

USER ACCEPTANCE

S.No.	Parameter	Values	Screenshot
1	Model Summary		<p>MODEL BUILDING</p> <pre>[] from keras.models import Sequential from keras.layers import Dense from keras.layers import Convolution2D from tensorflow.keras.layers import Conv2D, MaxPooling2D from keras.layers import Dropout from keras.layers import Flatten [] model=Sequential() [] model.add(Convolution2D(32,(3,3), input_shape=(64,64,1), activation = 'relu')) [] model.add(MaxPooling2D(pool_size=(2,2))) [] model.add(Flatten()) [] model.add(Dense(units=512, activation='relu')) [] model.add(Dense(units=9, activation='softmax')) [] model.compile(loss='categorical_crossentropy', optimizer='adam', metrics=['accuracy']) [] model.fit(x_train,steps_per_epoch=len(x_train),epochs=5,validation_data=x_test,validation_steps=1)</pre>
2	Accuracy	<p>Training Accuracy 99.84%</p> <p>Validation Accuracy 64.65%</p>	<pre>model=Sequential() model.add(Convolution2D(32,(3,3), input_shape=(64,64,1), activation = 'relu')) model.add(MaxPooling2D(pool_size=(2,2))) model.add(Flatten()) model.add(Dense(units=512, activation='relu')) model.add(Dense(units=9, activation='softmax')) model.compile(loss='categorical_crossentropy', optimizer='adam', metrics=['accuracy']) model.fit(x_train,steps_per_epoch=len(x_train),epochs=5,validation_data=x_test,validation_steps=len(x_test)) Epoch 1/5 216/216 [=====] - 162s 749ms/step - loss: 0.1131 - accuracy: 0.9633 - val_loss: 7.3499 - val_accuracy: 0.6456 Epoch 2/5 216/216 [=====] - 39s 181ms/step - loss: 0.0356 - accuracy: 0.9980 - val_loss: 7.9273 - val_accuracy: 0.6461 Epoch 3/5 216/216 [=====] - 42s 197ms/step - loss: 0.0294 - accuracy: 0.9923 - val_loss: 7.7494 - val_accuracy: 0.6469 Epoch 4/5 216/216 [=====] - 41s 190ms/step - loss: 0.0173 - accuracy: 0.9951 - val_loss: 8.0277 - val_accuracy: 0.6461 Epoch 5/5 216/216 [=====] - 42s 194ms/step - loss: 0.0072 - accuracy: 0.9984 - val_loss: 8.4261 - val_accuracy: 0.6465</pre>