Manda Li LISUM20 04/28/2023 Data Glacier

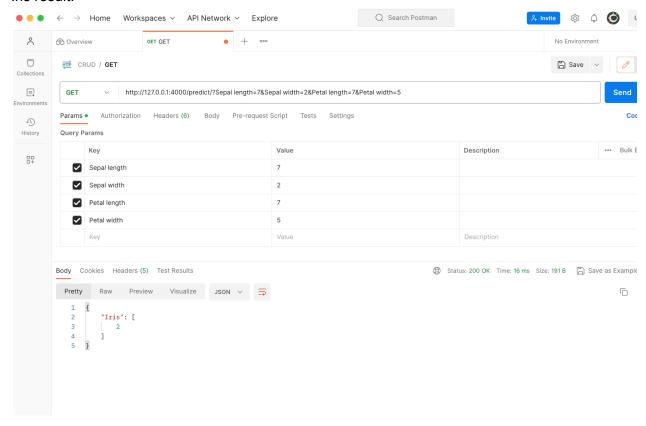
- 1. Select toy data
  - a. Iris dataset was selected as toy data. This dataset describes the features of iris including sepal length, sepal width, pedal length, pedal width, and the category of iris based on these features.
- 2. Save the model
  - a. The logistic model on sklearn was imported and trained on the iris dataset. The trained model was dumped by pickle and saved as iris model.pkl.

```
from sklearn import datasets
     import pickle
4
     iris = datasets.load_iris()
     X = iris.data
     y = iris.target
     from sklearn.linear_model import LogisticRegression
     from sklearn.model_selection import train_test_split
10
     import joblib
11
12
     X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2
13
14
     model = LogisticRegression()
15
     model.fit(X_train, y_train)
16
17
     pickle.dump(model, open('iris_model.pkl','wb'))
18
19
```

## ≡ iris\_model.pkl

- 3. Deploy the model on flask
  - a. The model was deployed on flask. Running on local host 127.0.0.1:4000. The result prediction result was checked by Postman.

## Iris result:



## Reference:

Fisher, R. A. (1936). The use of multiple measurements in taxonomic problems. Annals of Eugenics, 7(2), 179-188.

Dua, D. and Graff, C. (2019). UCI Machine Learning Repository [http://archive.ics.uci.edu/ml]. Irvine, CA: University of California, School of Information and Computer Science. Pedregosa, F. et al. (2011). Scikit-learn: Machine Learning in Python. Journal of Machine Learning Research, 12, 2825-2830.