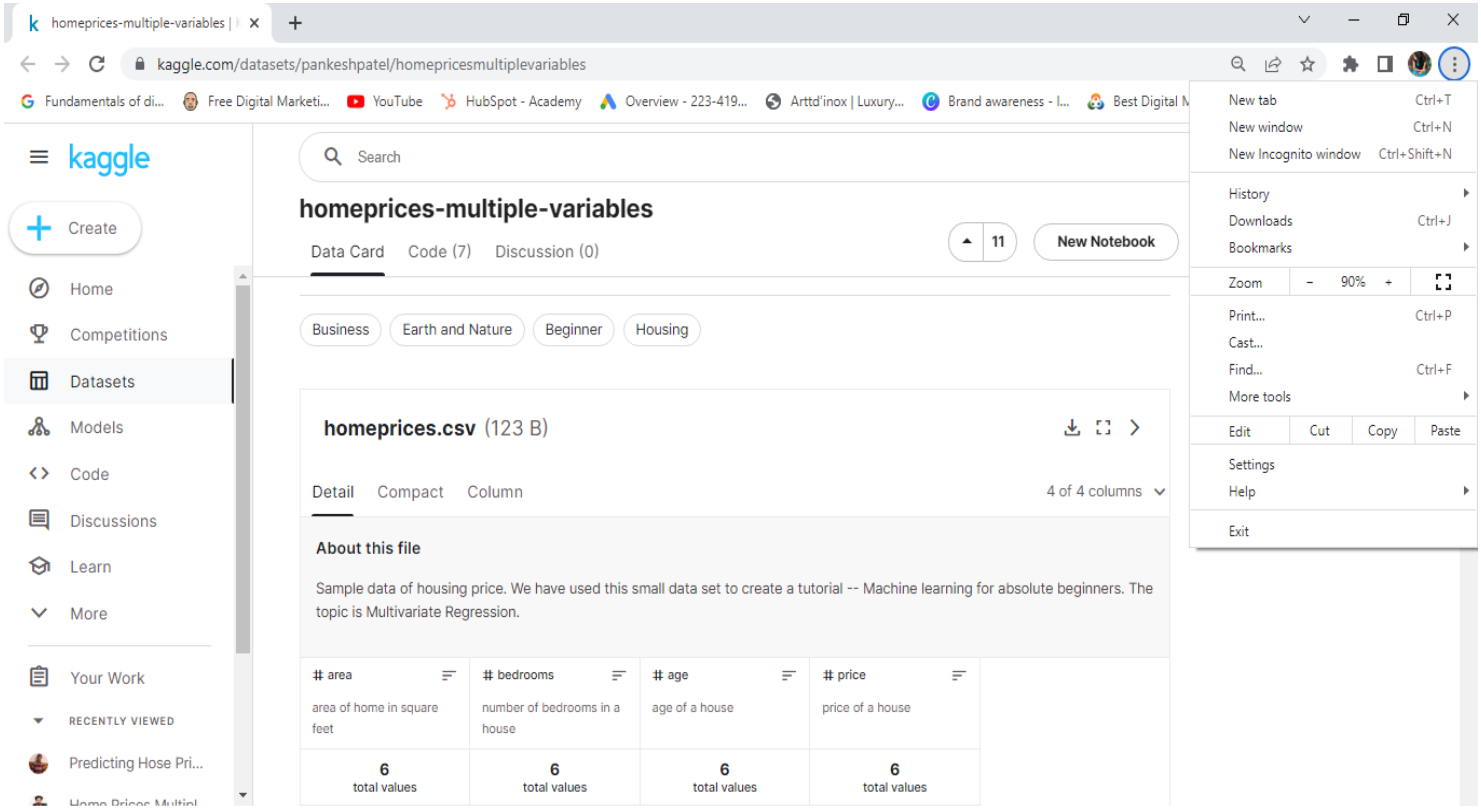
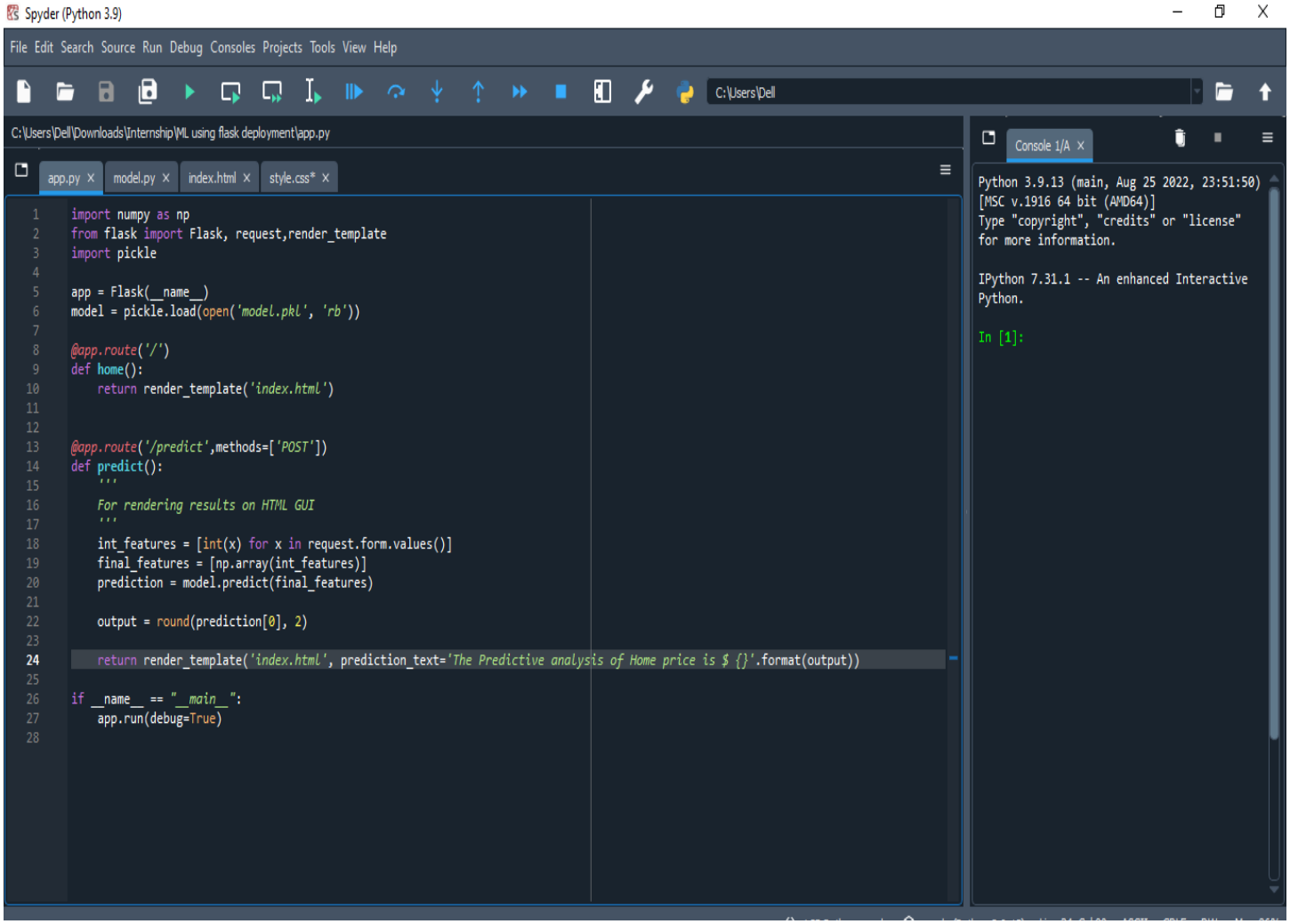
Name: B. Harika
Internship Batch code: LISUM19
Submitted date: 2nd April 2023
Submitted to: Data Glacier
Project Title: Flask deployment on Render Cloud (Predictive analysis on Home Prices)
Data storage location:
https://github.com/HarikaReddyB/Ml_on_Cloud_and_API_deployment

Downlaoding the dataset by Kaggle datasets:

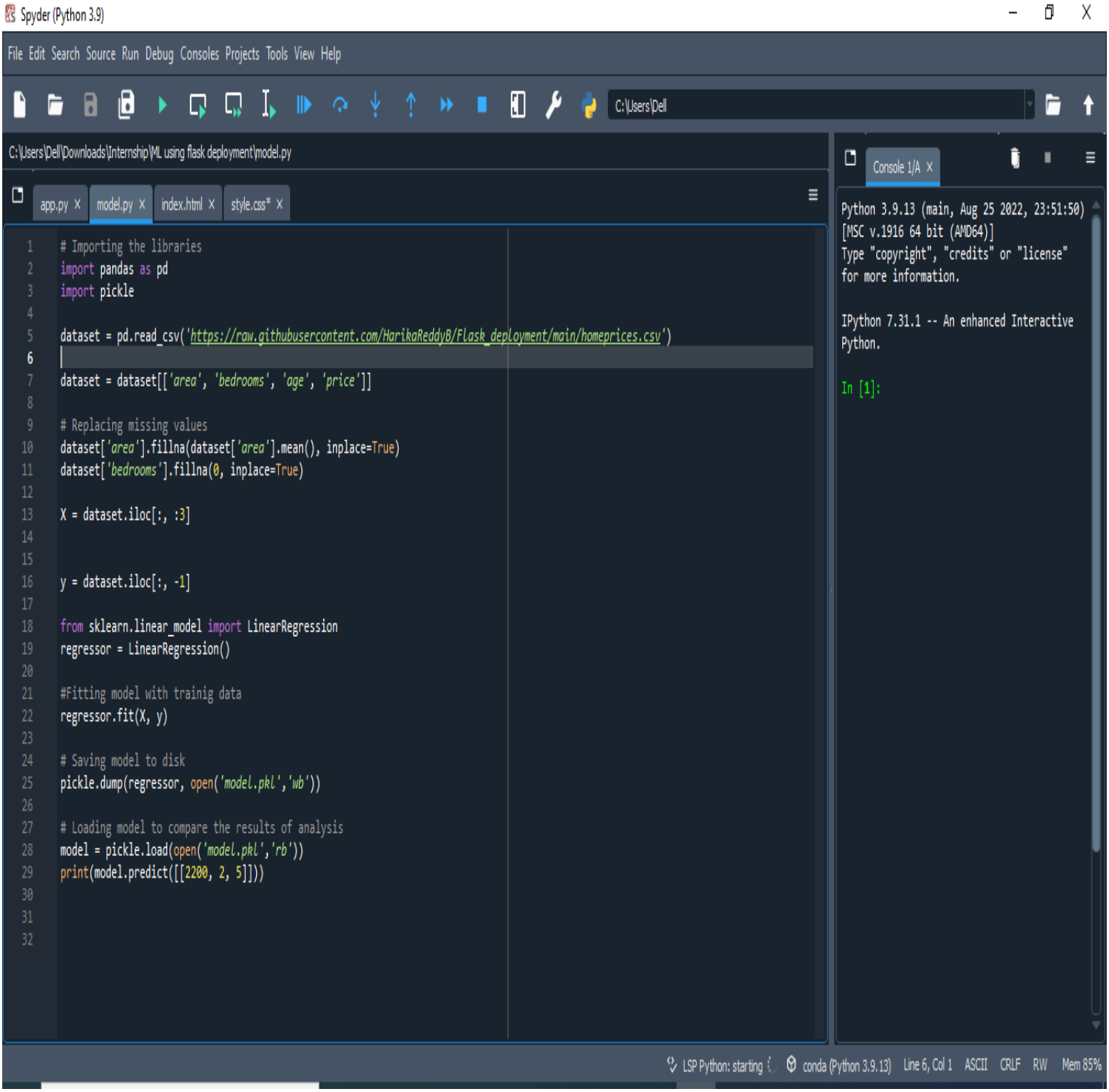


app.py for flask deployment

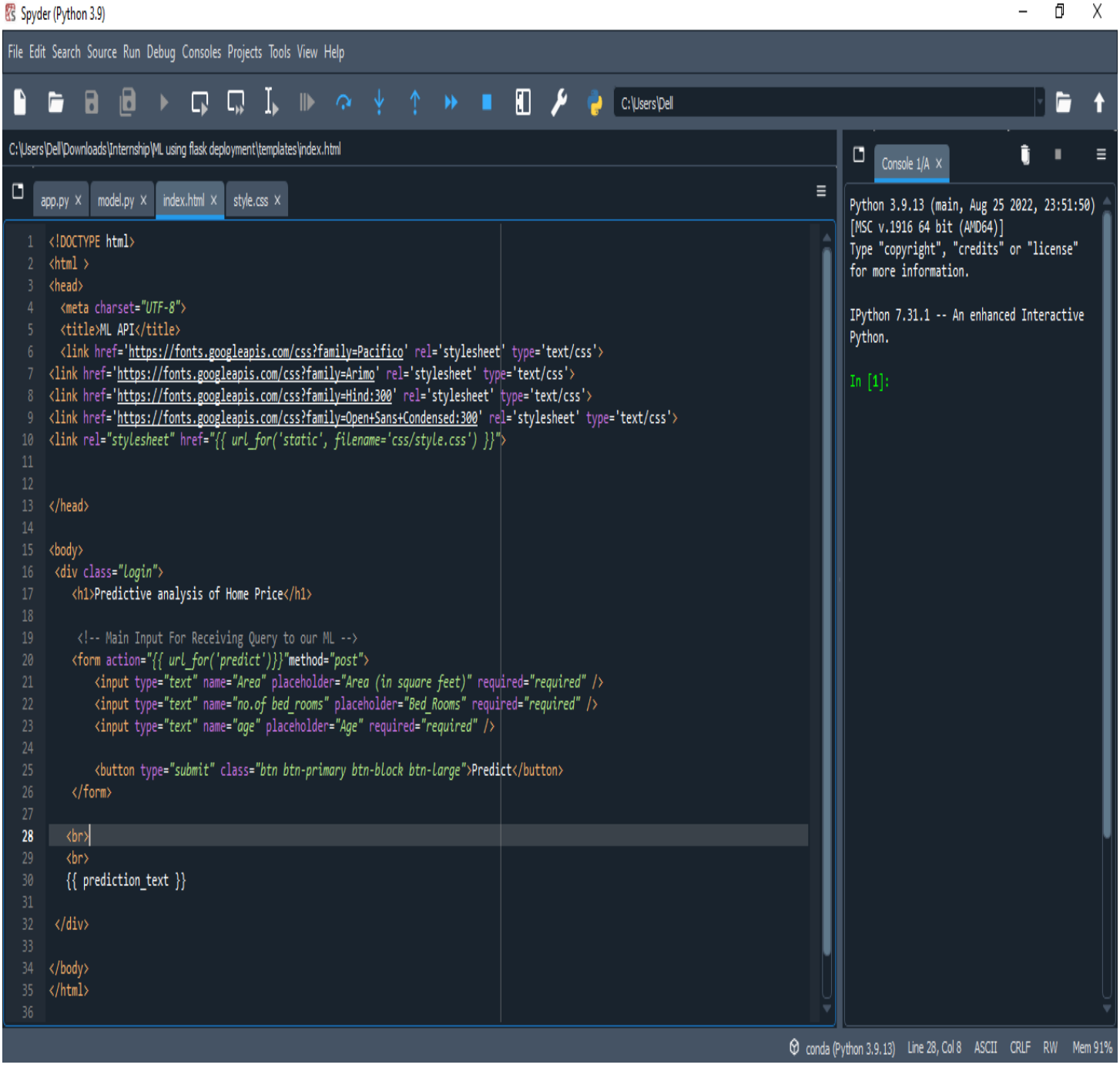



```python
import numpy as np
from flask import Flask, request,render_template
import pickle

app = Flask(__name__)
model = pickle.load(open('model.pkl', 'rb'))

@app.route('/')
def home():
    return render_template('index.html')


@app.route('/predict',methods=['POST'])
def predict():
    '''
    For rendering results on HTML GUI
    '''
    int_features = [int(x) for x in request.form.values()]
    final_features = [np.array(int_features)]
    prediction = model.predict(final_features)

    output = round(prediction[0], 2)

    return render_template('index.html', prediction_text='The Predictive analysis of Home price is $ {}'.format(output))

if __name__ == "__main__":
    app.run(debug=True)
```

Model.py

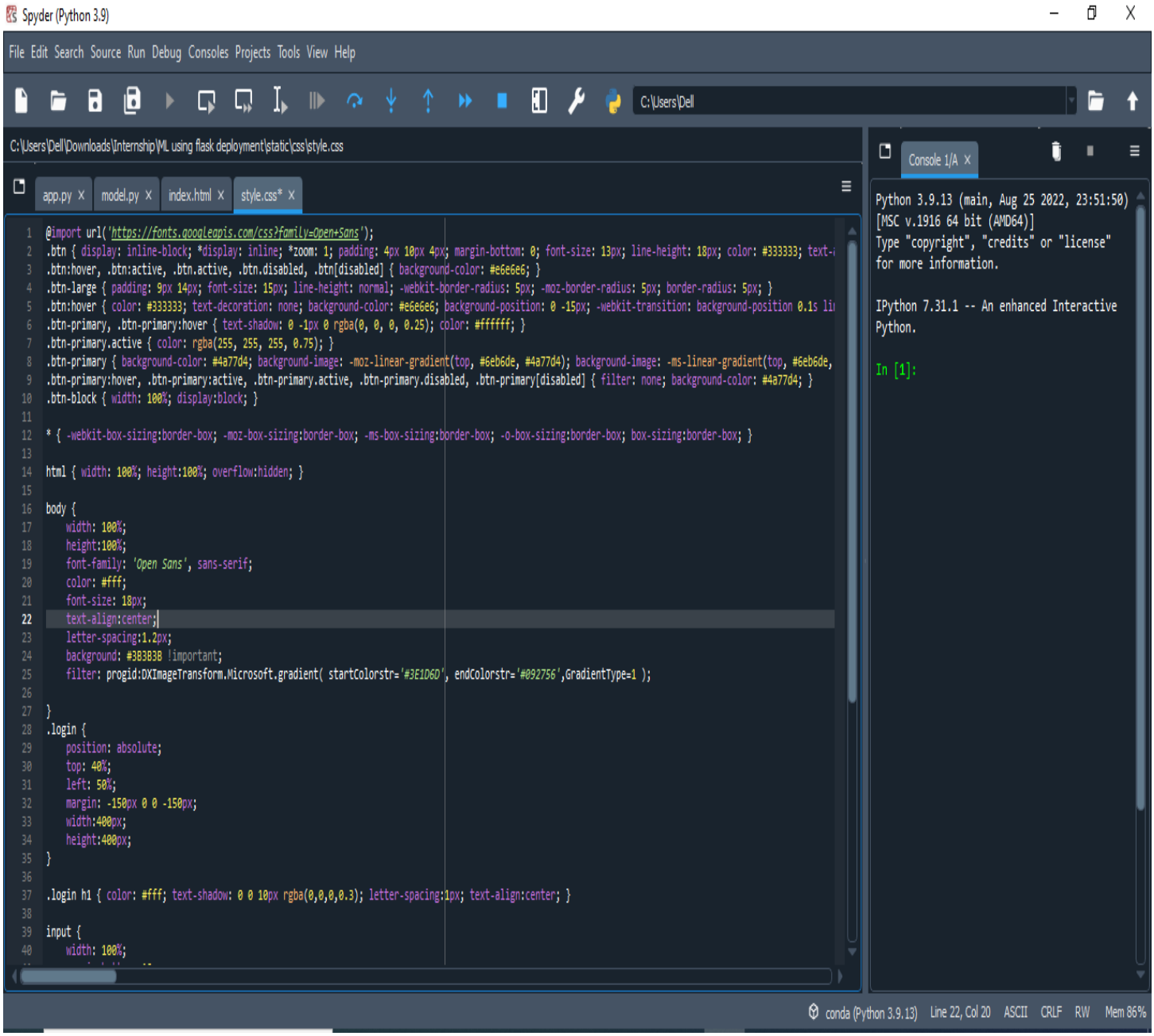

Spyder (Python 3.9)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\Dell
C:\Users\Dell\Downloads\Internship\ML using flask deployment\model.py
app.py
model.py
index.html
style.css*
# Importing the libraries
import pandas as pd
import pickle
dataset = pd.read_csv('https://raw.githubusercontent.com/HarikaReddyB/Flask_deployment/main/homeprices.csv')
dataset = dataset[['area', 'bedrooms', 'age', 'price']]
# Replacing missing values
dataset['area'].fillna(dataset['area'].mean(), inplace=True)
dataset['bedrooms'].fillna(0, inplace=True)
X = dataset.iloc[:, :3]
y = dataset.iloc[:, -1]
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
#Fitting model with trainig data
regressor.fit(X, y)
# Saving model to disk
pickle.dump(regressor, open('model.pkl','wb'))
# Loading model to compare the results of analysis
model = pickle.load(open('model.pkl','rb'))
print(model.predict([[2200, 2, 5]]))
Console 1/A
Python 3.9.13 (main, Aug 25 2022, 23:51:50)
[MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license"
for more information.
IPython 7.31.1 -- An enhanced Interactive
Python.
In [1]:
LSP Python: starting
conda (Python 3.9.13)
Line 6, Col 1
ASCII
CRLF
RW
Mem 85%

Index.html

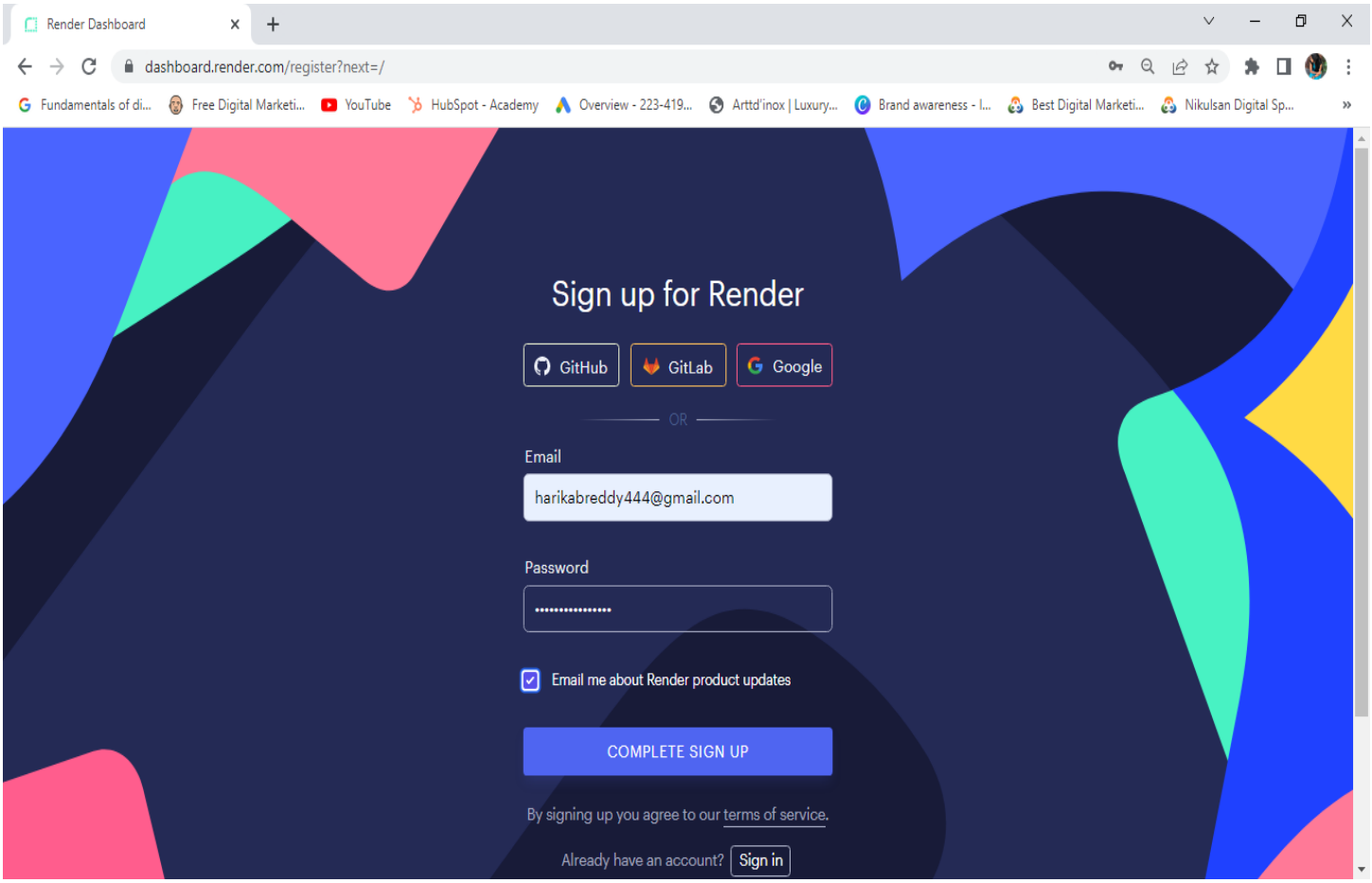



```
<!DOCTYPE html>
<html >
<head>
  <meta charset="UTF-8">
  <title>ML API</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300' rel='stylesheet' type='text/css'>
<link rel="stylesheet" href="{{ url_for('static', filename='css/style.css') }}">


</head>

<body>
 <div class="login">
    <h1>Predictive analysis of Home Price</h1>

     <!-- Main Input For Receiving Query to our ML -->
    <form action="{{ url_for('predict')}}"method="post">
        <input type="text" name="Area" placeholder="Area (in square feet)" required="required" />
        <input type="text" name="no.of bed_rooms" placeholder="Bed_Rooms" required="required" />
        <input type="text" name="age" placeholder="Age" required="required" />

        <button type="submit" class="btn btn-primary btn-block btn-large">Predict</button>
    </form>

   <br>
   <br>
   {{ prediction_text }}

 </div>

</body>
</html>
```

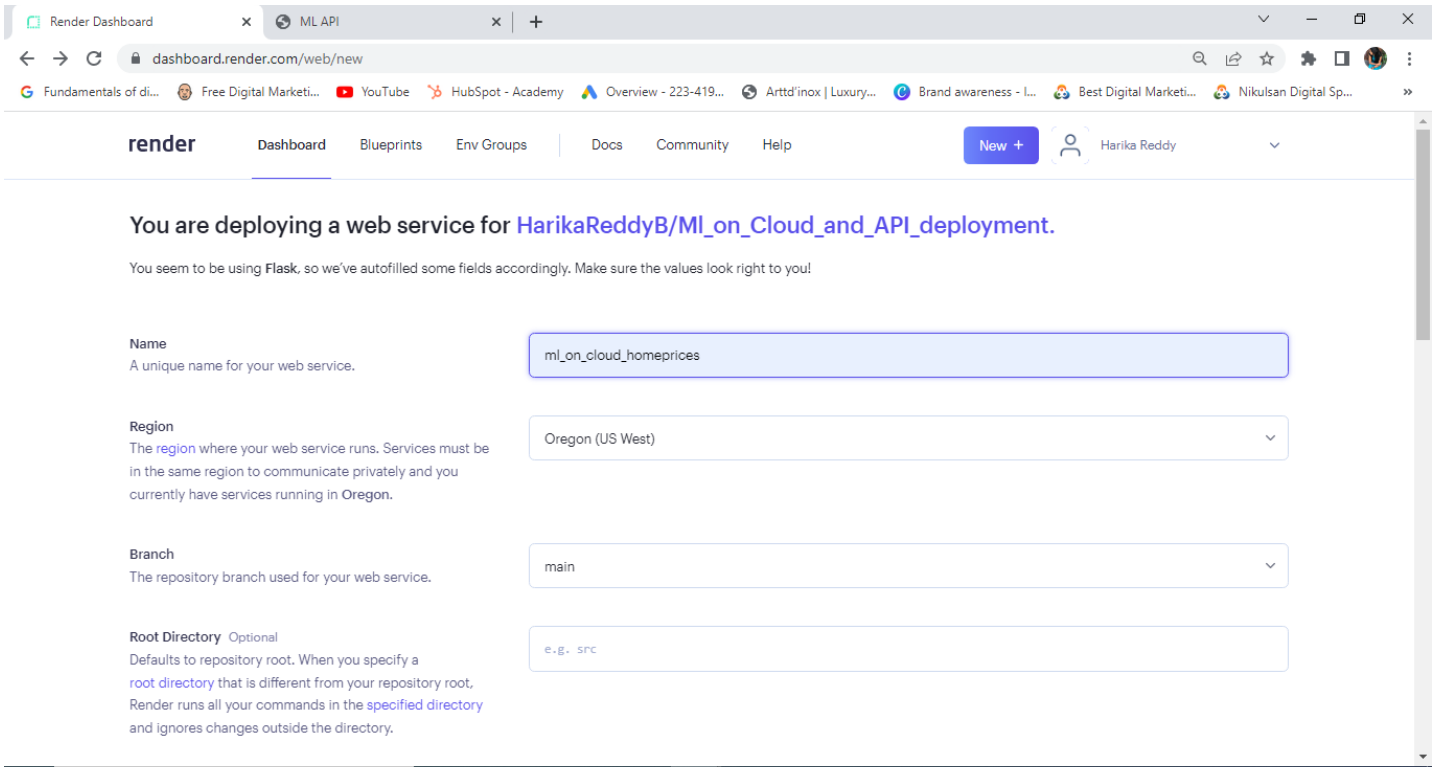
Style.css

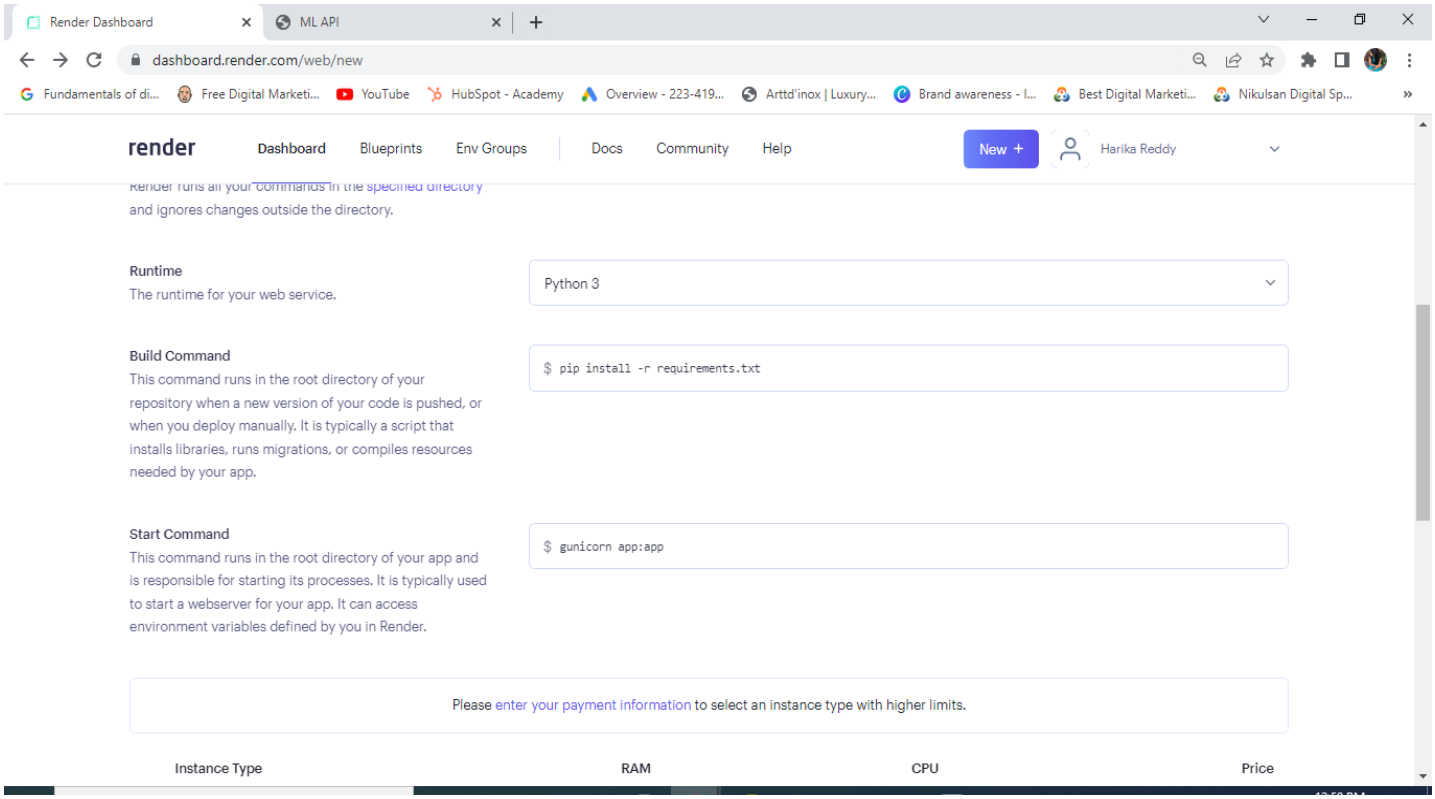

Spyder (Python 3.9)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\Dell
C:\Users\Dell\Downloads\Internship\ML using flask deployment\static\css\style.css
app.py
model.py
index.html
style.css*
@import url('https://fonts.googleapis.com/css?family=Open+Sans');
.btn { display: inline-block; *display: inline; *zoom: 1; padding: 4px 10px 4px; margin-bottom: 0; font-size: 13px; line-height: 18px; color: #333333; text-
.btn:hover, .btn:active, .btn.active, .btn.disabled, .btn[disabled] { background-color: #e6e6e6; }
.btn-large { padding: 9px 14px; font-size: 15px; line-height: normal; -webkit-border-radius: 5px; -moz-border-radius: 5px; border-radius: 5px; }
.btn:hover { color: #333333; text-decoration: none; background-color: #e6e6e6; background-position: 0 -15px; -webkit-transition: background-position 0.1s li
.btn-primary, .btn-primary:hover { text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25); color: #ffffff; }
.btn-primary.active { color: rgba(255, 255, 255, 0.75); }
.btn-primary { background-color: #4a77d4; background-image: -moz-linear-gradient(top, #6eb6de, #4a77d4); background-image: -ms-linear-gradient(top, #6eb6de,
.btn-primary:hover, .btn-primary:active, .btn-primary.active, .btn-primary.disabled, .btn-primary[disabled] { filter: none; background-color: #4a77d4; }
.btn-block { width: 100%; display:block; }
* { -webkit-box-sizing:border-box; -moz-box-sizing:border-box; -ms-box-sizing:border-box; -o-box-sizing:border-box; box-sizing:border-box; }
html { width: 100%; height:100%; overflow:hidden; }
body {
width: 100%;
height:100%;
font-family: 'Open Sans', sans-serif;
color: #fff;
font-size: 18px;
text-align:center;
letter-spacing:1.2px;
background: #3B3B3B !important;
filter: progid:DXImageTransform.Microsoft.gradient(startColorstr='#3E1D6D', endColorstr='#092756',GradientType=1);
}
.login {
position: absolute;
top: 40%;
left: 50%;
margin: -150px 0 0 -150px;
width:400px;
height:400px;
}
.login h1 { color: #fff; text-shadow: 0 0 10px rgba(0,0,0,0.3); letter-spacing:1px; text-align:center; }
input {
width: 100%;
Console 1/A
Python 3.9.13 (main, Aug 25 2022, 23:51:50)
[MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license"
for more information.
IPython 7.31.1 -- An enhanced Interactive
Python.
In [1]:
conda (Python 3.9.13)
Line 22, Col 20
ASCII
CRLF
RW
Mem 86%

Creating Account on Render.com

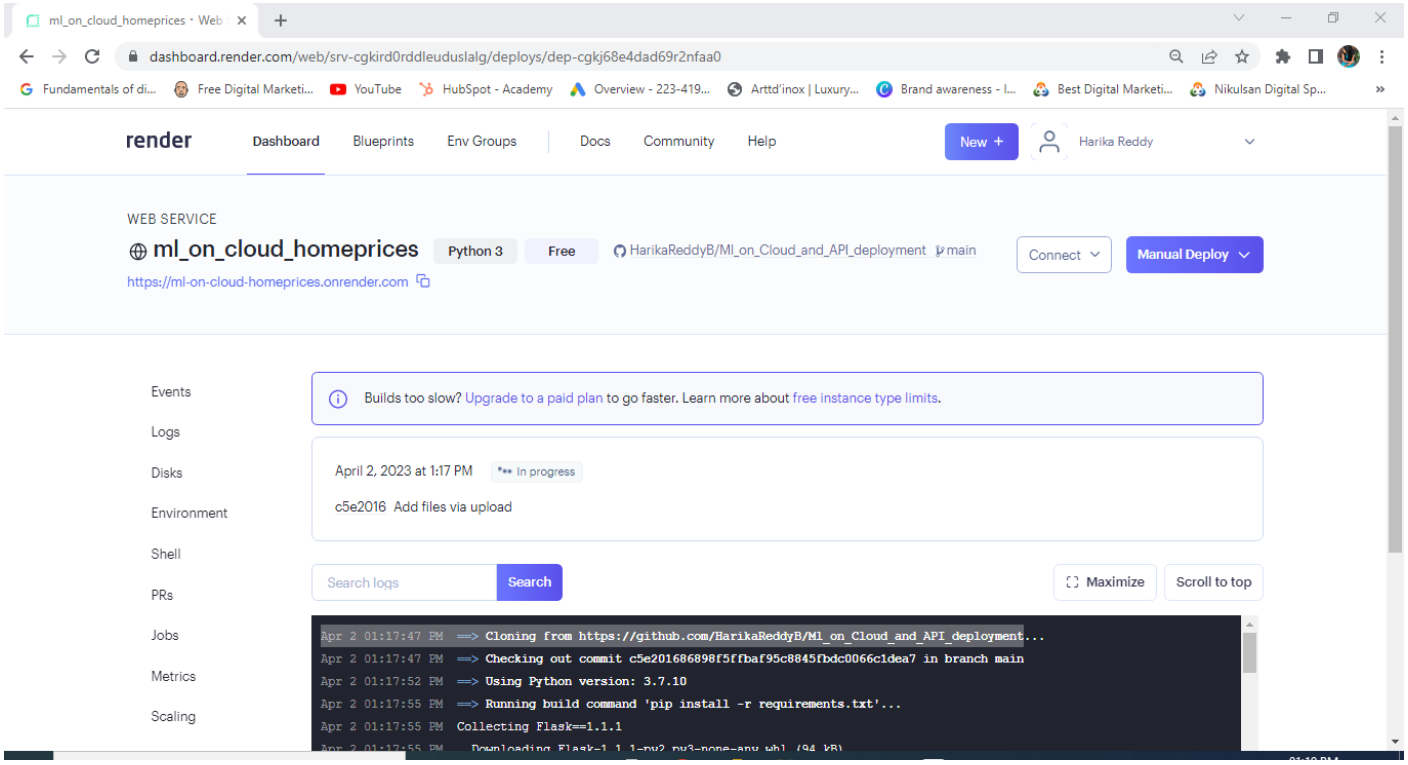


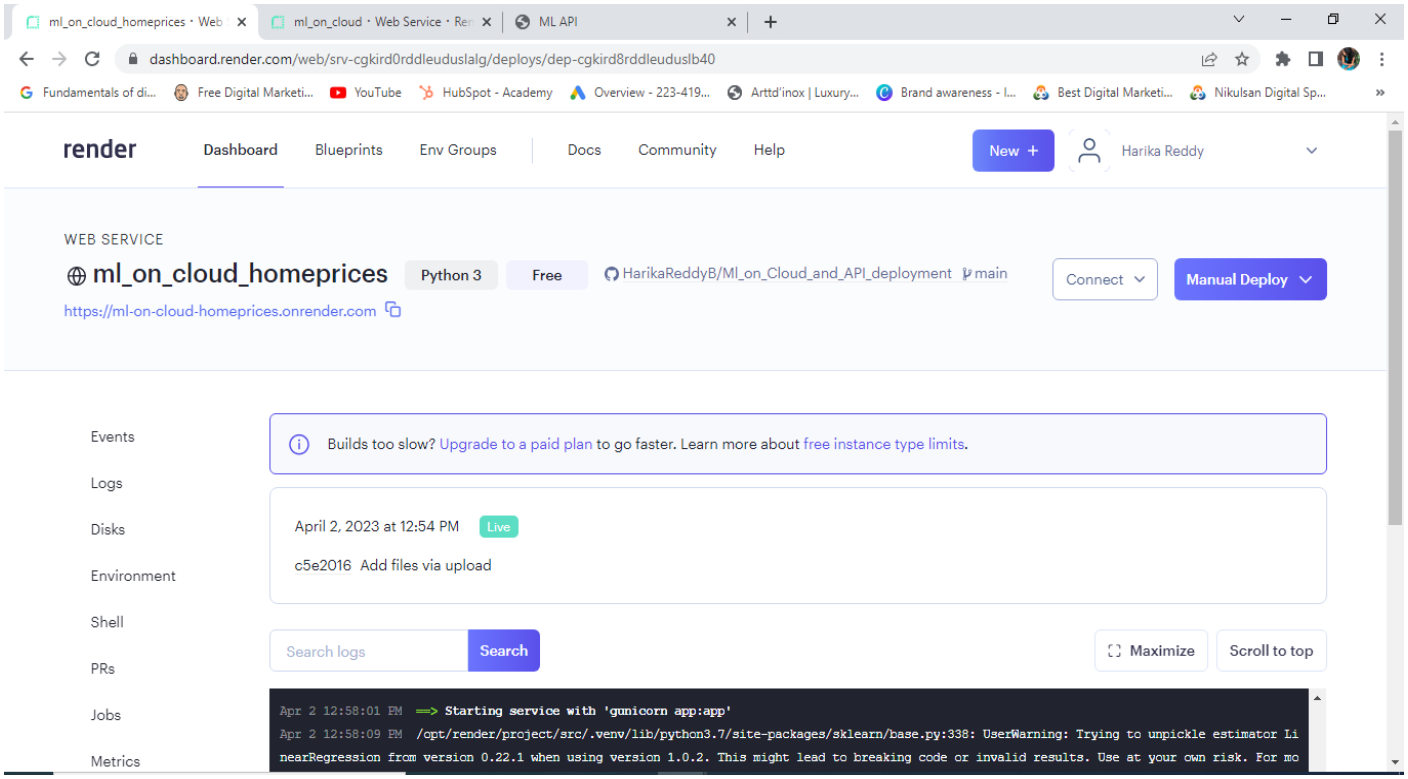
Deploying after connecting with github:





Deployment and after Site is live:





Predictive analysis of Home Price on Render Cloud:
https://ml-on-cloud-homeprices.onrender.com