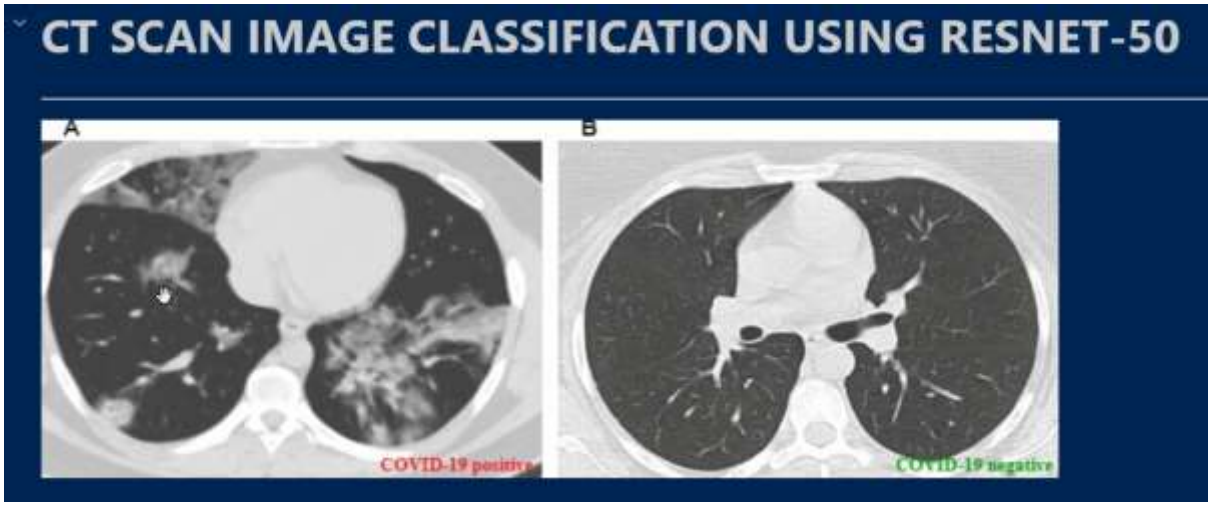
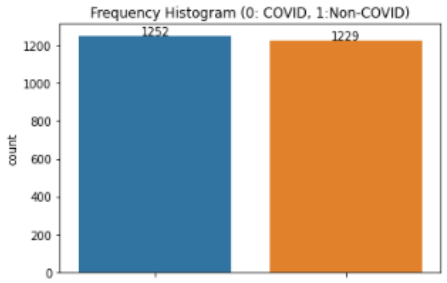



**Display the dataset count of covid and non covid in histogram**

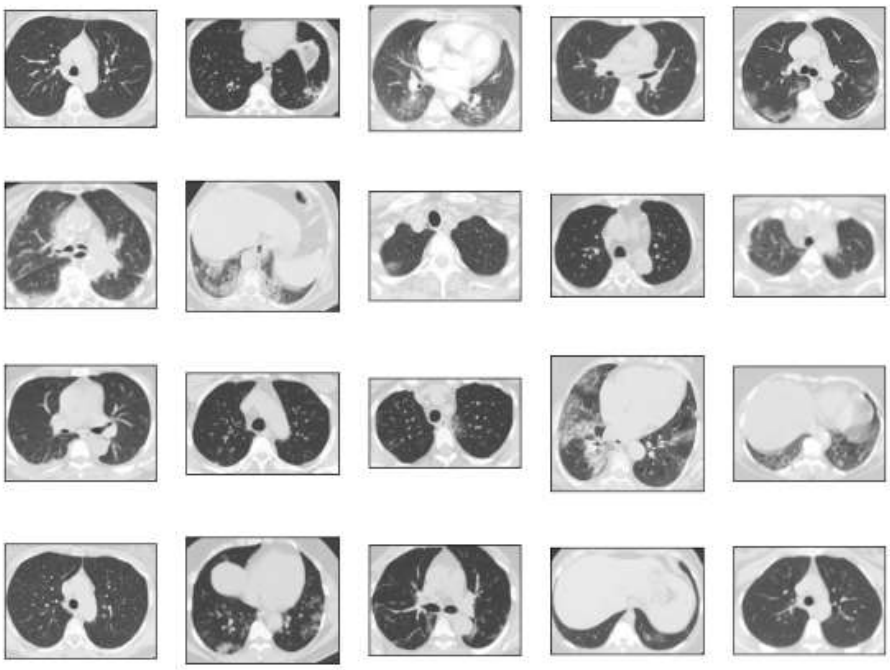
```
# the purpose of the below code  is to shuffle the data and reset the indices.

# Set a seed for reproducibility
Seed = 40

# Shuffle the data using the seed and reset the indices
train = train_data.sample(frac = 1, replace=False, random_state = Seed)
train = train.reset_index(drop = True)

# Plot a frequency histogram to show the distribution of classes
sns.countplot(x = "Class Label", data = train)
for i in range(len(train['Class Label'].value_counts().values)):
    plt.text(x=i, y=train['Class Label'].value_counts().values[i]+5, s=train['Class Label'].value_counts().values[i], ha='center')
plt.title("Frequency Histogram (0: COVID, 1:Non-COVID)")
```

```
Text(0.5, 1.0, 'Frequency Histogram (0: COVID, 1:Non-COVID)')
```

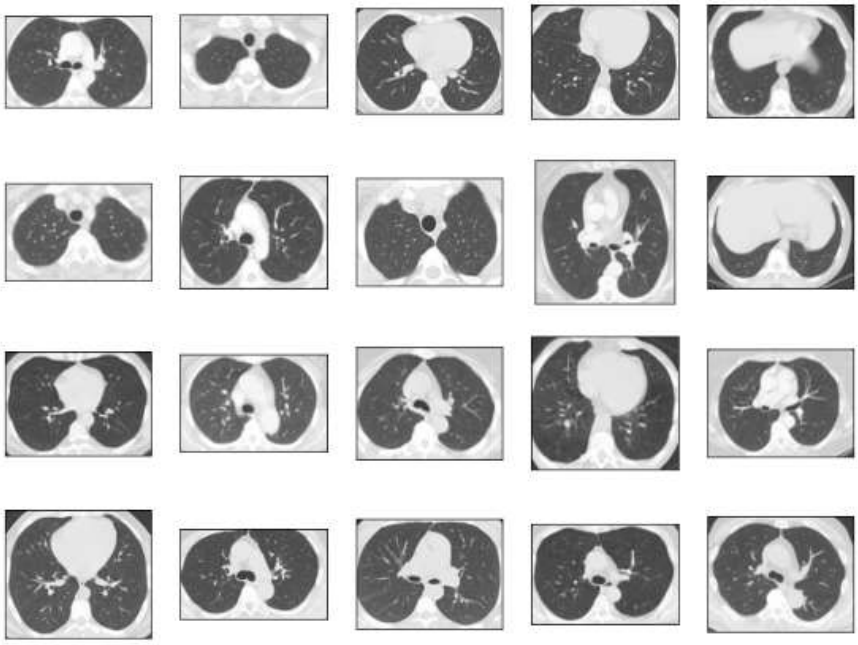


**Displaying covid and non covid sets image**

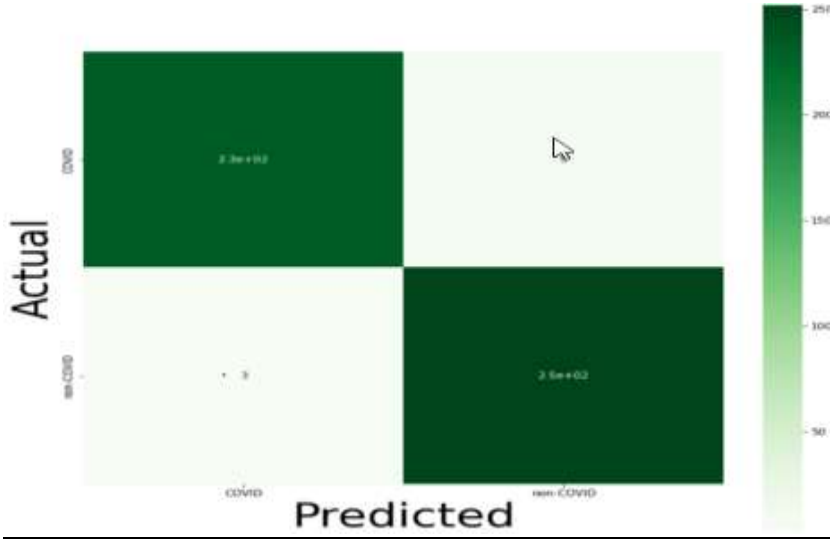
COVID

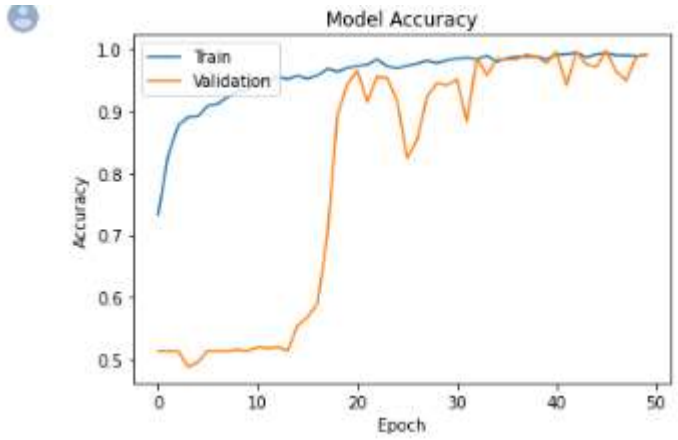


non-COVID



**Confusion matrix, model loss and accuracy**



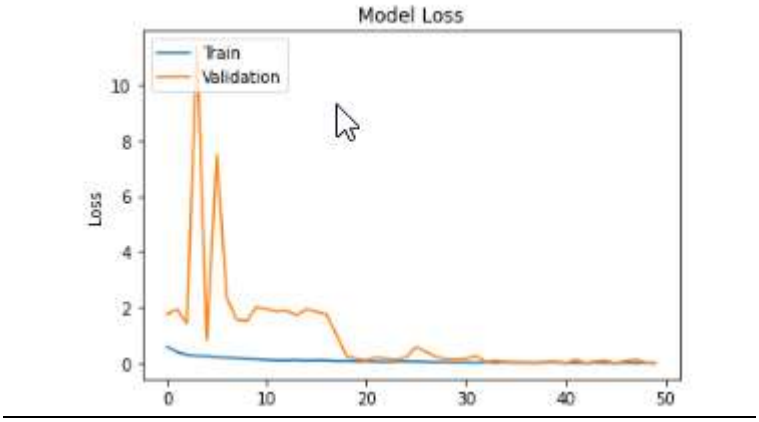
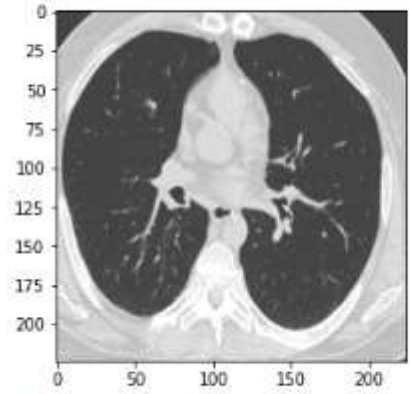



**Image Prediction**

```
1/1 [==============================] - 0s 30ms/step
[9.9939036e-01 6.0962822e-04]
```




```
Prediction: Covid-19
```