Title: Week 4 Assignment: Deployment on Flask

Name: Minseok Kim
Batch Code: LISUM28
Submission Date: 12/28/2023
Submitted To: Data Glacier

Introduction

This document provides a detailed report on the deployment of a machine learning model as a web application using Flask. The Iris dataset was utilized as a toy dataset for training the machine learning model, which was then saved and deployed.

1. Toy Data Selection

The Iris dataset was chosen due to its simplicity and widespread use for educational purposes in machine learning. The dataset includes various measurements of Iris flowers and is ideal for classification tasks.

2. Model Training and Saving

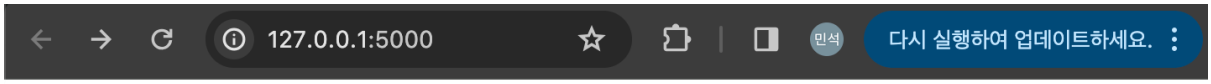
A logistic regression model was trained using the Iris dataset. After achieving satisfactory performance, the model was saved using Python's pickle module for future use in predictions.

3. Flask Web Application Deployment

The saved model was deployed in a Flask web application. The application was set up to receive input data through a web form and use the trained model to predict the Iris species.

4. PDF Report Creation

This report was compiled to include the steps of the deployment process, along with the relevant screenshots to illustrate the workflow.



Iris Species Predictor

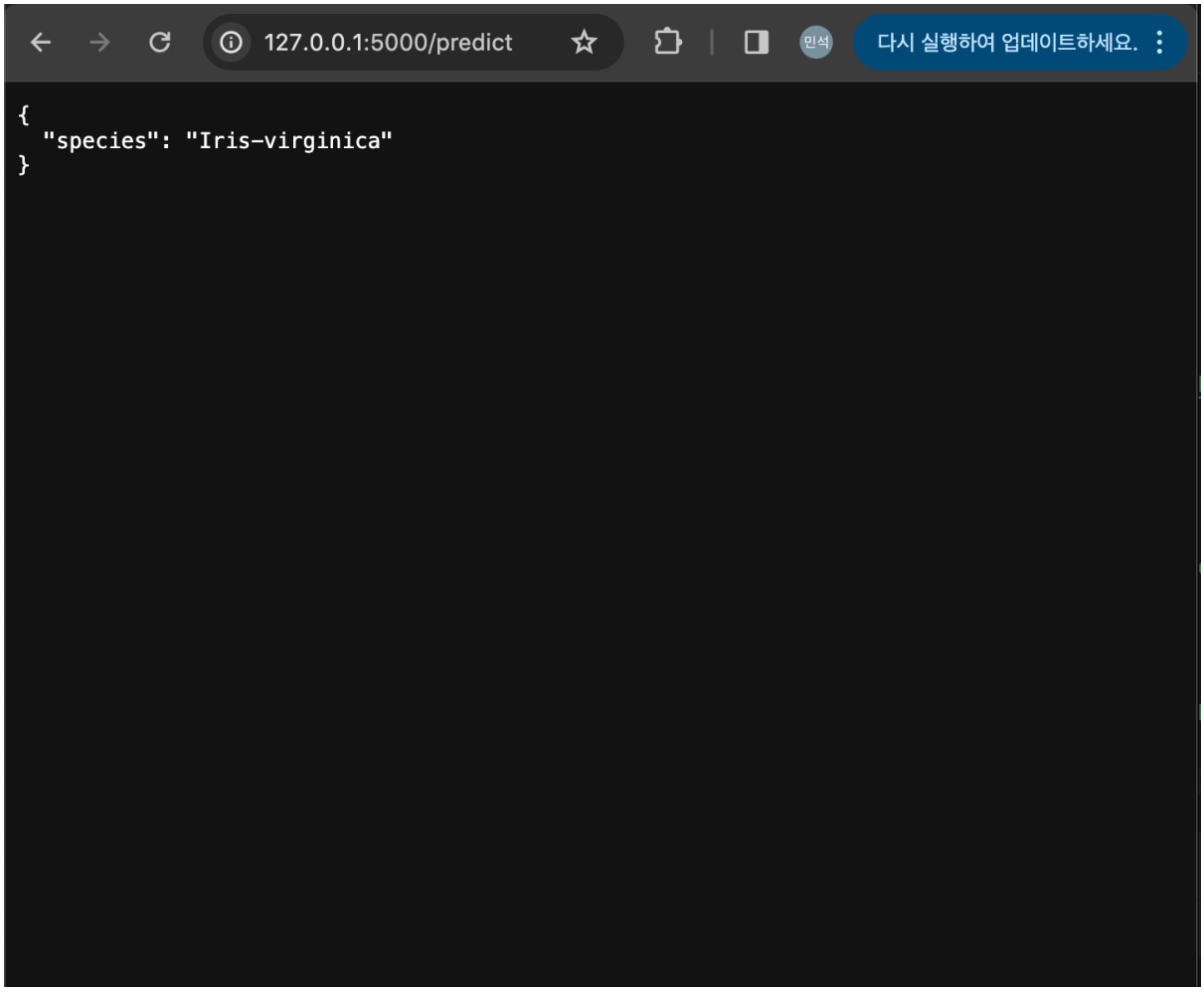
Sepal Length: 4.1

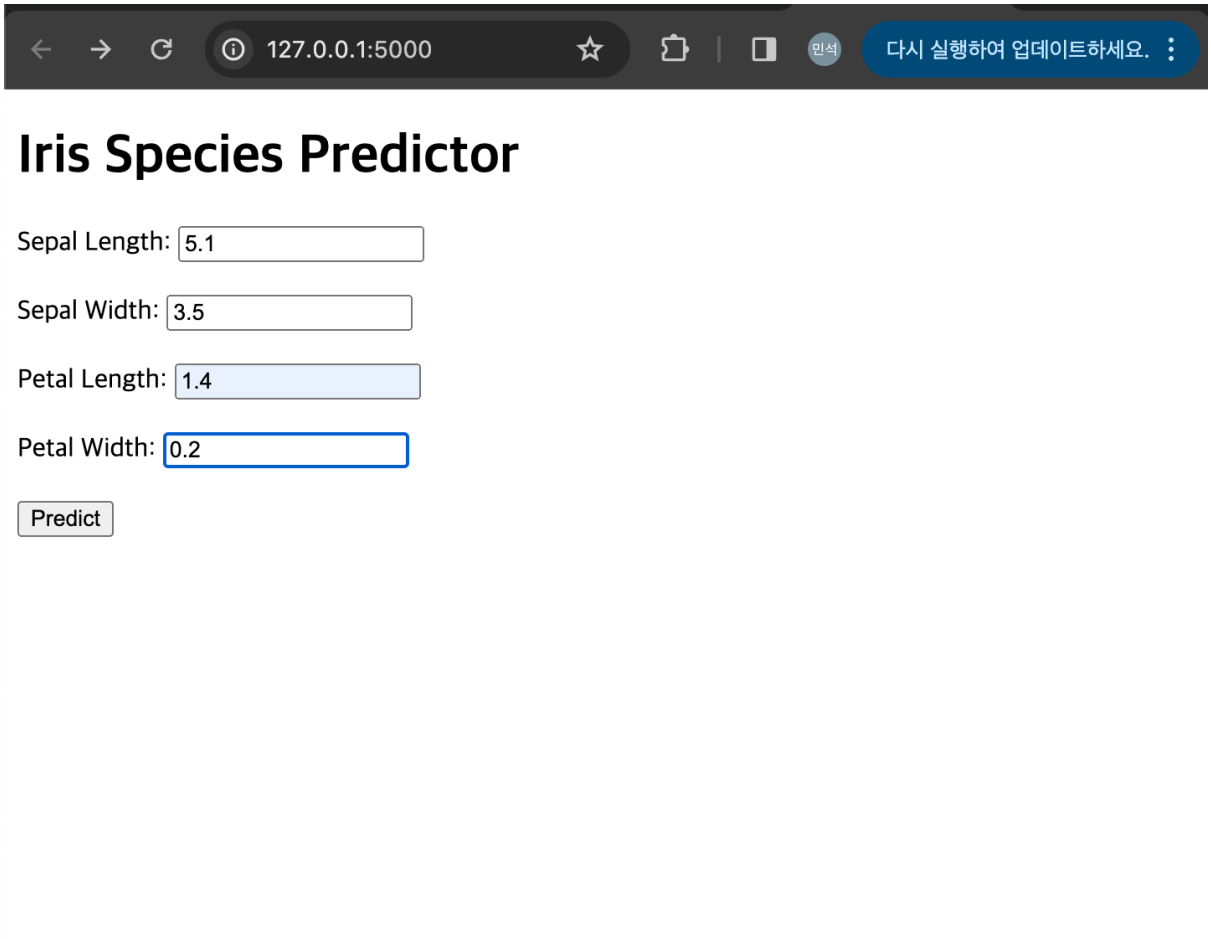
Sepal Width: 2

Petal Length: 3

Petal Width: 4

Predict


127.0.0.1:5000/predict
민석
다시 실행하여 업데이트하세요.
{
"species": "Iris-virginica"
}



Screenshots
Below are the screenshots captured during the deployment process:

Iris Species Predictor

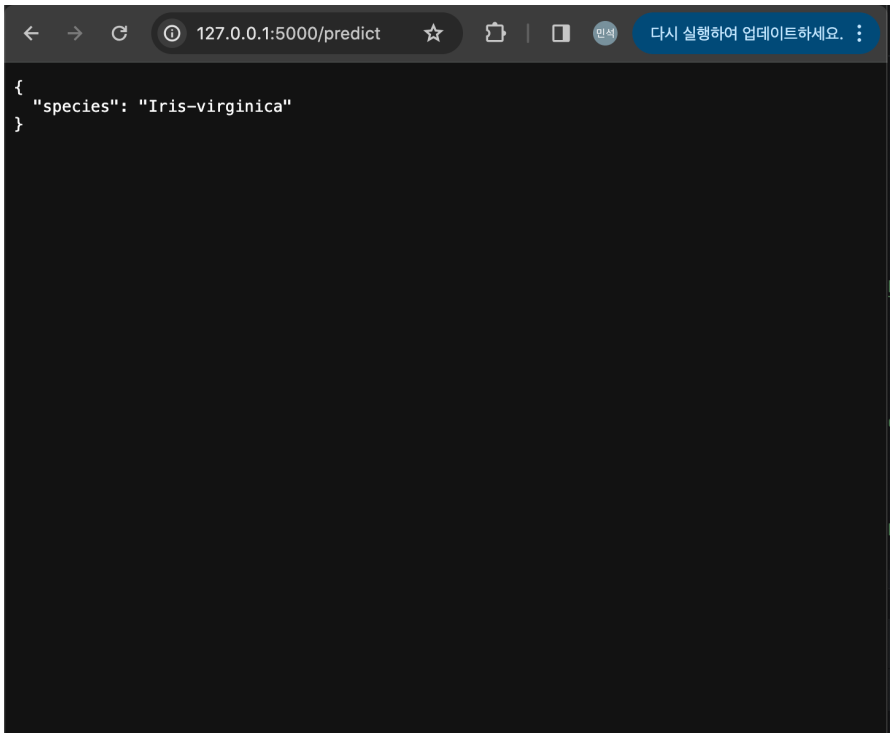
Sepal Length: 4.1

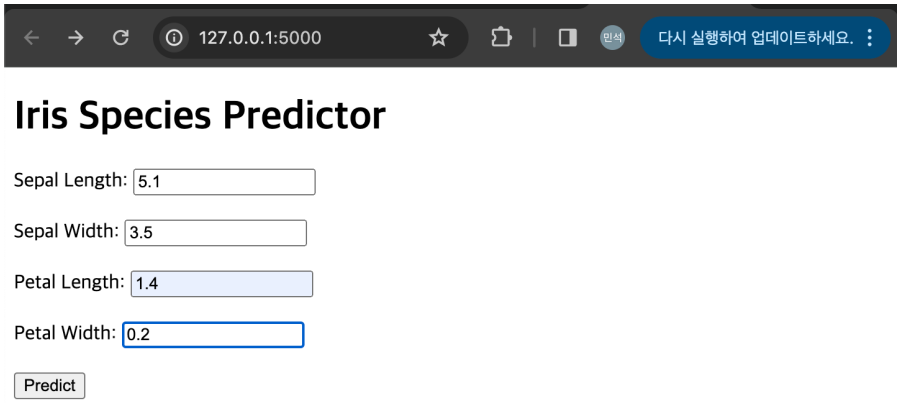
Sepal Width: 2

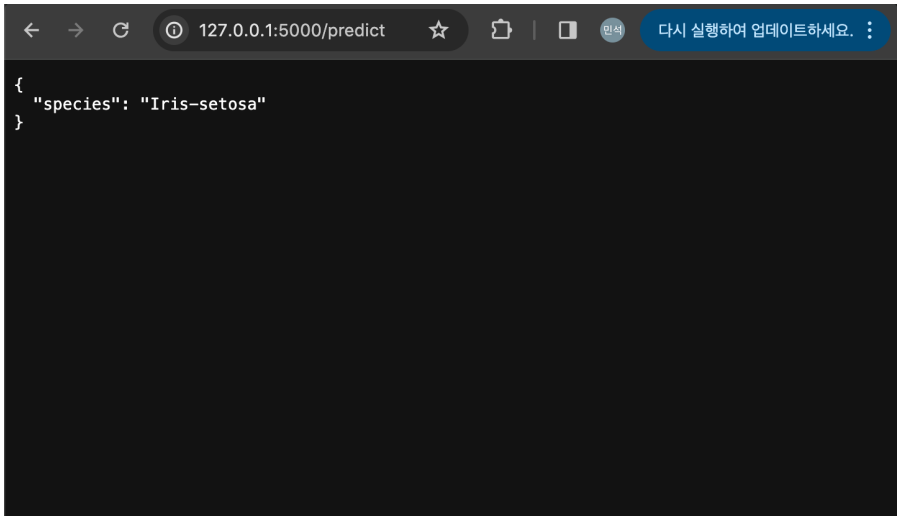
Petal Length: 3

Petal Width: 4

Predict







Conclusion

The Flask application successfully serves as an interface for users to inp ut data and receive predictions. The application could be further improv ed with a user-friendly results page and enhanced styling.