Radar unit interface specification

**v1.0**

# Revision history

|  |  |  |
| --- | --- | --- |
| Date | Version | Description |
| 2015.10.04 | 1.0 | Setup document |

# World-Radar requirements

## Method name: GetObjcetsByTriangle

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| PositionA | Array of Integer | 2 | [0] := x; [1] := y |
| PositionB | Array of Integer | 2 | [0] := x; [1] := y |
| PositionC | Array of Integer | 2 | [0] := x; [1] := y |

Return set (List of):

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| Id | int | - | Identify the object |
| PositionA | Array of Integer | 2 | [0] := x; [1] := y |
| PositionB | Array of Integer | 2 | [0] := x; [1] := y |
| PositionC | Array of Integer | 2 | [0] := x; [1] := y |
| ObjectType | int | - | See the values below ([5](#_ObjectType_values:)) |
| RelativeSpeed | int | 0-150 |  |

Other requirements:

Id value must be the same on each query per object!

## Method name: GetCarPosition

Return set (List of):

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| CarPosition | Array of Integer | 2 | [0] := x; [1] := y |

## Method name: GetDirection

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| CarPosition | Array of Integer | 2 | [0] := x; [1] := y |
| ObstaclePosition | Array of Integer | 2 | [0] := x; [1] := y |

Return set (List of):

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| Direction | Bool | 0-1 | 0 - approach 1 - diverge |

# Radar-Bus requirements

## Method name: SetRadarDetectedObjects

Parameters:

|  |  |  |
| --- | --- | --- |
| Property name | Type | Range |
| PositionX | Integer | Range of Integer |
| PositionY | Integer | Range of Integer |

# Radar-Wheel requirements

## Method name: GetCurrentSpeed

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| CarSpeed | Integer | 0-150 | Actual speed from wheels (km/h) |

# ObjectType values:

1, Human

2, Car

3, Table

4, Pedestrian crossing

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