Project Development Phase

SPRINT DELIVERY -3

Model testing:

Fruit model:

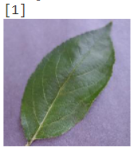
```
from tensorflow.keras.preprocessing.image import img_to_array

import numpy as np
import tensorflow as tf
import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
model = tf.keras.models.load_model(r'/content/drive/MyDrive/IBM_DATASET/fruit.h5
')
img = image.load_img('/content/00fca0da-2db3-481b-b98a-
9b67bb7b105c___RS_HL 7708.JPG',target_size=(128,128))
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
pred=np.argmax(model.predict(x),axis=1)
#classes=np.argmax(pred,axis=1)
print(pred)
img
```

output:

```
[ ] img = image.load_img('/content/00fca0da-2db3-481b-b98a-9b67bb7b105c___RS_HL 7708.JPG',target_size=(128,128))
    x=image.img_to_array(img)
    x=np.expand_dims(x,axis=0)
    pred=np.argmax(model.predict(x),axis=1)
    #classes=np.argmax(pred,axis=1)
    print(pred)
    img

    1/1 [==============================] - 0s 32ms/step
    [1]
```



```
options=['Apple blackrot','Apple healthy','corn healthy','corn leaf_blight','Peach_bacte
rial spot','peach healthy']
print(options[pred[0]])
```

ouput:

```
options=['Apple blackrot','Apple healthy','corn healthy','corn leaf_blight','Peach_bacterial spot','peach healthy']
print(options[pred[0]])

Apple healthy
```

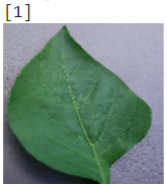
Vegetable model:

```
from tensorflow.keras.preprocessing.image import img_to_array

import numpy as np
import tensorflow as tf
import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
model = tf.keras.models.load_model(r'/content/drive/MyDrive/IBM_DATASET/veg.h5'
)
img = image.load_img('/content/b45d62a2-3de1-411b-8f88-
ab52195b6dda___JR_HL 7639.JPG',target_size=(128,128))
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
pred=np.argmax(model.predict(x),axis=1)
#classes=np.argmax(pred,axis=1)
print(pred)
img
```

```
[ ]  img = image.load_img('/content/b45d62a2-3de1-411b-8f88-ab52195b6dda___JR_HL 7639.JPG',target_size=(128,128))
     x=image.img_to_array(img)
     x=np.expand_dims(x,axis=0)
     pred=np.argmax(model.predict(x),axis=1)
     #classes=np.argmax(pred,axis=1)
     print(pred)
     img
```

```
1/1 [==============================] - 0s 27ms/step
[1]
```



```
options=['Bell pepper bacterialspot','Bell pepper healthy healthy','potato early blight','
potato healthy','potato late_blight','tomato_bacterial spot','tomato lateblight','tomato le
afmold','tomatoseptonia leafspot']
print(options[pred[0]])
```