Introduction:

In the recent times, due to the pandemic the use of online meetings and classes have increased drastically. But due to less activeness and less interaction of the participants, it becomes really boring. Now, one to make meetings funny we have come up with this project. We can your mood based upon your facial expressions. We also show an emoji based upon your mood! It makes virtual interactions more fun and interactive.

To accomplish this task, we will use CNN networks. CNN stands for convolutional neural network. CNN most commonly is applied to analyse visual imagery.

Introduction:

Our project is classified into two parts:

1. Emojify: In this part we will take in your face as input through your camera. Then we will analyse the photo using CNN and classify it according to the dataset chosen.

The architecture of a Convolutional Network is analogous to that of the connectivity pattern of Neurons in the Human Brain and was inspired by the organization of the Visual Cortex. Individual neurons respond to stimuli only in a restricted region of the visual field known as the Receptive Field. A collection of such fields overlaps to cover the entire visual area.

The role of the Convolutional Network is to reduce the images into a form which is easier to process, without losing features which are critical for getting a good prediction.

1. Cartoonify:

For this part, we use OpenCv library. OpenCV is a great tool for image processing and performing computer vision tasks. It is an open-source library that can be used to perform tasks like face detection, objection tracking, landmark detection, and much more.

In this part we take an image from the user’s hard disk and process the image to form a cartoon like image and the user can save into the pc.