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from flask import Flask, render template, request
import pickle
import pandas as pd
import numpy as np
from sklearn.preprocessing import OneHotEncoder
app = Flask( name )
# Load the model and OneHotEncoder
model = pickle.load(open("model.pkl", 'rb'))
ohe = pickle.load(open("ohe.pkl", 'rb'))  # Load the OneHotEncoder
@app.route('/')
def welcome():
    return render template('index.html')
@app.route('/predict', methods=['POST'])
def predict():
    age = request.form['age']
    gender = request.form['gender']
    occupation = request.form['occupation']
    line of work = request.form['line of work']
    prefer = request.form['prefer']
    certaindays hw = request.form['certaindays hw']
    time bp = float(request.form['time bp'])
    time dp = float(request.form['time dp'])
    travel_time = float(request.form['travel_time'])
    easeof online = float(request.form['easeof online'])
    home env = float(request.form['home env'])
    prod inc = float(request.form['prod inc'])
    sleep bal = float(request.form['sleep bal'])
    new skill = float(request.form['new skill'])
    fam connect = float(request.form['fam connect'])
    relaxed = float(request.form['relaxed'])
    self time = float(request.form['self time'])
    like_hw = float(request.form['like_hw'])
    dislike hw = float(request.form['dislike hw'])
    # Validate that the input values are not empty
    if '' in [age, gender, occupation, line of work, prefer,
certaindays hw]:
        return render template('index.html', predict="Please fill all
fields.")
    # Create a DataFrame from the input data
    input data = pd.DataFrame({
        'age': [age],
        'gender': [gender],
        'occupation': [occupation],
        'line of work': [line_of_work],
        'prefer': [prefer],
        'certaindays_hw': [certaindays_hw],
        'time_bp': [time_bp],
        'time dp': [time_dp],
        'travel time': [travel time],
        'easeof online': [easeof online],
        'home env': [home env],
        'prod inc': [prod inc],
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'sleep bal': [sleep bal],
        'new skill': [new skill],
        'fam connect': [fam connect],
        'relaxed': [relaxed],
        'self time': [self time],
        'like hw': [like hw],
        'dislike hw': [dislike hw]
   })
   # Transform categorical variables using the loaded OneHotEncoder
   encoded_data = ohe.transform(input_data[['age', 'gender',
'occupation', 'line of work', 'prefer', 'certaindays hw']])
   encoded data df = pd.DataFrame(encoded data,
columns=ohe.get_feature_names_out(['age', 'gender', 'occupation',
'line_of_work', 'prefer', 'certaindays_hw']))
   # Concatenate the encoded data with the rest of the input data
   input features = pd.concat([encoded data df, input data[['time bp',
'time_dp', 'travel_time', 'easeof_online', 'home_env', 'prod_inc',
'sleep_bal', 'new_skill', 'fam_connect', 'relaxed', 'self_time',
'like hw', 'dislike hw']]], axis=1)
   # Make the prediction using the loaded model
   prediction = model.predict(input features)
   # Return the prediction result
   return render_template('index.html', predict=f"Predicted value:
{prediction[0]}")
if name == ' main ':
   app.run(debug=True, port=1111)
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