**Project Overview**

This project involves training a decision tree model on the Iris dataset and deploying it using a Flask API. The API allows users to send feature data and receive prediction results from the trained model.

**Instructions to Build and Run the Docker Container**

1. Clone the repository.
2. Build the Docker image using the provided Dockerfile.
3. Run the Docker container, mapping the container's port to port 5000 on your host machine.

**Instructions to Test the ML Endpoint**

1. Ensure the Docker container is running.
2. Send a POST request to **http://localhost:5000/predict** with JSON data containing the Iris flower's features (sepal length, sepal width, petal length, petal width).
3. Receive and interpret the response, which will contain the predicted class of the Iris flower based on the input features.

**Additional Information**

* The Flask API listens on port 5000 by default.
* The project uses the **scikit-learn** library to train the decision tree model.
* Ensure all dependencies listed in **requirements.txt** are installed if running the application locally.
* For local development, you can run the Flask app with a Python command.
* The trained model is saved to a file and loaded when the Flask app starts.