**User Data**

* **userID**: A unique string identifier assigned to each user upon account creation, ensuring system-wide uniqueness.
* **sessionStartTime**: Timestamp (DateTime) marking the beginning of a user session, used to log interaction duration.
* **sessionEndTime**: Timestamp (DateTime) marking the end of a user session.
* **neuralNetworkWeights**: An array of floating-point values representing personalized neural network weights for individual users, used for gesture customization and consistency across devices.

**Gesture Tracking Data**

* **gestureID**: A unique string identifier for each captured gesture.
* **timestamp**: A DateTime record for each frame in the gesture, stored as a 4D array (x, y, z, time) to maintain continuity of gesture flow.
* **positionX, positionY, positionZ**: Float values representing the 3D coordinates of the LED glove in space, tracking the path of each gesture.
* **PWM Signature**: Pulse Width Modulation rate (Integer) associated with the LED glove, used to uniquely identify and differentiate it from other light sources in the environment.
* **Environmental Conditions**: Describes ambient lighting conditions as a string to adjust gesture tracking parameters accordingly. These conditions help calibrate tracking algorithms for optimal performance.

**Visualization Data**

* **path3DData**: An array of floating-point values representing the smoothed 3D coordinates of the gesture path, processed for VR/AR visualization.
* **deviceType**: A string that specifies the type of device used to ensure compatibility and appropriate display adjustments.
* **renderingSettings**: A string that includes visual quality and responsiveness settings based on device capabilities, adjusting for frame rate, resolution, or latency as required.

**Performance Metrics**

* **frameRate**: A floating-point value representing the rate of video capture during gesture tracking, measured in frames per second (fps).
* **processingTime**: A float representing the time taken to process each frame for gesture recognition, smoothing, and visualization.
* **accuracy**: A float indicating the percentage of correct predictions made by the machine learning model for gesture recognition.
* **Resource Usage**: Logs CPU and memory usage as floating-point values, used to analyze and optimize application performance across devices.