Flask Deployment Web App Document

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Batch Code: LISUM39

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Submitted To: GitHub

Setting Up and Loading the Model

```
# Load the dataset
df = pd.read_csv('iris.csv')

print(df.head())
```

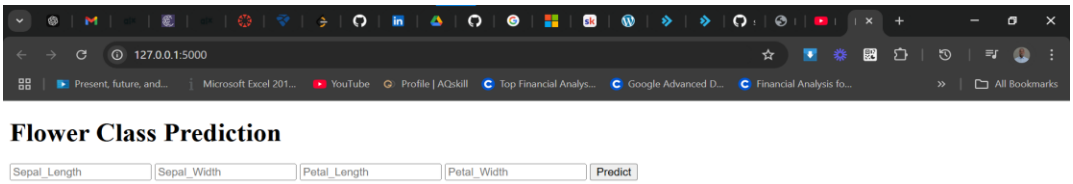
Training the data

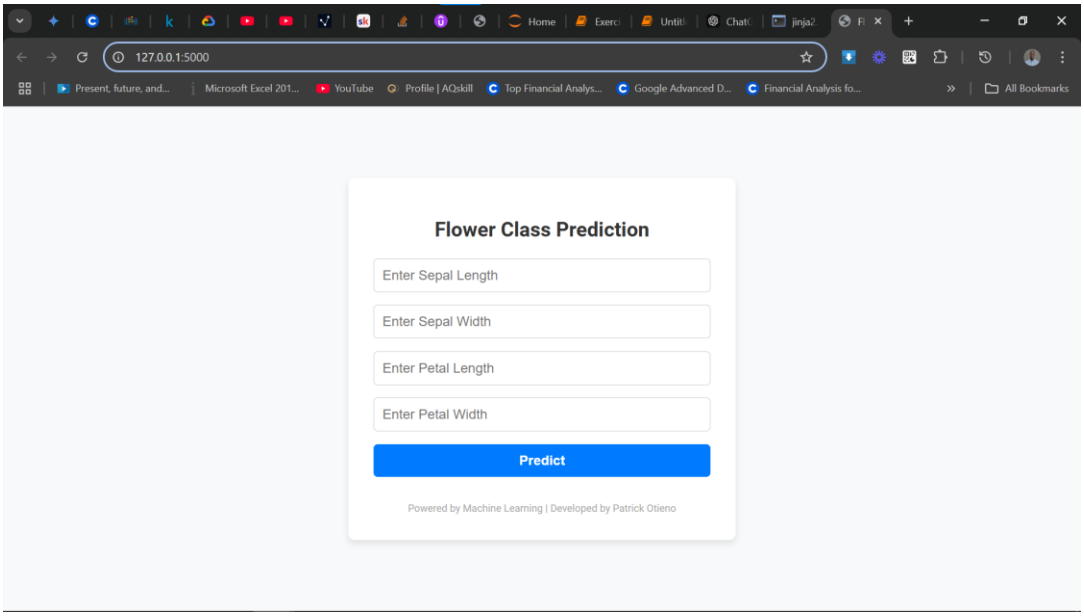
```
# Select independent and dependent variables
X = df[['sepal_length', 'sepal_width', 'petal_length', 'petal_width']]
Y = df['species']

# Split the dataset into train and test
X_train, X_test, Y_train, Y_test = train_test_split(X, Y, test_size=0.3,
random_state=50)

# Feature scaling for independent variables only
sc = StandardScaler()
X_train = sc.fit_transform(X_train)
X_test = sc.transform(X_test)
```

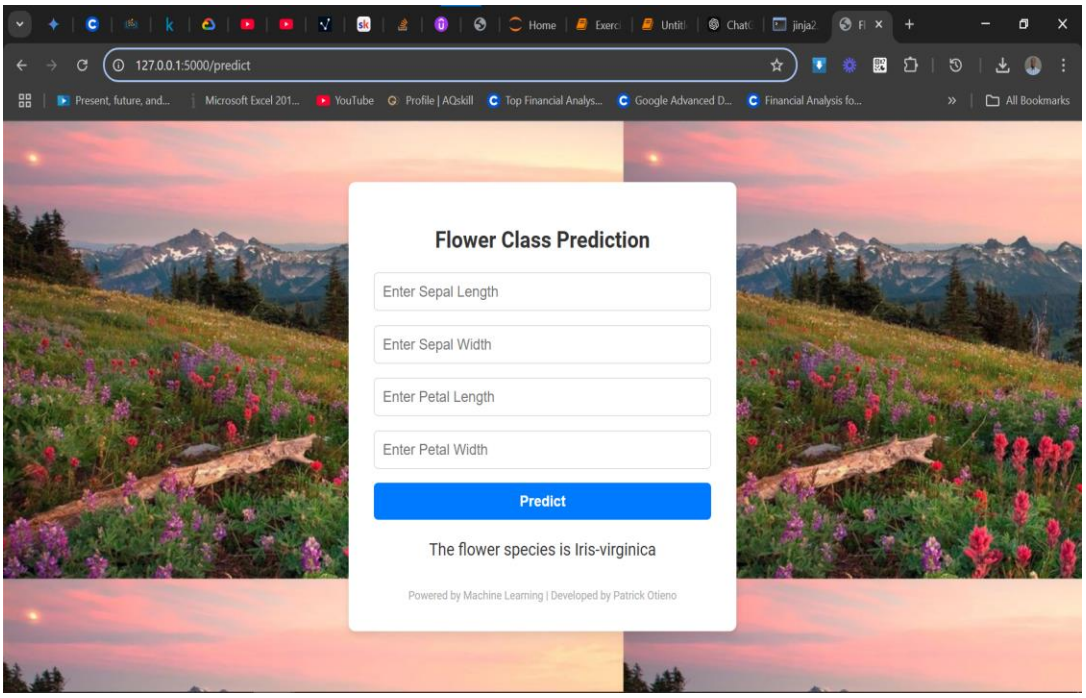
Instantiating it, fitting and saving s pickle

```
# Instantiate the model
classifier = RandomForestClassifier(random_state=50)

# Fit the model
classifier.fit(X_train, Y_train)

# Save the trained model as a pickle file
pickle.dump(classifier, open("iris_model.pkl", "wb"))
```

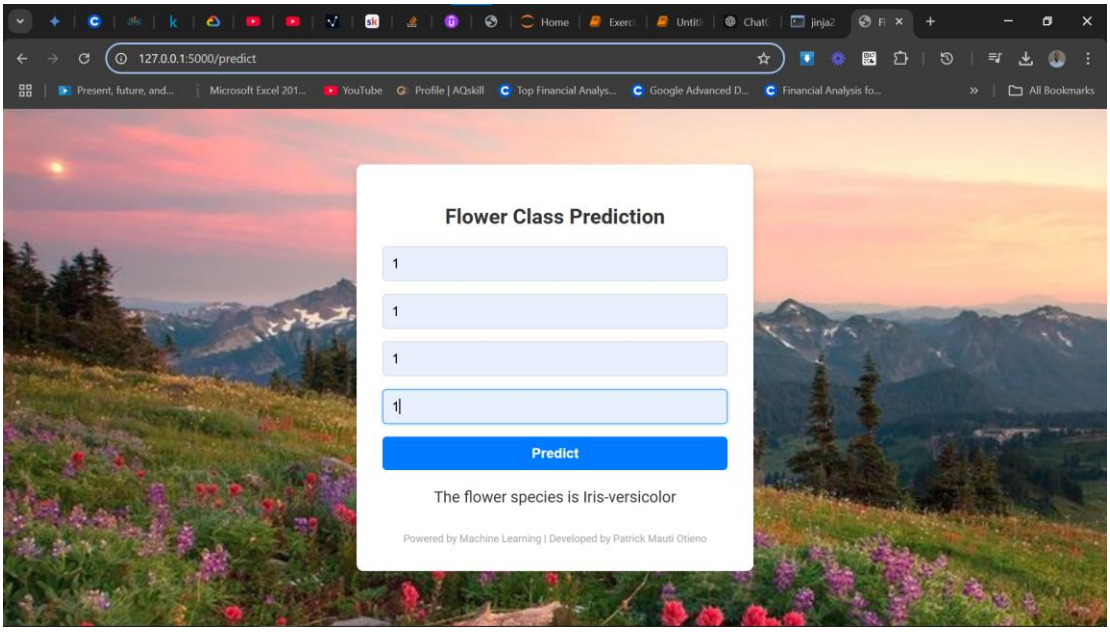
HTML AND CSS DEVELOPMENT

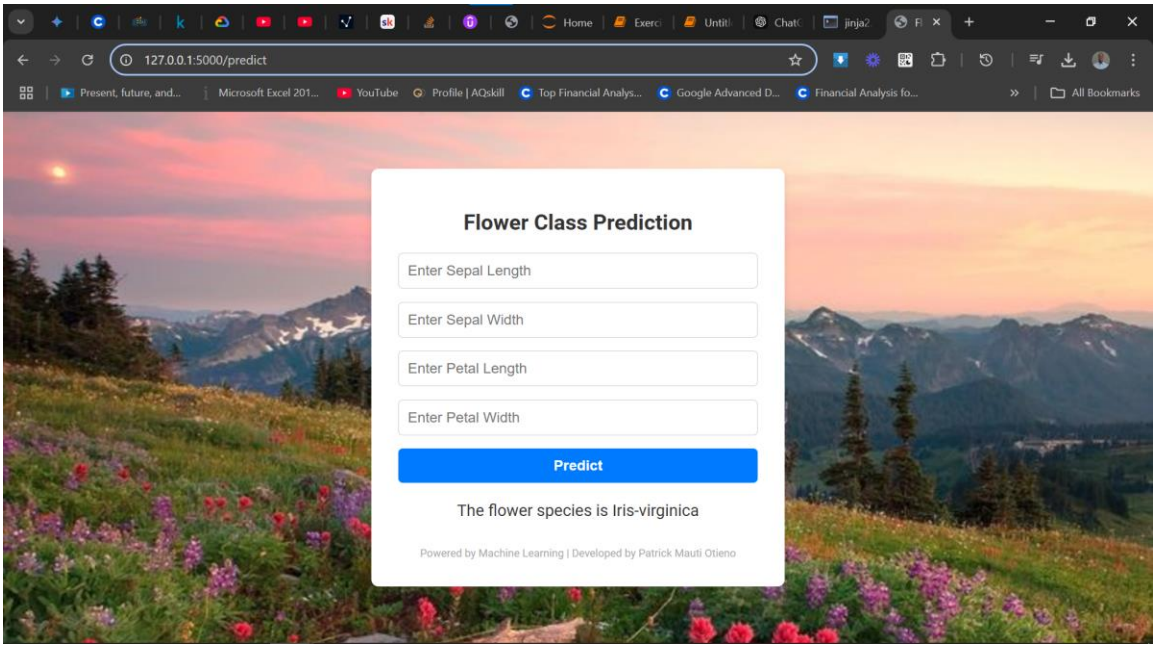






MODEL DEPLOYMENT




127.0.0.1:5000/predict
Flower Class Prediction
Enter Sepal Length
Enter Sepal Width
Enter Petal Length
Enter Petal Width
Predict
The flower species is Iris-virginica
Powered by Machine Learning | Developed by Patrick Mauti Otieno