

Model Building

Test The Model

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Team ID	PNT2022TMID43812
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts

Evaluation is a process during the development of the model to check whether the model is the best fit for the given problem and corresponding data.

Load the saved model using load_model

Predicting our results

```
from tensorflow.keras.models import load_model
from keras.preprocessing import image
model = load_model("nutrition.h5") #loading the model for testing
```

Taking an image as input and checking the results

```
img = image.load_img(r"C:\Users\DELL\Desktop\Desk Files\Nutrition Analysis Using Image Classification\
Sample_Images\Test_Image5.jpg",
                    grayscale=False,target_size= (64,64))#loading of the image
x = image.img_to_array(img)#image to array
x = np.expand_dims(x,axis = 0)#changing the shape
pred = model.predict_classes(x)#predicting the classes
pred
```

By using the model we are predicting the output for the given input image

```
index=['APPLES', 'BANANA', 'ORANGE', 'PINEAPPLE', 'WATERMELON']  
result=str(index[pred[0]])  
result  
  
'PINEAPPLE'
```

The predicted class index name will be printed here.