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1. from __future__ import print_function
2.
3.
4. from __future__ import division
5.
6. import os
7.
8. import numpy as np
9. import tensorflow as tf
10. from PIL import Image
11. from flask import Flask, redirect, render_template, request
12. from keras.applications.inception_v3 import preprocess_input
13. from keras.models import model_from_json, load_model
14. from werkzeug.utils import secure_filename
15. from keras.preprocessing import image
16.
17. global graph
18. graph=tf.compat.v1.get_default_graph()
19. app = Flask(__name__)
20.
21. json_file=open('final_model.json','r')
22. loaded_model_json=json_file.read()
23. json_file.close()
24. loaded_model=model_from_json(loaded_model_json)
25. loaded_model.load_weights("final_model.h5")
26.
27. @app.route('/', methods=['GET'])
28. def index():
29.     return render_template('digital.html')
30.
31. @app.route('/predict', methods=['GET','POST'])
32. def upload():
33.     if request.method=='POST':
34.         f=request.files['image']
35.         basepath=os.path.dirname(__file__)
36.         file_path=os.path.join(basepath, 'uploads', secure_filename(f.filename))
37.         f.save(file_path)
38.         img=image.load_img(file_path,target_size=(224,224))
39.
40.         x=image.img_to_array(img)
41.         x=np.expand_dims(x,axis=0)
42.
43.         with graph.as_default():
44.             preds=loaded_model.predict_classes(x)
45.
46.         found=["The great Indian bustard is found on the Indian
subcontinent", "The spoon-billed sandpiper is small wader that breeds in northeastern India"]
47.         text= found[preds[0]]

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48.         return text
49.
50. if __name__ == '__main__':
51.     app.run(threaded=False)
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