Week 5: Deployment on Heroku

Name:RAKSHIT GROVER
Batch Code: LISUM35
Date: 2ND AUGUST 2024
Submitted to: Data Glacier

INTRODUCTION

In this project, we are going to deploy a machine learning model using the Heroku Framework. As a demonstration, our model helps to predict the salary of an employee based on certain features.

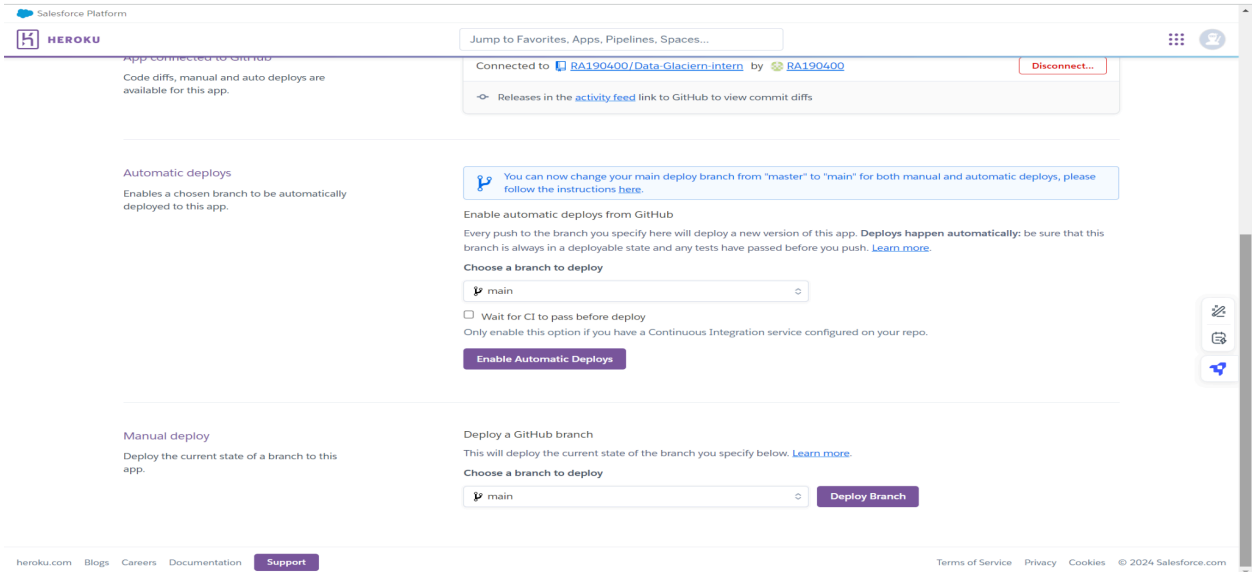
DATASET(hiring.csv)-

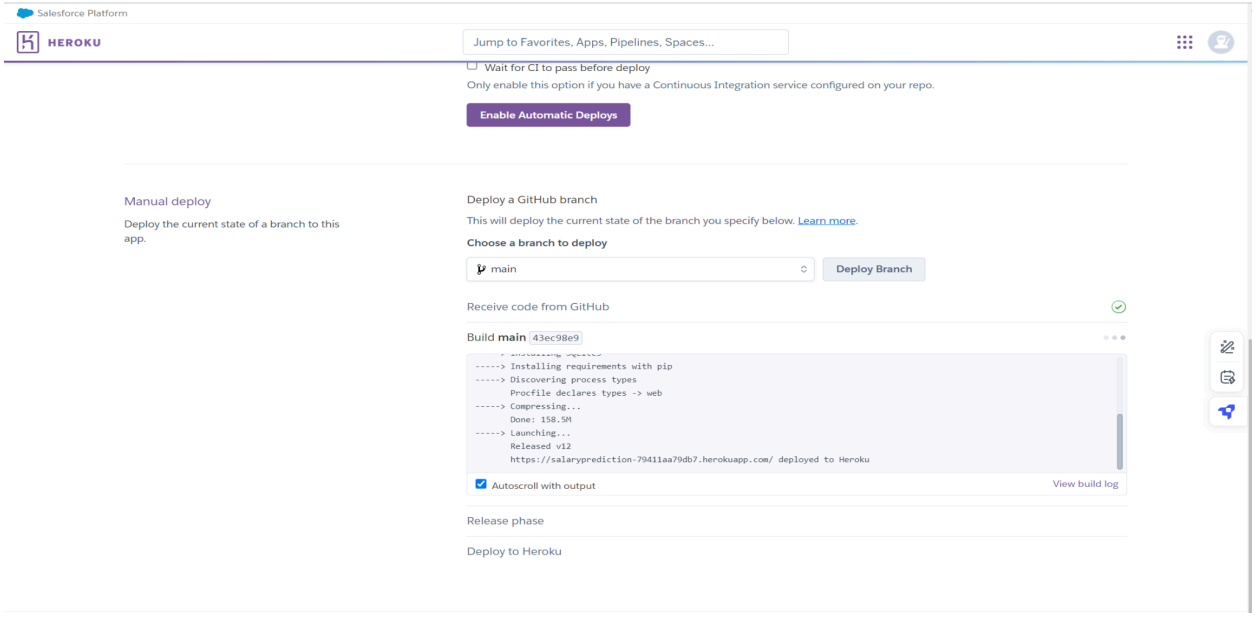
This dataset contains records of job candidates with columns for their experience, test score, interview score, and salary offered. Some values are missing or non-numeric , which may require cleaning for analysis. The dataset shows how different levels of experience, test, and interview scores correspond to various salary offers.

Model.py- First we are going to run the model.py file.The code file reads a dataset from a CSV file, processes it by filling missing values and converting textual experience data to integers. It then trains a Linear Regression model using the entire dataset and saves the trained model to the model.pkl file. Finally, it loads the saved model and makes a prediction for a given set of input values. This approach ensures the model is preserved for future use and demonstrates its ability to predict salary based on provided features.

App.py- The code loads a pre-trained model from a file named `model.pkl` using the `pickle` module. It has two main routes: the root route (`/`) that renders an `index.html` template to serve as the home page, and a `/predict` route that handles POST requests for making predictions. When a user submits the form on the home page, the `/predict` route extracts the form data, converts it into an appropriate format for the model, and makes a prediction. The predicted salary is then rounded to two decimal places and displayed back on the `index.html` page. The code includes error handling to ensure that invalid inputs or other exceptions are gracefully managed, providing appropriate feedback to the user. Finally, the app runs in debug mode when executed directly.

Deployment:


Salesforce Platform
HEROKU
Jump to Favorites, Apps, Pipelines, Spaces...
Code diffs, manual and auto deploys are available for this app.
Connected to RA190400/Data-Glaciern-intern by RA190400
Disconnect...
Releases in the activity feed link to GitHub to view commit diffs
Automatic deploys
Enables a chosen branch to be automatically deployed to this app.
You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions here.
Enable automatic deploys from GitHub
Every push to the branch you specify here will deploy a new version of this app. Deploys happen automatically: be sure that this branch is always in a deployable state and any tests have passed before you push. Learn more.
Choose a branch to deploy
main
Wait for CI to pass before deploy
Only enable this option if you have a Continuous Integration service configured on your repo.
Enable Automatic Deploys
Manual deploy
Deploy the current state of a branch to this app.
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
heroku.com Blogs Careers Documentation Support
Terms of Service Privacy Cookies © 2024 Salesforce.com


Salesforce Platform
HEROKU
Jump to Favorites, Apps, Pipelines, Spaces...
Wait for CI to pass before deploy
Only enable this option if you have a Continuous Integration service configured on your repo.
Enable Automatic Deploys
Manual deploy
Deploy the current state of a branch to this app.
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 43ec98e9
-----> Installing requirements with pip
-----> Discovering process types
Procfile declares types -> web
-----> Compressing...
Done: 158.5M
-----> Launching...
Released v12
https://salaryprediction-79411aa79db7.herokuapp.com/ deployed to Heroku
Autoscroll with output
View build log
Release phase
Deploy to Heroku


Predict Salary Analysis
Experience
Test Score
Interview Score
Predict