PROJECT NAME	Project - A Novel Method for Handwritten Digit Recognition System
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from flask_pymongo import pymongo

from flask import request,send_file

from keras.models import load_model

from PIL import Image

import numpy as np


model = load_model("digit-recognition.h5")

uri = 'mongodb+srv://harsh:harsh@cluster0.rxvjk.mongodb.net/?retryWrites=true&w=majority'

client = pymongo.MongoClient(uri)

db = client.check_db

coll = db.check_coll

print('connection has made')


def api_endpoints(endpoints):

   @endpoints.route('/verify', methods=['POST'])

   def verify():

      try:

         email = request.form.get('email')

         pwd = request.form.get("pwd")

         flag = coll.find_one({"email":email, "pwd":pwd})

         status={
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            'statuscode' : 200,
        }
        if(flag!=None):
            status['statusmessage'] = "true"
        else:
            status['statusmessage'] = "false"
    except Exception as e:
        status={
            'statuscode' : 400,
            'statusmessage' : str(e)
        }
    return status

@endpoints.route('/upload', methods=['POST'])
def upload():
    input = request.files.get("image")
    global format
    format = request.form.get("format")
    img= Image.open(input)
    img = img.resize((200,200))
    img.save("files/input."+format)
    return send_file(path_or_file = "files/input."+format)

@endpoints.route('/predict', methods=['GET'])
def predict():
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    result = {};
    img=Image.open("files/input."+format).convert("L")
    img = img.resize((28,28))
    im2arr=np.array(img)
    im2arr = im2arr.reshape(1,28,28,1)
    y_pred = model.predict(im2arr)
    result["value"] = int(np.argmax(y_pred))
    print("Predicted value is",result)
    return result


@endpoints.route('/image', methods=['GET'])
def image():
    return send_file(path_or_file = "files/input."+format)


return endpoints
```