Variable	Type	Range/Categories	Business Meaning
row_id	object		
sequence_type	object	Target / Non-Target	sequence_type - If the gesture is a target or non-target type. Train only.
sequence_id	object	[SEQ_000007 - SEQ_065531]	sequence_id - An ID for the batch of sensor data. Each sequence includes one Transition, one Pause, and one Gesture.
sequence_counter	int64	mean 43.645234 std 45.717673 min 0.000000 25% 17.000000 50% 35.000000 75% 54.000000 max 699.000000	sequence_counter - A counter of the row within each sequence.
subject	object	[SUBJ_000206 - SUBJ_064387]	subject - A unique ID for the subject who provided the data.
orientation	object	Seated Lean Non Dom - FACE DOWN Lie on Side - Non Dominant Seated Straight Lie on Back	orientation - Description of the subject's orientation during the sequence. Train only.
behavior	object	Relaxes and moves hand to target location Hand at target location Performs gesture Moves hand to target location	behavior - A description of the subject's behavior during the current phase of the sequence.
phase	object	Transition Gesture	phase - Whether the sequence is in transition or the actual gesture
gesture	object	Cheek - pinch skin Forehead - pull hairline Write name on leg Feel around in tray and pull out an object Neck - scratch Neck - pinch skin Eyelash - pull hair Eyebrow - pull hair Forehead - scratch Above ear - pull hair Wave hello Write name in air Text on phone Pull air toward your face Pinch knee/leg skin Scratch knee/leg skin Drink from bottle/cup Glasses on/off	gesture - The target column. Description of sequence Gesture. Train only.
acc_x	float64	[-34.5859375 46.328125]	acc_[x/y/z] - Measure linear acceleration along three axes in meters per second squared from the IMU sensor.
acc_y	float64	[-24.40234375 27.18359375]	
acc_z	float64	[-42.85546875 30.078125]	
rot_w	float64	[0.0 0.9993896484375]	rot_[w/x/y/z] - Orientation data which combines information from the IMU's gyroscope, accelerometer, and magnetometer to describe the device's orientation in 3D space.
rot_x	float64	[-0.9991455078125 0.99981689453125]	
rot_y	float64	[-0.99969482421875 0.99945068359375]	
rot_z	float64	[-0.9981689453125 0.9998779296875]	
thm_1	float64	[-0.3704126477241516 38.457664489746094]	thm_[1-5] - There are five thermopile sensors on the watch which record temperature in degrees Celsius. Note that the index/number for each corresponds to the index in the photo on the Overview tab.
tof_1_v0	float64	[-1.0 249.0]	tof_[1-5]_v[0-63] - There are five time-of-flight sensors on the watch that measure distance. In the dataset, the 0th pixel for the first time-of-flight sensor can be found with column name tof_1_v0, whereas the final pixel in the grid can be found under column tof_1_v63. This data is collected row-wise, where the first pixel could be considered in the top-left of the grid, with the second to its right, ultimately wrapping so the final value is in the bottom right (see image above). The particular time-of-flight sensor is denoted by the number at the start of the column name (e.g., 1_v0 is the first pixel for the first time-of-flight sensor while 5_v0 is the first pixel for the fifth time-of-flight sensor). If there is no sensor response (e.g., if there is no nearby object causing a signal reflection), a -1 is present in this field. Units are uncalibrated sensor values in the range 0-254. Each sensor contains 64 pixels arranged in an 8x8 grid, visualized in the figure below.
IMU sensor derivatives	float64	[-15 15]	**(engineered feature)**The 1st derivative of each IMU sensor reading.
acceleration magnitude	float64	[5 15]	**(engineered feature)**The magnitude of acceleration.
rotation angle	float64	[0.0 1.5]	**(engineered feature)**The real part of the rotation angle.
naive magnitude	float64	[0.0 1.0]	**(engineered feature)**Naive calculation of rotation magnitude.