

# Project Synopsis Of Volume Controller



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## ➤ **Introduction: -**

This project is about the control the volume of a System. By the help of this project by just showing the gesture which is feed in the program to control the volume we can be able to raise and low the volume. For this we need a different library to make it work. All libraries have a different functionality.

## ➤ **Technology Used; -**

### **1. Language:**

A. Python 3.7

### **2. libraries:**

#### **A. Media Pipe**

Media Pipe is an open-source libraries. It provides cross platform, customizable and many more. I help to read the hand in my project. It read the hand by breaking it into the 21 points on a different place. It also has a functionality of read the face and posture and many more. With the help of media pipe, it makes easy to do a next work.

#### **B. Open-CV**

Open-CV is an open-source library which stand for open-source computer vision. Open CV is a library which provide the huge no of function to read the image, face detection, it helps to read the image by using camera. It supports the multiple language like java python c++. It contains more than 2500 hundred optimized algorithms. It helps to make many AL/ML project.

#### **C. NumPy**

This library I am using in this project for a very basic purpose to get the current time. This module of the python provides many functions related to the Time. It also provides functionality other than representing time, like

waiting during code execution and measuring the efficiency of your code.

#### **D. PyCaw**

Pycaw is Python Core Audio Windows Library. It works with python2 and python3. Its help to read the volume of the system and helps to set the volume according to our need.

#### **E. Math**

The math module is a standard module in Python and is always available. To use mathematical functions under this module, you must import the module using import math

### **3. Tool: -**

A. PyCharm community edition

#### **➤ Methodology/ Planning of work: -**

For completion of the project, we need to understand the working of the Python and its syntax.

We also need to find the library which we be need in our project to make it possible and we must understand the function of the library. So, we can easily find the perfect function which will be able to do us require our work.

In the first draft of this project, we need to read the palm and mark it all possible to mark 21 points which are provided by the library.

In the second draft of this project, we need to able to read our system volume and able to interpret according to our need of the project.

#### **➤ Novelty Of project**

In the upcoming time we are moving forward to control the function using voice control gesture control. I f we take the example of Samsung TV it also has the gesture reading functionality, but it does not contain the

volume controlling functionality. In other example if I talk about the BMW car it also has gesture control system. But it also lacks the functionality of the volume control. My project is something we are going to see in the near upcoming. Hence, I use this idea to learn the new tech and implement it.

➤ **Future Scope: -**

If we talk about the future of the project, we are already seeing the multiple thing which come with multiple gesture recognition system. So, we can use this module to integrate with other thing. If we extend this project to some extent, we can also add the functionality to set the maximum and minimum value bar.