auto-water-supply-randomf

June 28, 2024

[ ]:
```
import pandas as pd
from sklearn.ensemble import RandomForestClassifier
```

[ ]:
```
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

[ ]:
```
data = pd.read_csv('/content/drive/MyDrive/PUMPING/data.csv')
```

[ ]:
```
xv_train = data[['moisture','temp']]
y_train = data['pump']
```

[ ]:
```
RFC = RandomForestClassifier(random_state=0)
RFC.fit(xv_train,y_train)
```

[ ]:
```
RandomForestClassifier(random_state=0)
```

[ ]:
```
# Get user input for moisture and temperature
user_moisture = float(input("Enter moisture value: "))
user_temp = float(input("Enter temperature value: "))

# Create a DataFrame for user input
user_input = pd.DataFrame({'moisture': [user_moisture], 'temp': [user_temp]})

# Make the prediction
user_pred = RFC.predict(user_input)


print("Predicted pump value:", user_pred[0])
if user_pred[0] > 0.5:
    print("Pump is off")
else:
    print("Pump is on")
```

```
Enter moisture value: 638
Enter temperature value: 16
```

```
Predicted pump value: 1
Pump is off
```