

Test both the models

Team ID	PNT2022TMID51209
Project Name	Project - Fertilizers Recommendation System For Disease Prediction

Test the Fruit disease prediction model


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In [22]: # Testing the model

In [23]: `from tensorflow.keras.preprocessing import image
import numpy as np`

In [29]: `img=image.load_img(r'C:\Users\Elcot\project\flask\sample_images\Healthy corn.jpg',grayscale=False,target_size=(128,128))
img`

Out[29]: 

In [30]: `x = image.img_to_array(img) # Converting image into array
x = np.expand_dims(x,axis=0) # expanding Dimensions
pred = np.argmax(model.predict(x)) # Predicting the higher probability index
op = ['Apple__Black_rot','Apple__healthy','Corn_(maize)__healthy','Corn_(maize)__Northern_Leaf_Blight',''] # Creating List
op[pred] # List indexing with output`


1/1 [=====] - 0s 63ms/step

Out[30]: 'Corn_(maize)__Northern_Leaf_Blight'

In [31]: `img=image.load_img(r'C:\Users\ELCOT\project\flask\Sample_images\apple.jpg',grayscale=False,target_size=(128,128))
img`

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Out[31]: 

In [32]: `x = image.img_to_array(img) # Converting image into array
x = np.expand_dims(x,axis=0) # expanding Dimensions
pred = np.argmax(model.predict(x)) # Predicting the higher probability index
op = ['Apple__Black_rot','Apple__healthy','Corn_(maize)__healthy','Corn_(maize)__Northern_Leaf_Blight',''] # Creating List
op[pred] # List indexing with output`

1/1 [=====] - 0s 128ms/step

Out[32]: 'Apple__healthy'

In [34]: `x_train.class_indices`

Out[34]: `{'Apple__Black_rot': 0,
'Apple__healthy': 1,
'Corn_(maize)__Northern_Leaf_Blight': 2,
'Corn_(maize)__healthy': 3,
'Peach__Bacterial_spot': 4,
'Peach__healthy': 5}`

Test the Vegetable disease prediction model

jupyter Test the vegetable model Last Checkpoint: 25 minutes ago (unsaved changes)  Logout

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In [5]:


```
from keras.preprocessing import image
from tensorflow.keras.preprocessing.image import img_to_array
from tensorflow.keras.preprocessing import image
from tensorflow.keras.models import load_model
import numpy as nps
```

In [8]:

```
model=load_model(r'C:\Users\Elcot\project\flask\uploads\vegetable.h5')
```

In [9]:

```
img=image.load_img(r'C:\Users\Elcot\project\flask\sample_images\lqptredf.jpg',grayscale=False,target_size=(128,128))
img
```

Out[9]: 

In [11]:

```
x = image.img_to_array(img) # Converting image into array
x = nps.expand_dims(x,axis=0) # expanding Dimensions
pred = nps.argmax(model.predict(x)) # Predicting the higher probablity index
op = ['Pepper,_bell___Bacterial_spot','Pepper,_bell___healthy','Potato___Early_blight','Potato___healthy','Potato___Late_blight',
op[pred] # List indexing with output
```

1/1 [=====] - 104s 104s/step

Out[11]: 'Pepper,_bell___Bacterial_spot'