**Data Science – Pose Detector**

# **1. Install mediapipe**

* pip install mediapipe

# **2. Mediapipe**

* Mediapipe is a framework mainly used for building multimodal audio, video, or any data.
* With the help of the MediaPipe framework, an impressive ML pipeline can be built for instance of inference models like TensorFlow, TFLite, and also for media processing functions.

# **3. Pose landmark detection**

* By using media pipe pose land marker,
  + we can detect the landmarks of human bodies in an image or video.
  + We can identify key body locations, analyze posture, and categorize movements.
* This task uses machine learning (ML) models that work with single images or video.
* The task outputs body pose landmarks in image coordinates and in 3-dimensional world coordinates.

# **4. Pose landmarker model**

* The pose landmarker model tracks 33 body landmark locations, representing the approximate location of the following body parts.

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| 0 - nose  1 - left eye (inner)  2 - left eye  3 - left eye (outer)  4 - right eye (inner)  5 - right eye  6 - right eye (outer)  7 - left ear  8 - right ear  9 - mouth (left)  10 - mouth (right)  11 - left shoulder  12 - right shoulder  13 - left elbow  14 - right elbow  15 - left wrist  16 - right wrist | 17 - left pinky  18 - right pinky  19 - left index  20 - right index  21 - left thumb  22 - right thumb  23 - left hip  24 - right hip  25 - left knee  26 - right knee  27 - left ankle  28 - right ankle  29 - left heel  30 - right heel  31 - left foot index  32 - right foot index |