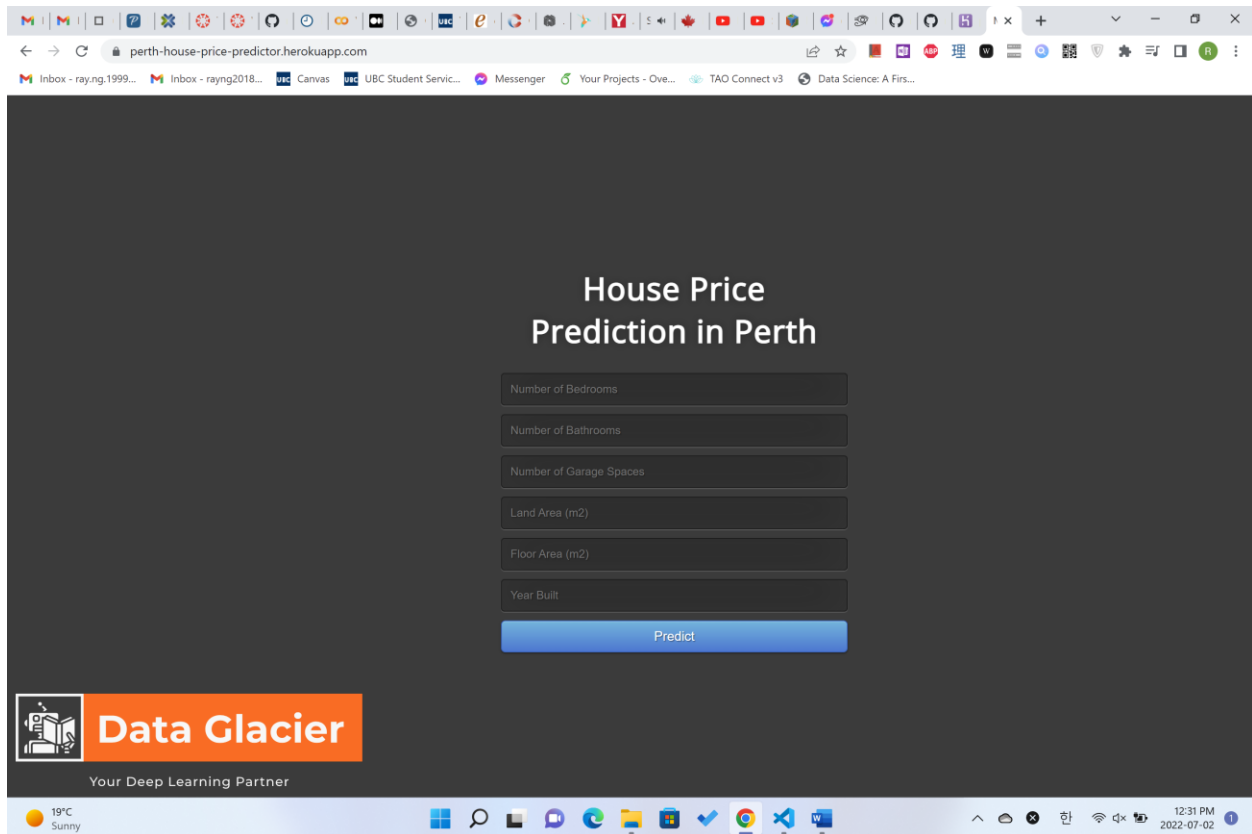
**Step 4.** Deploy the app in Heroku by going to Deploy -> Deployment method -> Select GitHub, and add the repository name, then click **Search** and **Connect**

The screenshot shows the Heroku Deploy interface for the application 'perth-house-price-predictor'. The top navigation bar includes 'Overview', 'Resources', 'Deploy' (selected), 'Metrics', 'Activity', 'Access', and 'Settings'. Below the navigation bar, there are two main sections. The first section, 'Add this app to a pipeline', offers options to create a new pipeline or add the app to an existing one. The second section, 'Add this app to a stage in a pipeline to enable additional features', provides information about connecting pipelines to GitHub for review apps. Below these sections is a 'Deployment method' section with three options: 'Heroku Git' (Use Heroku CLI), 'GitHub' (Connect to GitHub), and 'Container Registry' (Use Heroku CLI). The 'Connect to GitHub' section is active, showing a search for a repository to connect to. The search results show 'rainbow31499' and 'lisum-10-week-4-5'. A 'Connect' button is visible at the bottom right of the search results.

**Step 5.** Click **Deploy Branch** under Manual deploy to deploy the app to Heroku. Then a console message such as below should appear

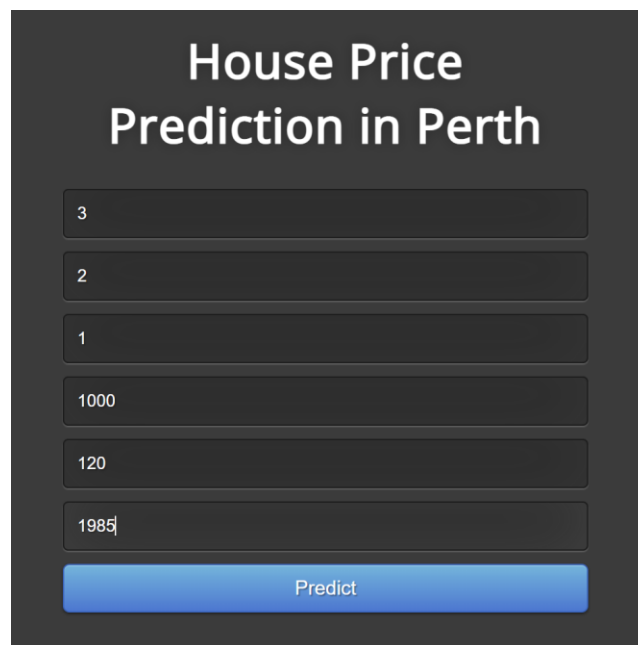
The screenshot shows the Heroku Manual deploy interface. The 'Manual deploy' section is active, showing the option to 'Deploy the current state of a branch to this app.' Below this, the 'Deploy a GitHub branch' section is visible, which includes a dropdown menu to 'Choose a branch to deploy' (set to 'main') and a 'Deploy Branch' button. Below the deployment button, the 'Receive code from GitHub' section shows a green checkmark. The 'Build main 8cc87cf3' section displays the output of the deployment process, including the following text: 'Compressing...', 'Done: 154.1M', 'Launching...', 'Released v3', 'https://perth-house-price-predictor.herokuapp.com/ deployed to Heroku', 'This app is using the Heroku-20 stack, however a newer stack is available.', 'To upgrade to Heroku-22, see: https://devcenter.heroku.com/articles/upgrading-to-the-latest-stack', and 'Autoscroll with output' (checked). A 'View build log' link is also present. The 'Release phase' section is visible at the bottom, showing 'Deploy to Heroku'.

**Step 6.** Click **View** once the deployment is complete. This should launch the app under the URL <https://perth-house-price-predictor.herokuapp.com/>



The screenshot shows a web browser window displaying the 'House Price Prediction in Perth' application. The interface has a dark grey background. At the top, the title 'House Price Prediction in Perth' is centered in white. Below the title, there are six input fields stacked vertically, each with a light grey border and placeholder text: 'Number of Bedrooms', 'Number of Bathrooms', 'Number of Garage Spaces', 'Land Area (m2)', 'Floor Area (m2)', and 'Year Built'. A blue 'Predict' button is located below these fields. In the bottom left corner, there is a logo for 'Data Glacier' with the tagline 'Your Deep Learning Partner'. The browser's address bar shows the URL 'perth-house-price-predictor.herokuapp.com'. The Windows taskbar at the bottom indicates the system time is 12:31 PM on 2022-07-02, and the weather is 19°C Sunny.

**Step 7.** Add variables in each field, then click predict to get a predicted price for a house of the given characteristics. As an example, the following variables give a prediction of \$552991.32



This image is a close-up of the 'House Price Prediction in Perth' application interface. The title 'House Price Prediction in Perth' is centered at the top. Below the title, the six input fields are filled with the following example values: '3' for Number of Bedrooms, '2' for Number of Bathrooms, '1' for Number of Garage Spaces, '1000' for Land Area (m2), '120' for Floor Area (m2), and '1985' for Year Built. A blue 'Predict' button is positioned at the bottom of the form.