{

"cells": [

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"cell\_type": "code",

"execution\_count": 1,

"metadata": {},

"outputs": [],

"source": [

"from tensorflow.keras.models import load\_model\n",

"from tensorflow.keras.preprocessing import image\n",

"import cv2\n",

"import numpy as np"

]

},

{

"cell\_type": "code",

"execution\_count": 2,

"metadata": {},

"outputs": [],

"source": [

"index = [\"balls\",\"books\",\"cars\",\"cycles\",\"pen\"]"

]

},

{

"cell\_type": "code",

"execution\_count": 3,

"metadata": {},

"outputs": [

{

"name": "stdout",

"output\_type": "stream",

"text": [

"WARNING:tensorflow:From C:\\Users\\suman\\AppData\\Local\\Continuum\\anaconda3\\lib\\site-packages\\tensorflow\\python\\ops\\init\_ops.py:97: calling GlorotUniform.\_\_init\_\_ (from tensorflow.python.ops.init\_ops) with dtype is deprecated and will be removed in a future version.\n",

"Instructions for updating:\n",

"Call initializer instance with the dtype argument instead of passing it to the constructor\n",

"WARNING:tensorflow:From C:\\Users\\suman\\AppData\\Local\\Continuum\\anaconda3\\lib\\site-packages\\tensorflow\\python\\ops\\init\_ops.py:1251: calling VarianceScaling.\_\_init\_\_ (from tensorflow.python.ops.init\_ops) with dtype is deprecated and will be removed in a future version.\n",

"Instructions for updating:\n",

"Call initializer instance with the dtype argument instead of passing it to the constructor\n",

"WARNING:tensorflow:From C:\\Users\\suman\\AppData\\Local\\Continuum\\anaconda3\\lib\\site-packages\\tensorflow\\python\\ops\\init\_ops.py:97: calling Zeros.\_\_init\_\_ (from tensorflow.python.ops.init\_ops) with dtype is deprecated and will be removed in a future version.\n",

"Instructions for updating:\n",

"Call initializer instance with the dtype argument instead of passing it to the constructor\n",

"WARNING:tensorflow:From C:\\Users\\suman\\AppData\\Local\\Continuum\\anaconda3\\lib\\site-packages\\tensorflow\\python\\keras\\initializers.py:119: calling RandomUniform.\_\_init\_\_ (from tensorflow.python.ops.init\_ops) with dtype is deprecated and will be removed in a future version.\n",

"Instructions for updating:\n",

"Call initializer instance with the dtype argument instead of passing it to the constructor\n"

]

}

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"source": [

"model = load\_model(\"things.h5\")"

]

},

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"execution\_count": 4,

"metadata": {},

"outputs": [],

"source": [

"img = image.load\_img(\"cycle.jpg\",target\_size = (64,64))"

]

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"execution\_count": 5,

"metadata": {},

"outputs": [

{

"data": {

"text/plain": [

"PIL.Image.Image"

]

},

"execution\_count": 5,

"metadata": {},

"output\_type": "execute\_result"

}

],

"source": [

"type(img)"

]

},

{

"cell\_type": "code",

"execution\_count": 6,

"metadata": {},

"outputs": [],

"source": [

"x = image.img\_to\_array(img)"

]

},

{

"cell\_type": "code",

"execution\_count": 7,

"metadata": {},

"outputs": [

{

"data": {

"text/plain": [

"numpy.ndarray"

]

},

"execution\_count": 7,

"metadata": {},

"output\_type": "execute\_result"

}

],

"source": [

"type(x)"

]

},

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"execution\_count": 8,

"metadata": {},

"outputs": [

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"data": {

"text/plain": [

"(64, 64, 3)"

]

},

"execution\_count": 8,

"metadata": {},

"output\_type": "execute\_result"

}

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"source": [

"x.shape"

]

},

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"outputs": [],

"source": [

"x = np.expand\_dims(x,axis = 0)"

]

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"outputs": [

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"data": {

"text/plain": [

"(1, 64, 64, 3)"

]

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"execution\_count": 10,

"metadata": {},

"output\_type": "execute\_result"

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],

"source": [

"x.shape"

]

},

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"execution\_count": 11,

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"outputs": [],

"source": [

"pred = model.predict\_classes(x)"

]

},

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"execution\_count": 12,

"metadata": {},

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"data": {

"text/plain": [

"3"

]

},

"execution\_count": 12,

"metadata": {},

"output\_type": "execute\_result"

}

],

"source": [

"pred[0]"

]

},

{

"cell\_type": "code",

"execution\_count": 13,

"metadata": {},

"outputs": [

{

"name": "stdout",

"output\_type": "stream",

"text": [

"cycles\n"

]

}

],

"source": [

"print(index[pred[0]])"

]

},

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"cell\_type": "code",

"execution\_count": 14,

"metadata": {},

"outputs": [

{

"data": {

"text/plain": [

"array([3], dtype=int64)"

]

},

"execution\_count": 14,

"metadata": {},

"output\_type": "execute\_result"

}

],

"source": [

"pred"

]

},

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"cell\_type": "code",

"execution\_count": null,

"metadata": {},

"outputs": [],

"source": []

}

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"metadata": {

"kernelspec": {

"display\_name": "Python 3",

"language": "python",

"name": "python3"

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"nbconvert\_exporter": "python",

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"version": "3.7.3"

}

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