Image Processing Project

KAAKCHAT

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| **dlib.get\_frontal\_face\_detector()** | This face detector is made using the now classic Histogram of Oriented  Gradients (HOG) feature combined with a linear classifier, an image  pyramid, and sliding window detection scheme. This type of object detector  is fairly general and capable of detecting many types of semi-rigid objects in addition to human faces.  (will be used directly) |
| **dlip.shape\_predictor(predictor\_path)** | this function is used to detect the landmarks of the face (by passing the path of a pre trained model) |
| **isOpen( )** | Check if the eyes or mouth is open or not.  Ie : detect facial expressions.  (will be implemented from scratch using utility functions from opencv) |
| **Overlay()** | This function will overlay a filter image over a face part of a person in the image/frame.  (will be implemented from scratch using utility functions from opencv) |