Initialize the Model

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Team ID	PNT2022TMID18696
Project Name	Fertilizers Recommendation System For Disease Prediction

```
model=Sequential()

model.add(Convolution2D(32,(3,3),input_shape=(128,128,3),activation='relu') )

model.add(MaxPooling2D(pool_size=(2,2)))

model.add(Flatten())

model.add(Dense(units=40,kernel_initializer='uniform',activation='relu'))
model.add(Dense(units=70,kernel_initializer='random_uniform',activation='re
lu'))
model.add(Dense(units=6,kernel_initializer='random_uniform',activation='sof
tmax'))

model.compile(loss='categorical_crossentropy',optimizer="adam",metrics=["ac
curacy"])

    model.fit(x_train,steps_per_epoch=168,epochs=3,validation_data=x_test,valid
                                                                ation_steps=52)
Epoch 1/3
168/168 [==============================] - 45s 229ms/step - loss:
1.4802 -
accuracy: 0.4315 - val_loss: 119.8421 - val_accuracy: 0.5577
Epoch 2/3
168/168 [==============================] - 38s 223ms/step - loss:
1.0562 -
accuracy: 0.5982 - val_loss: 107.7073 - val_accuracy: 0.5288
Epoch 3/3
168/168 [==============================] - 36s 216ms/step - loss:
0.8406 - accuracy: 0.6905 - val_loss: 97.8494 - val_accuracy: 0.8173
```

<keras.callbacks.History at 0x1e34c9b7310>

```
model.save(r'C:\Users\uma25\project\flask\uploads\fruit.h5')
```