HERE Maps API - Utility class Vector3D

This article explains how to use the Vector3D utility class.

Introduction

This is a class representing a three dimensional vector. Full description is here:

http://developer.here.net/docs/maps_js/topics_api_pub/nokia.maps.util.Vector3D.html

Usage examples

Let's create a new Vector3D object:

```
>>> myVector = new nokia.maps.util.Vector3D (10, 10, 10) ;
```

This would return and object containing:

```
Object { x=10, y=10, z=10}
```

The "add(other)" method would create the sum of this vector and the added one.

We will create two Vector3D's and then create the third based on adding the 2nd to the 1st Vector3D.

```
>> myVector1 = new nokia.maps.util.Vector3D (10, 10, 10) ;
>> myVector2 = new nokia.maps.util.Vector3D (20, 20, 20) ;
>> myVector3 = myVector1.add(myVector2);
```

We would now have myVector3 to contain:

```
Object { x=30, y=30, z=30 }
```

With the method "angle" we can request, as the name says the relative angle: angle ([px, [py, [intertX, [intertY]]]]) : Number

Example on requesting the angle for myVector3:

```
>>> myVector3.angle();
```

Would return us a numeric value as follows:

```
45.00000000000001
```

And let's try one more operation with the "subtract" method. With it we can get the difference between two vectors:

```
>>> subtracted = myVector3.subtract(myVector1);
```

Would return us:

```
Object { x=20, y=20, z=20}
```

Feel free to try the other methods too, used in a similar manner.

Description of the angle method:

```
angle ([px, [py, [intertX, [intertY]]]]) : Number
Returns the angle of this vector in decimal degree to the given point within a
coordinate system that goes possitive to top/right.

For screen coordinates the Y-axis is inverted. For a normalized vector
the method can be called without parameters to return it's normalized angle.

Parameters:
{Number}      [px]:        The x-coordinate of the point to which the angle shall be calculated, if not given zero is used.
{Number}      [py]:        The y-coordinate of the point to which the angle shall be calculated, if not given zero is used.
{Boolean}     [intertX]:   If given and true, the x-axis is inverted, therefore the coordinates are increasing to the left and decre
{Boolean}     [intertY]:   If given and true, the y-axis is inverted, therefore the coordinates are increasing to the bottom and dec

Returns:
{Number}     The angle of this vector in degree, relative to the given coordinate.
```


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Tested with

- Firefox 12.x

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