QuakeSense : Earthquake Magnitude Prediction Using ML

```
import streamlit as st
import pandas as pd
import joblib

# Load the model
model =
joblib.load("project/random_forest_earthquake_model.pkl")

st.title("🌍 Earthquake Magnitude Prediction")
st.write("Enter seismic event features to predict the
earthquake magnitude.")

# Input fields
latitude = st.number_input("Latitude", -90.0, 90.0, step=0.1)
longitude = st.number_input("Longitude", -180.0, 180.0,
step=0.1)
depth = st.number_input("Depth (km)", 0.0, 700.0, step=0.1)
year = st.number_input("Year", 1900, 2100, step=1)
month = st.number_input("Month", 1, 12, step=1)
day = st.number_input("Day", 1, 31, step=1)
hour = st.number_input("Hour", 0, 23, step=1)

# Predict button
if st.button("Predict Magnitude"):
    features = pd.DataFrame([[latitude, longitude, depth,
year, month, day, hour]],
                            columns=["Latitude", "Longitude",
"Depth", "Year", "Month", "Day", "Hour"])
    prediction = model.predict(features)[0]
    st.success(f"Predicted Earthquake Magnitude:
{prediction:.2f}")
```