Name: Elizabeth Banning

Batch Code: LISUM14

Submission Date: November 1, 2022

Steps to Deploying a Model with Heroku

1. After importing and cleaning data, create model in Python and save model:

```
In [6]:   # Make model
          import numpy as np
          from sklearn.linear_model import LinearRegression
          X = np.array(house[['Income', 'HouseAge', 'AveRooms', 'AveBedrms', 'Population', 'Occupancy']])
          y = np.array(house['HousePrice'])
          model = LinearRegression().fit(X,y)
```

```
In [ ]:   import pickle
          filename = "C:/Users/estal/OneDrive/Desktop/DataGlacier/Week4/Model.sav"
          pickle.dump(model, open(filename, 'wb'))
```

2. Create Flask app:

```
import numpy as np
import pickle
from flask import Flask, request, render_template
app = Flask(__name__)
model = pickle.load(open('model.sav', 'rb'))
@app.route('/')
def home():
    return render_template('index.html')
@app.route('/predict', methods = ['POST'])
def predict():
    features = [np.array([float(x) for x in request.form.values()])]
    prediction = model.predict(features)
    output = round(prediction[0], 2)
    return render_template('index.html', prediction_text = 'House price prediction: ${}'.format(output))
if __name__ == '__main__':
    app.run(port = 5000, debug = True)
```
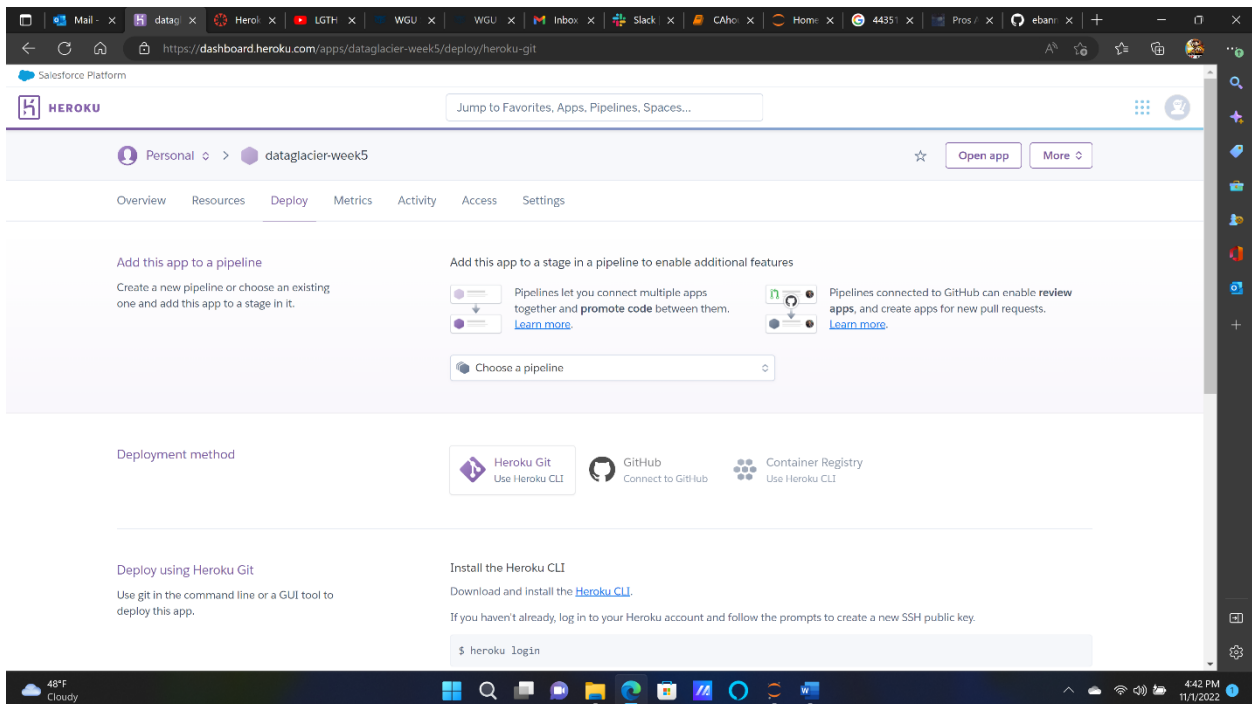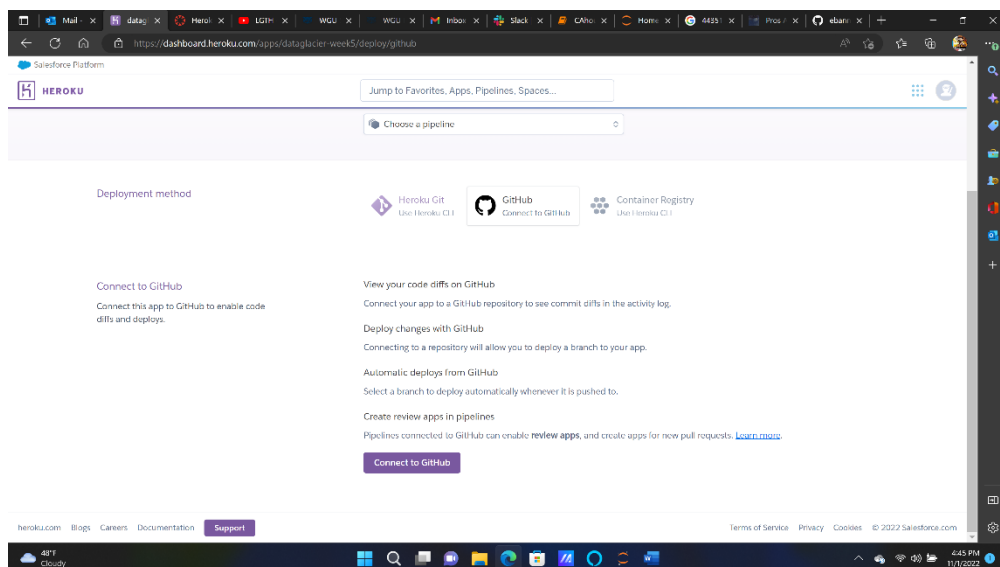
3. Upload files to GitHub repository and commit changes:
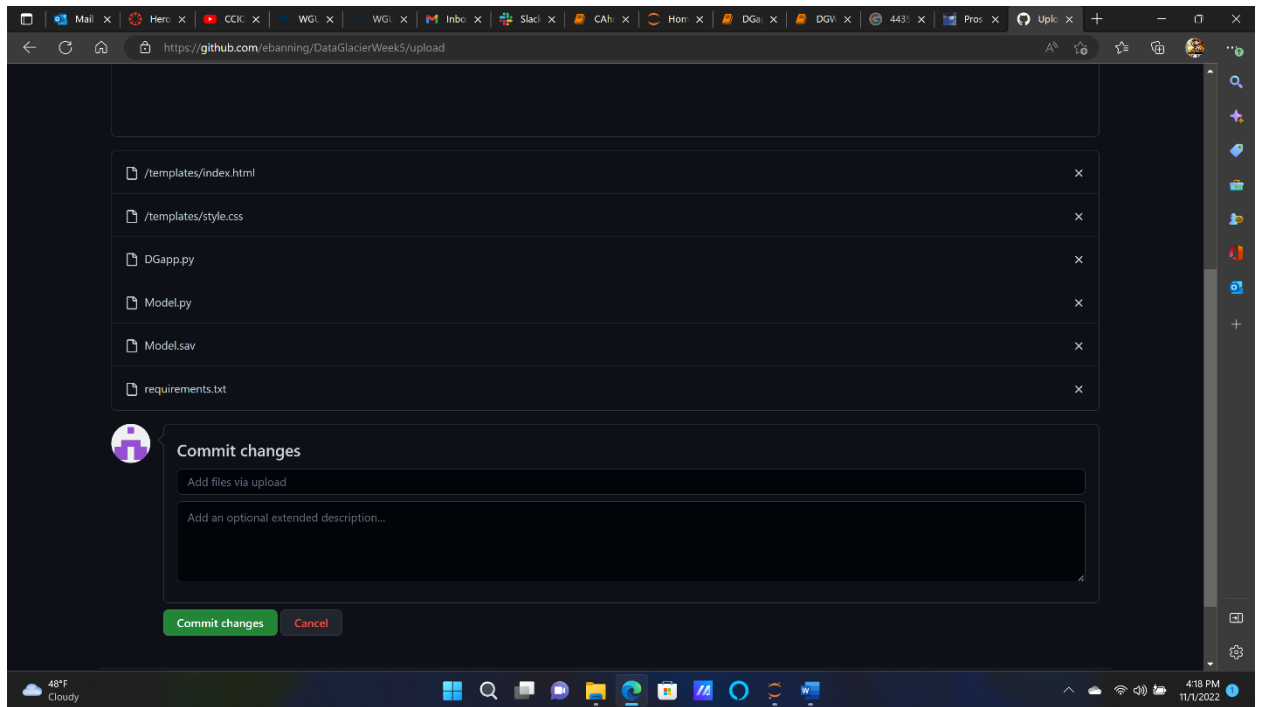
Files are now available in repository:
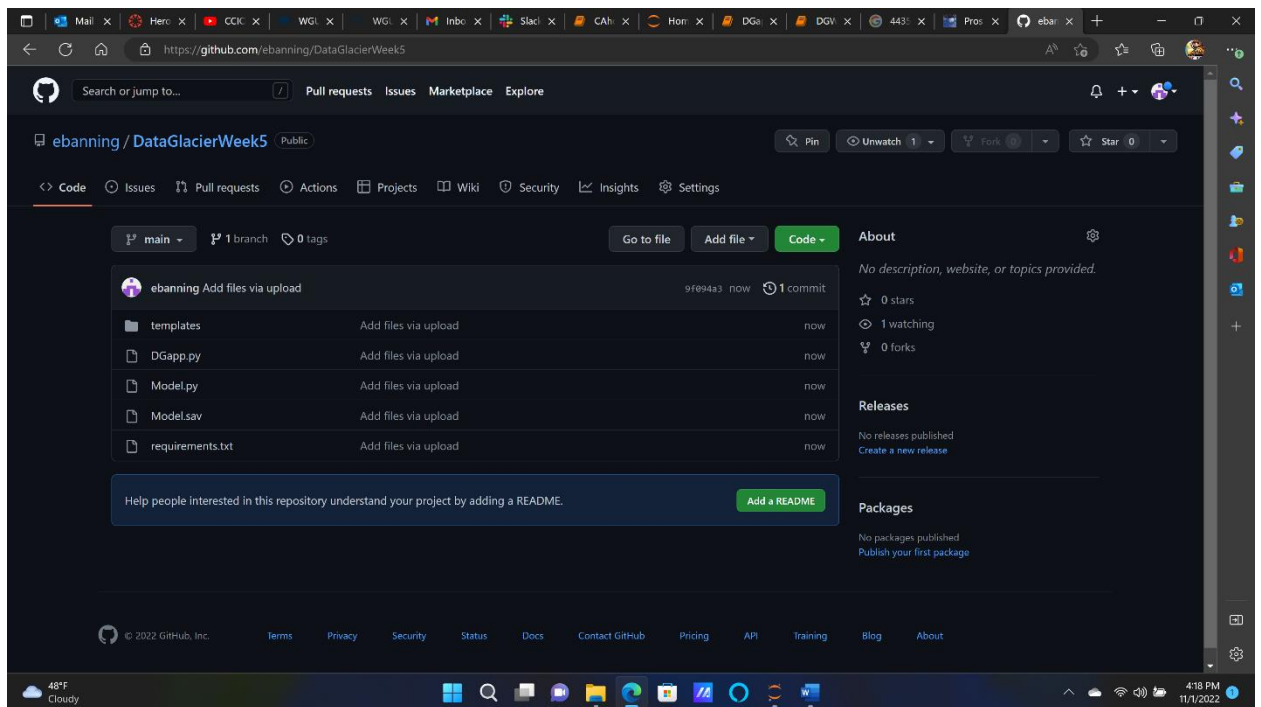
4. Link GitHub repository to Heroku account. Create new app:

Click to connect to GitHub:

Search for repository and click on connect:

5. Deploy app on Heroku. Click on the manual deploy branch button:
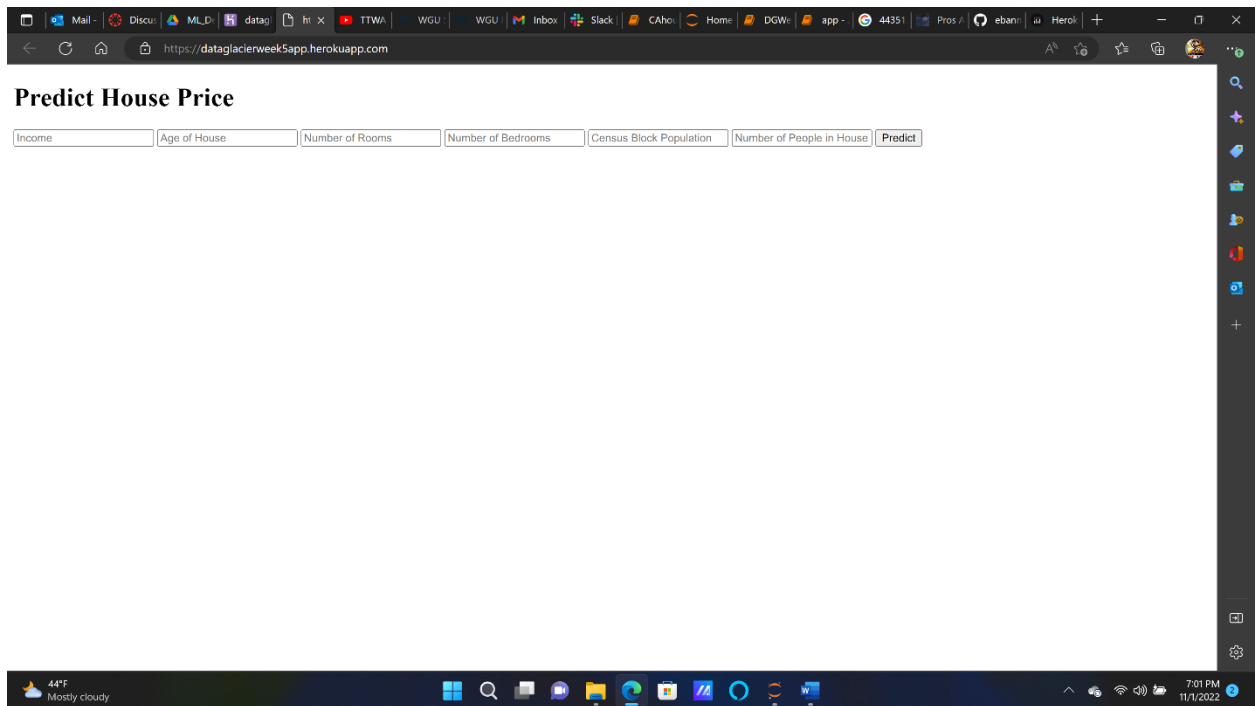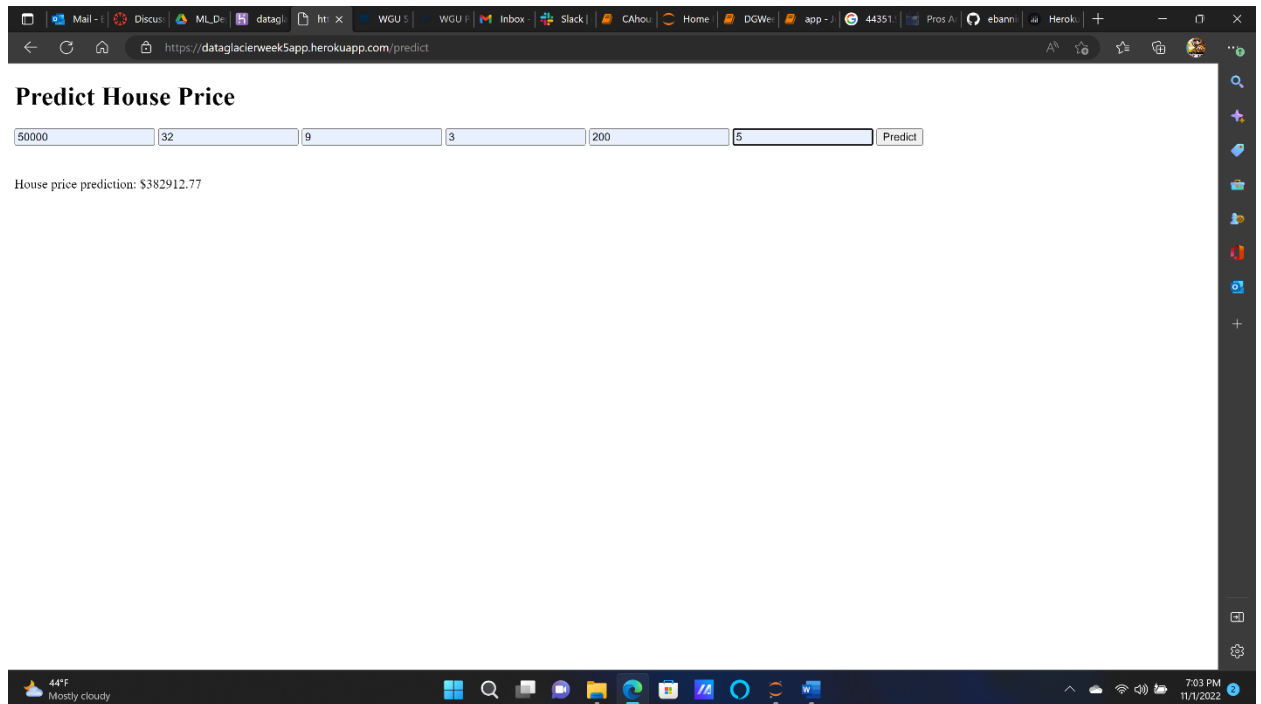
After necessary packages are installed, app is deployed. Click on view:
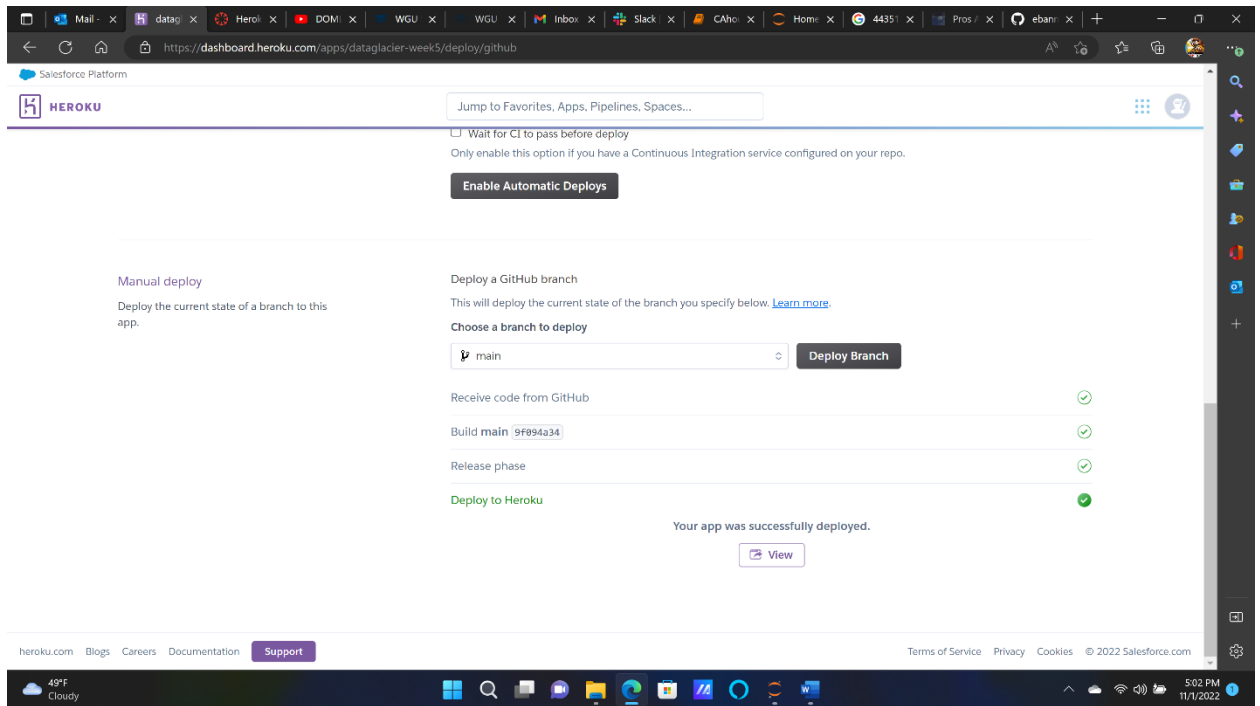
App is now available for use:

6. Test model:

Predict House Price

| 50000 | 32 | 9 | 3 | 200 | 5 | Predict |

House price prediction: $382912.77