

Week 5 Cloud and API Deployment

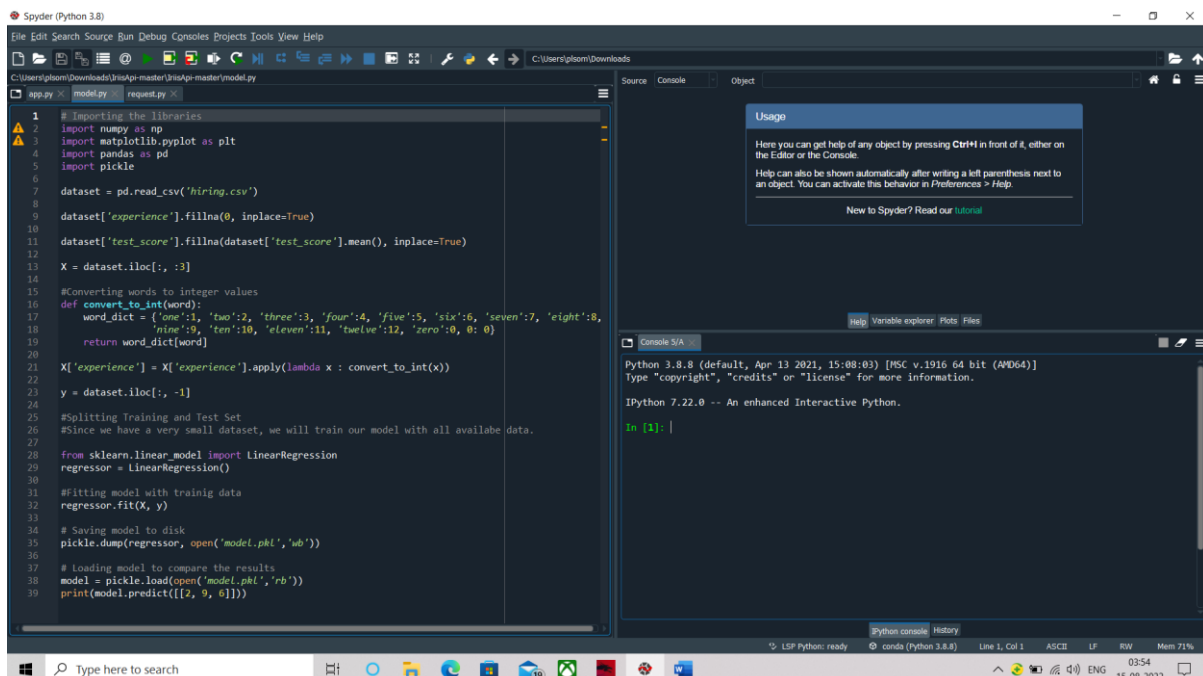
Name: Somasundaram Palaniappan

Batch code: LISUM10: 30

Submission Date: 14/8/2022

Submitted to: Data Glacier

URL: [ML API \(herokudemoapideployment.herokuapp.com\)](https://ml-api.herokuapp.com)



The screenshot shows the Spyder Python IDE interface. The main editor displays a Python script for data preprocessing and model training. The script includes imports for numpy, matplotlib, pandas, and pickle. It reads a CSV file named 'hiring.csv', fills missing values, and splits the data into features (X) and target values (y). A linear regression model is trained using sklearn's LinearRegression class. The model is saved as 'model.pkl' and loaded back to compare results. The console shows the IPython prompt and the output of the model's prediction.

```
1 # Importing the libraries
2 import numpy as np
3 import matplotlib.pyplot as plt
4 import pandas as pd
5 import pickle
6
7 dataset = pd.read_csv('hiring.csv')
8
9 dataset['experience'].fillna(0, inplace=True)
10
11 dataset['test_score'].fillna(dataset['test_score'].mean(), inplace=True)
12
13 X = dataset.iloc[:, :3]
14
15 # Converting words to integer values
16 def convert_to_int(word):
17     word_dict = {'one':1, 'two':2, 'three':3, 'four':4, 'five':5, 'six':6, 'seven':7, 'eight':8,
18                 'nine':9, 'ten':10, 'eleven':11, 'twelve':12, 'zero':0, 0: 0}
19     return word_dict[word]
20
21 X['experience'] = X['experience'].apply(lambda x : convert_to_int(x))
22
23 y = dataset.iloc[:, -1]
24
25 # Splitting Training and Test Set
26 # Since we have a very small dataset, we will train our model with all available data.
27
28 from sklearn.linear_model import LinearRegression
29 regressor = LinearRegression()
30
31 # Fitting model with training data
32 regressor.fit(X, y)
33
34 # Saving model to disk
35 pickle.dump(regressor, open('model.pkl', 'wb'))
36
37 # Loading model to compare the results
38 model = pickle.load(open('model.pkl', 'rb'))
39 print(model.predict([[2, 0, 0]]))
```

The console output shows the IPython prompt and the output of the model's prediction:

```
Python 3.8.8 (default, Apr 13 2021, 15:08:03) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.
IPython 7.22.0 -- An enhanced Interactive Python.
In [1]:
```

Week 5: Cloud and API dep... | google colabs - Search | Welcome To Collaboratory | herokudemoapideployment | ML API | SomSara/dummy

https://github.com/SomSara/dummy

Search or jump to... Pull requests Issues Marketplace Explore

SomSara / dummy (Public)

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main 1 branch 0 tags

Go to file Add file Code

File	Commit	Time
SomSara Create runtime.txt	4a86771	23 minutes ago 3 commits
templates	Add files via upload	25 minutes ago
LICENSE	Initial commit	26 minutes ago
Profile	Add files via upload	25 minutes ago
app.py	Add files via upload	25 minutes ago
model.pkl	Add files via upload	25 minutes ago
model.py	Add files via upload	25 minutes ago
request.py	Add files via upload	25 minutes ago
requirements.txt	Add files via upload	25 minutes ago
runtime.txt	Create runtime.txt	23 minutes ago

Help people interested in this repository understand your project by adding a README. Add a README

About

No description, website, or topics provided.

GPL-3.0 license

0 stars

1 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Environments 1

Week 5: Cloud and API dep... | google colabs - Search | Welcome To Collaboratory | herokudemoapideployment | ML API | SomSara/dummy

https://dashboard.heroku.com/apps/herokudemoapideployment/deploy/github

Salesforce Platform

HEROKU

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

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

Receive code from GitHub

Build main /4a867715

Release phase

Deploy to Heroku

Your app was successfully deployed.

View

Week 5: Cloud and API dep... x | google colabs - Search x | Welcome To Collaboratory - x | herokudemoapideployer... x | ML API x | SomSara/dummy x | + -

https://herokudemoapideployment.herokuapp.com

YouTube Gmail Google Maps UN Course Jobs Site https://secure.fourt... Tweet Sentiment Ex... Sign in Project Other favorites

Finding the Flower

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Predict
--------------	-------------	--------------	-------------	---------

Windows taskbar with search bar and system tray.

Week 5: Cloud and API dep... x | google colabs - Search x | Welcome To Collaboratory - x | herokudemoapideployer... x | ML API x | SomSara/dummy x | + -

https://herokudemoapideployment.herokuapp.com

YouTube Gmail Google Maps UN Course Jobs Site https://secure.fourt... Tweet Sentiment Ex... Sign in Project Other favorites

Finding the Flower

1.6	1	2	3	Predict
-----	---	---	---	---------

Windows taskbar with search bar and system tray.

