**✅ Project Requirements with Description**

**🔹 Python 3.10**

* **Why?**  
  MediaPipe works best with Python versions 3.9 or 3.10. Higher versions like 3.11 or 3.12 might not support it well (or at all).
* **Role:**  
  It’s the base interpreter needed to run your code and compatible with all the other libraries.

**🔹 mediapipe**

* **Why?**  
  This is the magic behind hand detection and finger tracking!
* **Role in Code:**
  + Detects hands in your webcam feed
  + Gives 21 landmark points for each hand
  + Helps identify gestures like thumbs up, index only, etc.

**🔹 opencv-python**

* **Why?**  
  For accessing the webcam and displaying the video with drawings (like landmarks and action text).
* **Role in Code:**
  + Captures video using your webcam
  + Shows the live video feed with visual overlays
  + Used for basic image operations like flipping the frame

**🔹 pyautogui**

* **Why?**  
  For performing UI actions like controlling volume or simulating keyboard shortcuts for zooming.
* **Role in Code:**
  + Simulates pressing keys like Ctrl + '+' or Ctrl + '-'
  + Automates volume key presses
  + Makes your gestures control real apps like Chrome, YouTube, etc.