

HAND WRITTEN DIGITS RECOGNITION USING RANDOM FOREST CLASSIFIER

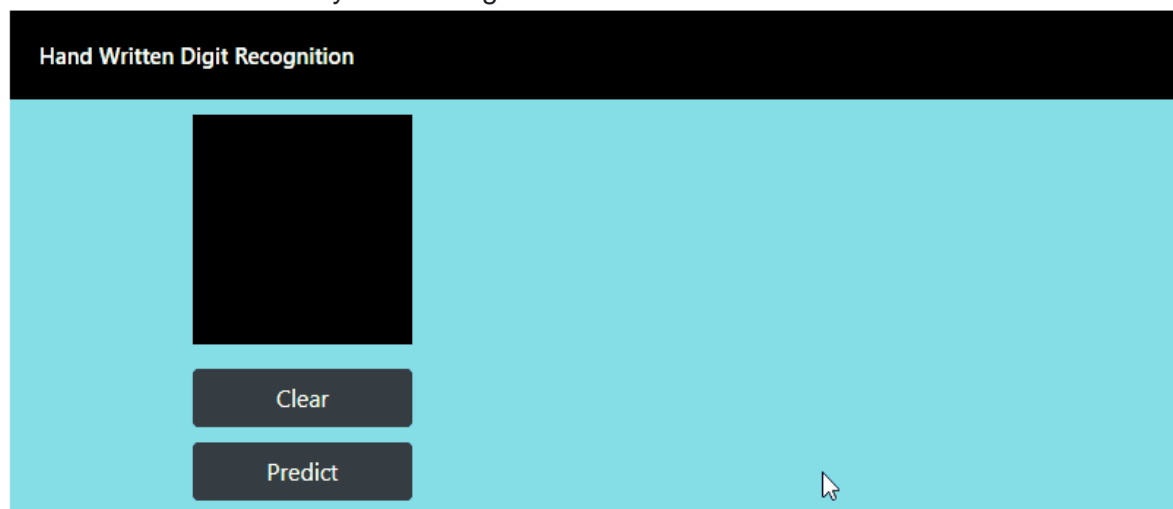
OBJECTIVE

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

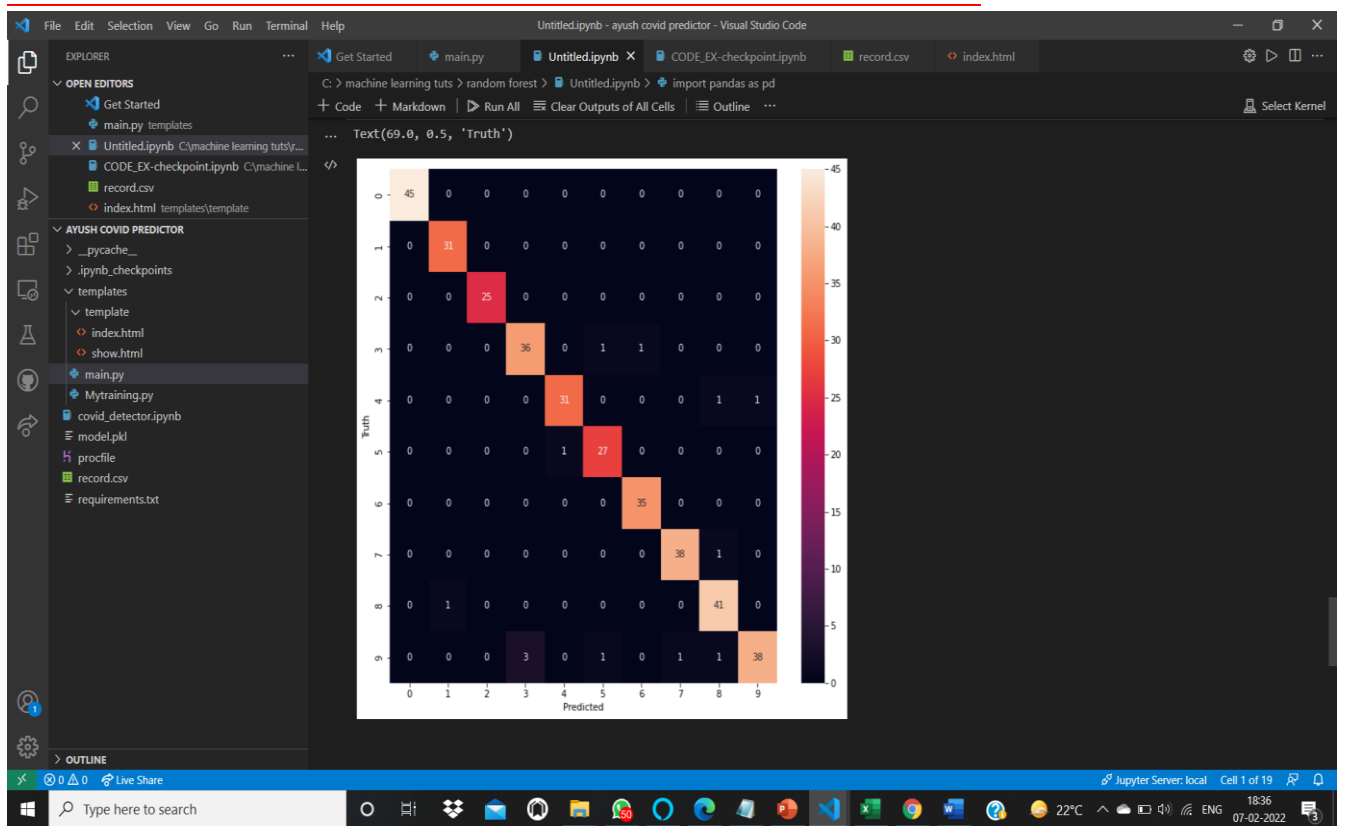
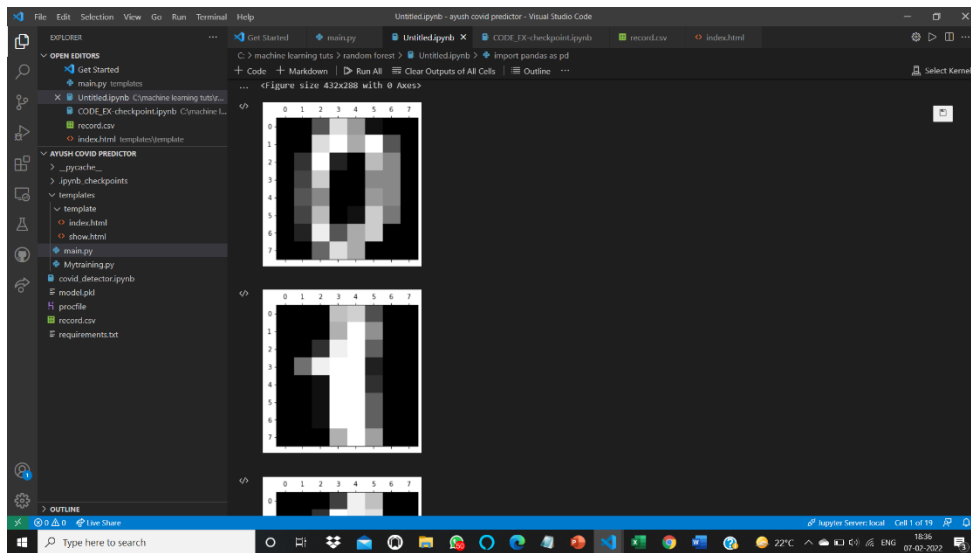
METHODOLOGY

In handwritten recognition digits ,we use MNIST dataset, It is a dataset of 60,000 small square 28x28 pixel grayscale images of handwritten single digits between 0 and 9. ML Algorithm Random forest classifier is used for 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



The image shows a web interface for "Hand Written Digit Recognition". It features a black header with the title in white. Below the header is a large light blue area. On the left side of this area, there is a black square for digit input, followed by two dark gray buttons labeled "Clear" and "Predict". A mouse cursor is visible near the bottom right of the interface.



Confusion matrix