Recognize hand gestures and Display corresponding images based on the detected gestures.

from cvzone.HandTrackingModule import HandDetector

The role of the HandDetector class can include:

- 1. **Hand Tracking:** The class is likely designed to track the position and movements of hands in a video feed or a series of images.
- 2. **Landmark Detection:** It may provide functionality for detecting key landmarks or points on the hand, such as fingertips, knuckles, and the palm.
- 3. **Gesture Recognition:** Some hand tracking modules include gesture recognition capabilities, allowing you to recognize predefined hand gestures.

- detector=HandDetector(detectionCon=0.7)

The detectioncon parameter likely refers to the confidence threshold for hand detection. This parameter determines the minimum confidence level required for a detected hand to be considered valid. A higher confidence threshold means that only hand detections with higher certainty will be accepted.

mediapipe is a popular open-source Python library developed by Google that provides a set of tools and solutions for various computer vision and machine learning tasks. The library is designed to simplify the development of applications that involve processing visual information, particularly in the context of human perception and understanding. Here are some key aspects and roles of the mediapipe library:

- 1. Hand Tracking and Pose Estimation: mediapipe includes pre-built modules for hand tracking and pose estimation. These modules can detect and track the position of hands and human body poses in images or video streams.
- 2. Face Detection and Recognition:

The library provides functionalities for detecting faces in images and performing face recognition tasks. This can be useful in applications such as facial authentication or emotion analysis.