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| Project | **Specification of Sensor Interface for Cyber and Physical World**  <<https://sagroups.ieee.org/2888.1/> **>** |
| Title | **Application programming interfaces of sensors for large space VR training systems** |
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| Re: |  |
| Abstract | This contribution illustrates the application programming interfaces of sensors for large space VR training systems. |
| Purpose | To start discussion on purpose of the standard |
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# Introduction

This contribution illustrates the application programming interfaces of sensors for large space VR training systems.

## Rigidbody sensor

Table 1 – Rigidbody sensor API

|  |  |
| --- | --- |
| Nested Classes | |
| Modifier and Type | Method and Description |
|  |  |
| Constructor | |
| Constructor and Description | |
| Rigidbody() | |
| *Default constructor.* | |
|  | |
| Rigidbody(String id) | |
|  | |
| Rigidbody(String id, String serverIPAddress, integer serverPort) | |
|  | |
| Fields | |
| Modifier and Type | Field and Description |
|  |  |
| Methods | |
| Modifier and Type | Method and Description |
| JSONObject | getRigidbodySensorData() |
|  | *This function returns sensor data from a rigidbody sensor in JSON format.* |
|  |  |

## IMU sensor

Table 2 – IMU sensor API

|  |  |
| --- | --- |
| Nested Classes | |
| Modifier and Type | Method and Description |
|  |  |
| Constructor | |
| Constructor and Description | |
| IMU() | |
| *Default constructor.* | |
|  | |
| IMU(String id) | |
|  | |
| IMU(String id, String serverIPAddress, integer serverPort) | |
|  | |
| Fields | |
| Modifier and Type | Field and Description |
|  |  |
| Methods | |
| Modifier and Type | Method and Description |
| JSONObject | getIMUSensorData() |
|  | *This function returns sensor data from an IMU sensor in JSON format.* |
|  |  |

## Glove sensor

Table 3 – Glove sensor API

|  |  |
| --- | --- |
| Nested Classes | |
| Modifier and Type | Method and Description |
|  |  |
| Constructor | |
| Constructor and Description | |
| Glove() | |
| *Default constructor.* | |
|  | |
| Glove(String id) | |
|  | |
| Glove(String id, String serverIPAddress, integer serverPort) | |
|  | |
| Fields | |
| Modifier and Type | Field and Description |
|  |  |
| Methods | |
| Modifier and Type | Method and Description |
| JSONObject | getGloveSensorData() |
|  | *This function returns sensor data from a glove sensor in JSON format.* |
|  |  |

## Bend sensor

Table 4 – Bend sensor API

|  |  |
| --- | --- |
| Nested Classes | |
| Modifier and Type | Method and Description |
|  |  |
| Constructor | |
| Constructor and Description | |
| Bend() | |
| *Default constructor.* | |
|  | |
| Bend(String id) | |
|  | |
| Bend(String id, String serverIPAddress, integer serverPort) | |
|  | |
| Fields | |
| Modifier and Type | Field and Description |
|  |  |
| Methods | |
| Modifier and Type | Method and Description |
| JSONObject | getBendSensorData() |
|  | *This function returns sensor data from a bend sensor in JSON format.* |
|  |  |