MINIMUM VIABLE PRODUCT

Abstract: -

The system was designed to introduce a more developed form of getting class attendance instead of the traditional format that was used by means of paper and pen. The main idea is to start by grasping the students images into train and test folders that will help while doing a video capture, the world is evolving and so should the systems that we use. The system involves:

OpenCV: –

A machine learning and computer vision software library is available for free under the name OpenCV. Open-Source Computer Vision Library is how OpenCV is formally referred to. It was developed to speed up the incorporation of machine perception into consumer goods and to offer a shared infrastructure for computer vision applications.

A digital image is one that is made up of picture components, also referred to as pixels, each of which has a discrete, finite amount of numeric representation for its level of intensity. The computer interprets an image as a collection of numerical values for these pixels, and in order to identify a particular image, it must find patterns and regularities in this numerical data.

We used two sets of models in our MVP, first one is the training dataset, where we have put the images where the data will be recorded, and the test dataset, where we have put the images, we must extract the attendance from. After comparing the two data sets system will give us a list of attendance and a list of absences, and also, if any new image is detected that is in the test data set but not in the train data set system will recognize that person and print 'there is a stranger in class, be careful.

Microsoft Excel: -

In the process the output which involves a report is going to be redirected in Microsoft Excel giving a clear outlay of whether a student is absent or present so that it can be easily interpreted by anyone who is interested with the model and has no clear knowledge of coding. The system is easy to understand and it is knowledgeable when understood.