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import matplotlib.pyplot as plt

from sklearn.datasets import load_iris

from sklearn.model_selection import train_test_split

from sklearn.tree import DecisionTreeClassifier, export_graphviz

from sklearn.metrics import accuracy_score

from IPython.display import Image, display

import pydotplus


# Load the Iris dataset

iris = load_iris()

X = iris.data

y = iris.target


# Split the dataset into training and testing sets

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=42)


# Create and train a Decision Tree classifier

clf = DecisionTreeClassifier(random_state=42)

clf.fit(X_train, y_train)


# Make predictions

y_pred = clf.predict(X_test)


# Evaluate the model

accuracy = accuracy_score(y_test, y_pred)

print(f'Accuracy: {accuracy * 100:.2f}%')
```



```
# Visualize the Decision Tree

def visualize_tree(tree, feature_names):
```

```
dot_data = export_graphviz(tree, out_file=None,
                            feature_names=feature_names,
                            class_names=iris.target_names,
                            filled=True, rounded=True,
                            special_characters=True)

graph = pydotplus.graph_from_dot_data(dot_data)

return Image(graph.create_png())
```

```
# Display the tree
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```
display(visualize_tree(clf, iris.feature_names))
```

Explanation:

1. **Import Libraries:** We import the necessary libraries including `matplotlib` for plotting, `sklearn` for machine learning tasks, and `pydotplus` and `graphviz` for visualizing the decision tree.
2. **Load Dataset:** The Iris dataset is loaded from `sklearn`.
3. **Split Dataset:** The dataset is split into training and testing sets using `train_test_split`.
4. **Train Classifier:** A `DecisionTreeClassifier` is created and trained on the training data.
5. **Make Predictions:** The trained model is used to make predictions on the test data.
6. **Evaluate Model:** The accuracy of the model is calculated using `accuracy_score`.
7. **Visualize Tree:** The decision tree is visualized using `export_graphviz` to create a DOT file, which is then converted to a PNG image using `pydotplus`. The image is displayed using IPython's `display`.