2022-12-19 Assignment

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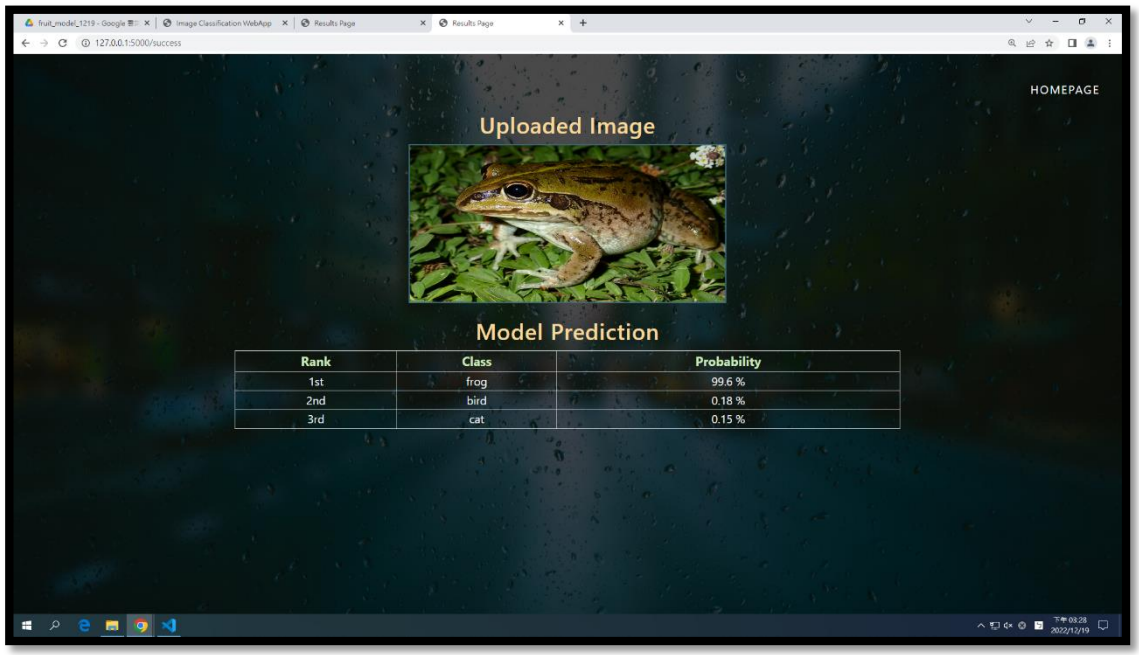
Github：https://reurl.cc/pZXbGl

1. 原範例測試結果



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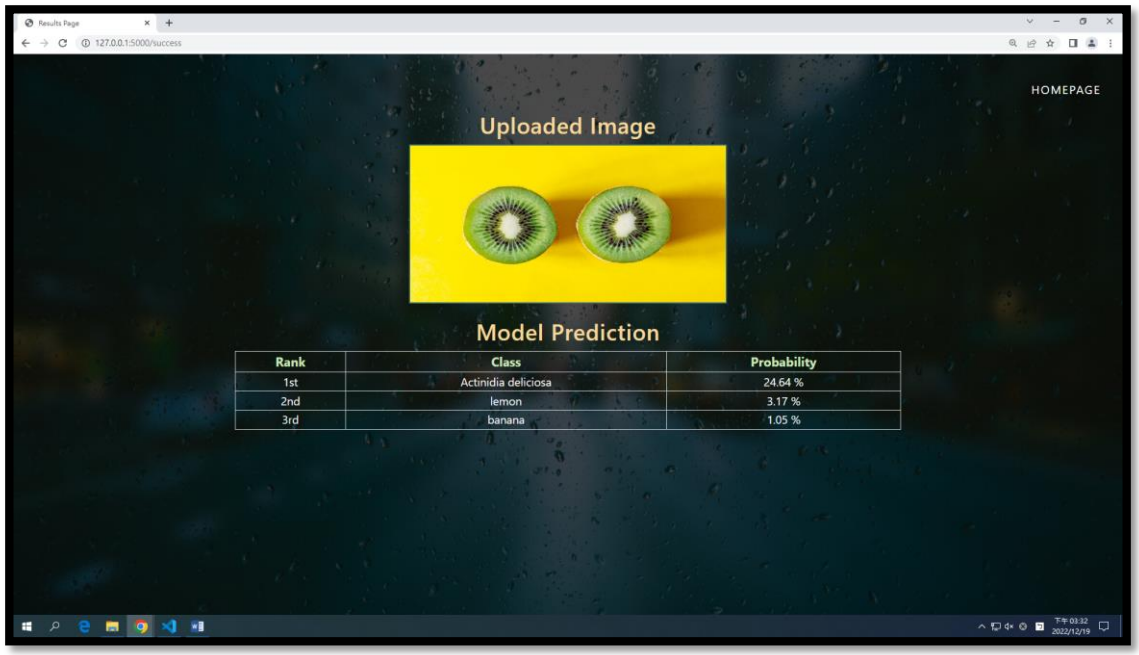
2. 更換成自己的模型 (fruit_model)



使用自己資料訓練時需要加上紅框部分

```
num_classes = len(class_names)

model = tf.keras.Sequential([
    feature_extractor_layer,
    tf.keras.layers.Dense(num_classes, activation='softmax')
])

model.summary()
```

最後儲存時名稱不需要副檔名

```
[ ] #－－－－儲存模型到雲端資料夾－－－－
    import os
    DATADIR = os.path.join(MOUNTPOINT, "MyDrive/TF_Models") #MyDrive_我的雲端, TF_Models_資料夾
    saved_model_path = os.path.join(DATADIR, "fruit_model_1219") #cats_and_dogs.h5_模型名稱
    model.save(saved_model_path)
```

Python app.py 模型改為儲存模型的名稱

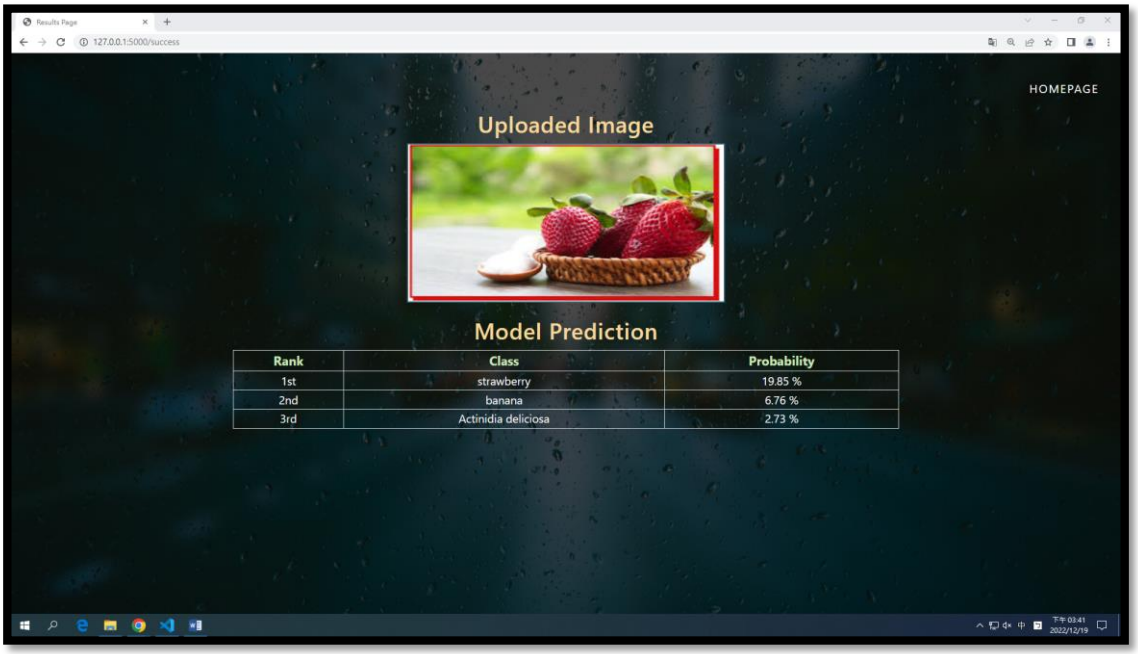
```
15
16  model_path = os.path.join(BASE_DIR , 'fruit_model_1219')
17  model = tf.keras.models.load_model(model_path)
18
```

Class 改為與模型資料一樣的類別

```
24      return '.' in filename and \
25              filename.rsplit('.', 1)[1] in ALLOWED_EXT
26
27  #classes = ['airplane' ,'automobile', 'bird' , 'cat' , 'deer' ,'dog' ,'frog', 'horse' ,'ship' ,'truck']
28
29  classes = ['Actinidia deliciosa', 'banana', 'lemon', 'orange', 'strawberry']
30
31  '''classes = ['Cherry', 'Coffee-plant' ,'Cucumber' ,'Fox_nut(Makhana)' ,'Lemon',
32   'Olive-tree', 'Pearl_millet(bajra)' ,'Tobacco-plant', 'almond', 'banana',
33   'cardamom', 'chilli', 'clove', 'coconut', 'cotton', 'gram', 'jowar', 'jute',
34   'maize', 'mustard-oil', 'papaya', 'pineapple', 'rice' ,'soyabean', 'sugarcane',
35   'sunflower' ,'tea', 'tomato' ,'vigna-radiati(Mung)', 'wheat']'''
```

下頁結果

Result


Results Page
127.0.0.1:5000/success
HOMEPAGE
Uploaded Image
Model Prediction
Rank
Class
Probability
1st
strawberry
19.85 %
2nd
banana
6.76 %
3rd
Actinidia deliciosa
2.73 %