HAND WRITTEN DIGITS RECOGNITION USING RANDOM FOREST CLASSIFIER

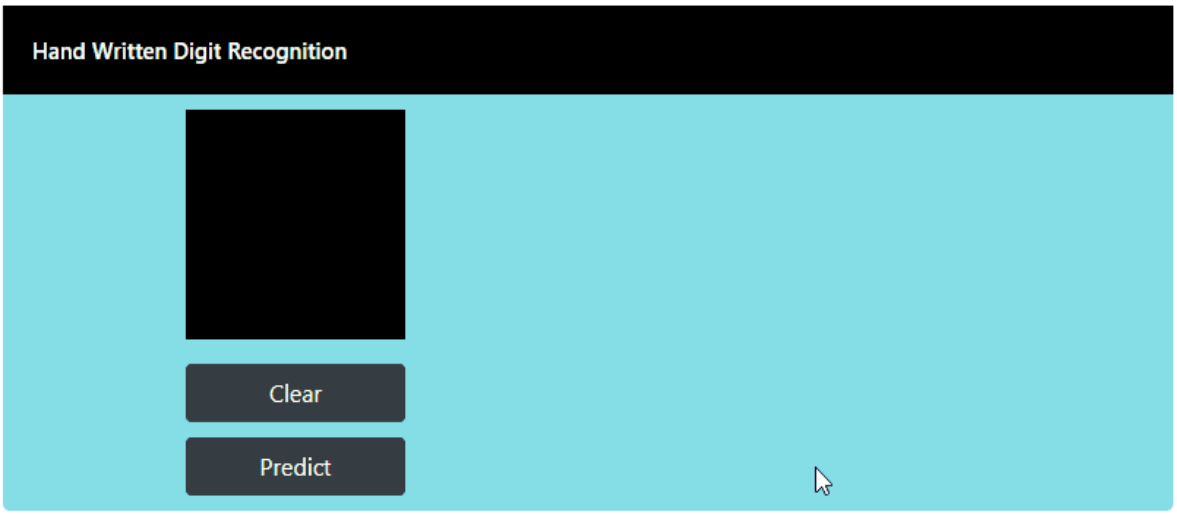
OBJECTIVE

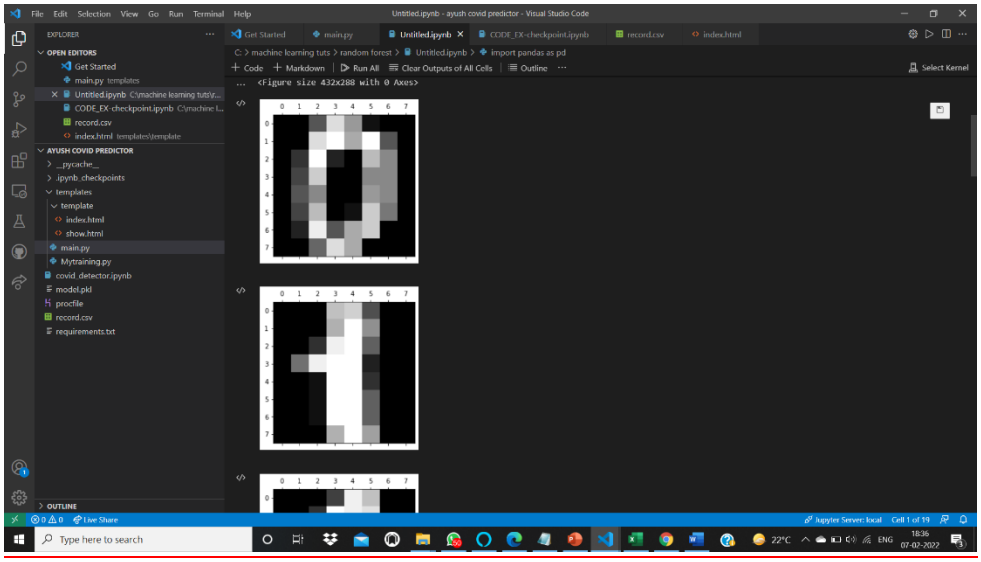
The aim of a handwriting digit recognition system is to convert handwritten digits into machine readable formats. The main objective of this work is to ensure effective and reliable approaches for recognition of handwritten digits

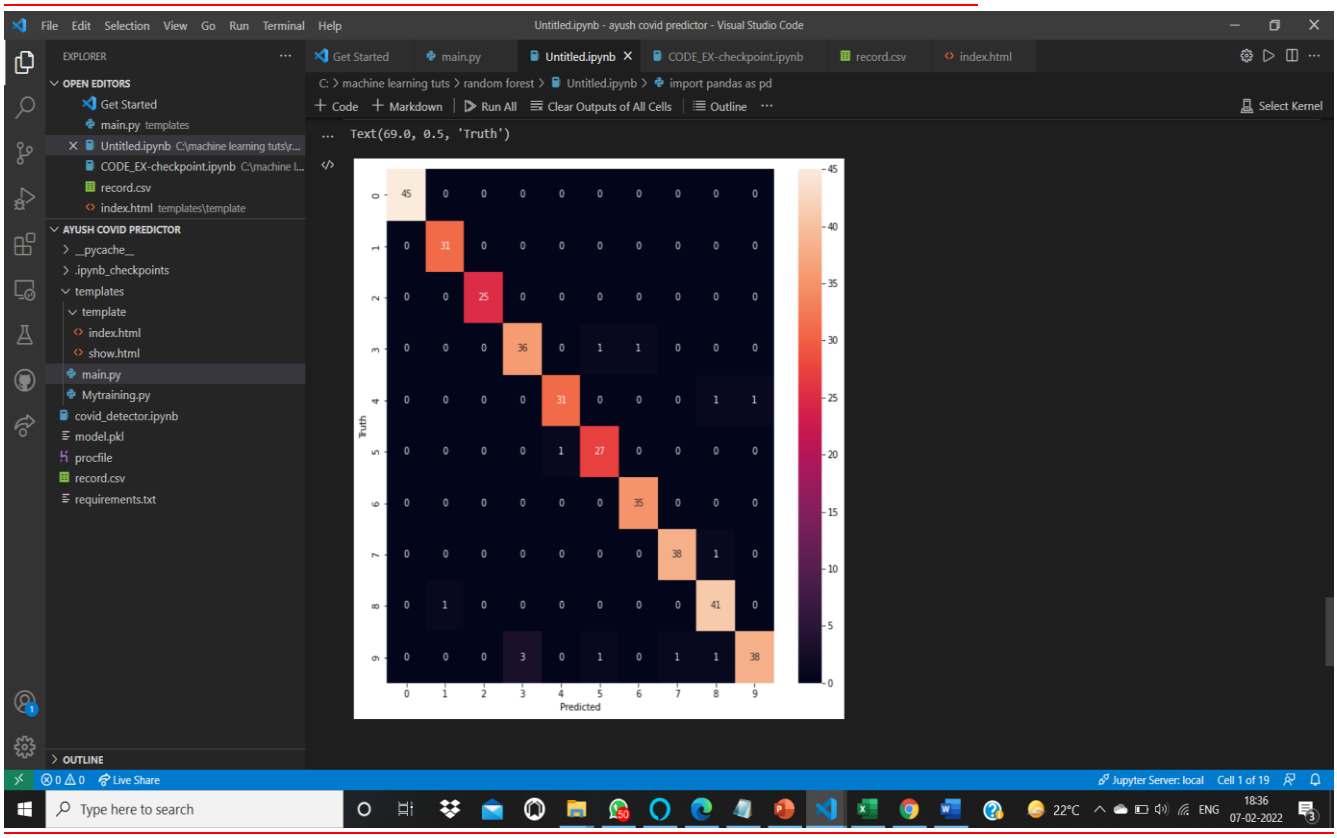
METHODOLOGY

In handwritten recognition digits ,we use MNIST dataset, It is a dataset of 60,000 small square 28×28 pixel grayscale images of handwritten single digits between 0 and 9.ML Algorithm Random forest classifier is used fpr predicting digits, we use train_test_split for training our ML MODEL in which data sets is divided into training dataset and testing data set .Confusion matrix is created for testing and predicted result .After generating this ml model we use this for hand written digits recognition accuracy score of model is 95.667%.

After generating this model we use tensorflow , CNN model for recognition part and with help html and java script,CSS for deployed it into our website.IN website part there is graph drawn and show accuracy of its recognition of number in between 0-9







Confusion matrix