
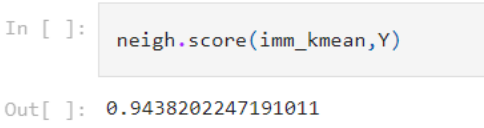



**Project Development Phase**  
**Model Performance Test**

Date	10 November 2022
Team ID	TEAMPNT2022TMID20861
Project Name	Project - <b>Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy</b>
Maximum Marks	10 Marks

**Model Performance Testing:**

Project team shall fill the following information in model performance testing template.

S. No:	Parameter	Values	Screenshot
1.	Model Summary	<b>Total params: 21,885,485</b> <b>Trainable params: 1,024,005</b> <b>Non-trainable params: 20,861,480</b>	 <pre> In [ ]: from keras.models import Sequential from keras.layers import Dense, Dropout, Activation, Flatten from keras.optimizers import Adam from keras.callbacks import EarlyStopping, ReduceLROnPlateau  model = Sequential() model.add(Dense(128, input_shape=(1, 28, 28), kernel_initializer='he_normal')) model.add(Activation('relu')) model.add(Dropout(0.2)) model.add(Dense(128, kernel_initializer='he_normal')) model.add(Activation('relu')) model.add(Dropout(0.2)) model.add(Dense(10, kernel_initializer='he_normal')) model.add(Activation('softmax'))  adam = Adam() early_stopping = EarlyStopping(monitor='val_loss', min_delta=0.001, patience=10) reduce_lr = ReduceLROnPlateau(monitor='val_loss', factor=0.5, patience=5)  model.compile(loss='categorical_crossentropy', optimizer=adam)  X_train, y_train, X_test, y_test = train_test_split(X, y, test_size=0.1, random_state=42)  model.fit(X_train, y_train, validation_data=(X_test, y_test),           callbacks=[early_stopping, reduce_lr],           epochs=100)  y_pred = model.predict(X_test) accuracy_score(y_test, y_pred)  Out[ ]: 0.9662921348314607 </pre>
2.	Accuracy	<b>Training Accuracy – 0.7917</b> <b>Validation Accuracy – loss 3.2610</b>	 <pre> In [ ]: neigh.score(imm_kmean,Y)  Out[ ]: 0.9438202247191011 </pre>
3.	Confidence Score(Only Yolo Projects)	Class Detected Confidence score	 <pre> - - - </pre>

