DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECTPROPOSAL

1. Project Title: - EMOJIFY - Create Your Own Emoji

2. Project Scope: - (Max 500 words)

Emoji helps individuals to express feelings and their identities more “authentically" by increasing the semantic quality of visual messages. Emojis are also used in feedback forms. The feedback form rate having emojis is greater than other methods for feedback.The feelings represented by the text or its severity are changed by emojis. Indeed, by simulating facial gestures, emojis can be used in Informal Text Communication (ITC) to express feelings such as sarcasm, irony or non-textual humour.

Emoji allows users to make a pick from wide lists, is one way to display nonverbal signs. Emotional recognition using facial expression through emoji in real time is explored in this project. Moreover, it further develops the criteria of facial expression assessment and real-time perception of facial emotion recognition. The created application contains six human expressions that include emotions that are happy, neutral , sad, surprise, angry, fearful, disgusted. We have took our dataset from Kaggle having some thousands images.The real expressions that are being expressed are the expressions transmitted by human beings. Because of their capacity to better communicate emotional responses and the way they promote contact between individuals, the investigations of such speech are important.

The output of the project shows the emoji with the respective face emotion. It is able to detect any amount of faces existing with certainty over a single picture. Current research looks at the role of emoji with the aid of pictorial representations of facial expressions in promoting emotional identification. In today's age, the use of communication through various platforms, such as cell phones and computers,is very popular. Any of the ways of contact which are very popular today are e-mails, instant messages, blog posts, and tweets.

The main goal of this project is to learn about human facial expressions and then show accurate Avatar or Emoji similar to facial expression.

The present work would therefore be structured to examine human emotions and the visual representation in the form of six emotions.

- ✧ Angry
- ✧ Disgust
- ✧ Fearful
- ✧ Happy
- ✧ Neutral
- ✧ Sad
- ✧ Surprise

We aim at identifying human facial expressions in order to process and chart corresponding avatars or emojis. A key step is the identification of faces.

We have built a convolution neural network to accomplish this task. CNN includes in-depth observation of characteristics present in the input image.

This research analysis reveals how the face looks and the facial exploration delivers connectivity. Therefore, it could be said facial expression is essential for the analysis of the investigation of the facial activity coding system.

3. Requirements: -

- **BASIC REQUIREMENTS:**

❖ FER 2013 datasets from Kaggle.
❖ Knowledge of python.
❖ Knowledge of jupyter notebook.
❖ Emojis/Avatars.

- **REQUIRED LIBRARIES:**

❖ TensorFlow.
❖ Keras.
❖ Numpy.

STUDENTS DETAILS

Name	UID	Signature
20BCS3839	Gurleen Kaur	
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APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)