Project Development Phase
Model Performance Test

Model Performance Testing:

```
[ ]  from keras.preprocessing.image import load_img, img_to_array
     img = load_img("C:\\Users\\abhir\\Downloads\\lebra.jpg", target_size=(331,331))
     img = img_to_array(img)
     img = np.expand_dims(img,axis = 0) # this is creating tensor(4Dimension)

     extracted_features = stacked_model.predict(img)
     y_pred = predictor_model.predict(extracted_features)

     1/1 [==============================] - 0s 247ms/step
     1/1 [==============================] - 0s 31ms/step
```

0s 247ms/step indicates that the "stacked_model" took **247 milliseconds** to process the input image and extract features.

0s 31ms/step indicates that "predictor_model" took **31 milliseconds** to make a prediction based on the extracted features.

```
[ ]  def get_key(val):
             for key, value in class_to_num.items():
              if val == value:
                  return key

     pred_codes = np.argmax(y_pred, axis = 1)
     predicted_dog_breed = get_key(pred_codes)
```

```
[ ]  print(predicted_dog_breed)

     labrador_retriever
```

This shows accuracy of as it predicted the correct breed