HERE Maps API - Coroutines

This article demonstrates the use of HERE Maps API `Coroutine` feature.

Introduction and Prerequisites

Firstly, please read the complete section of `Coroutines` at the HERE Maps API reference. It is explained there in detail, and here is the direct link:

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

The example below is using the same concept as in the How to pan the map example.

As the Coroutine built in serves a similar function to the JavaScript `setTimeout()` and `setInterval()`, you can also utilize them in same type of use cases. The main idea behind the `Coroutine` implementation is to serve as a point of saving some CPU time cycles, while performing multiple tasks during the same mapping program - threading.

Because there is a lot to this subject, it is highly recommended that you read the related API chapter.

Example code

This example will loop from 1 to 500 with 10ms delay. The run is displayed on screen, and after the set time period of `Coroutine` operations, the map will pan to a new position and the `Coroutines` get terminated. Remember to add in your own AppId and Token.

```
function initialiseCoroutines(map){
 // Define the 1st coroutine - increase the value of i by one every 10 milliseconds,
 // until we reach a 500. Watch the screen output for the numbers.
 this.iterationCoroutine = nokia.maps.util.Coroutine.create(
  "iterator", function( scope, context ) {
   i++;

   if ( i <= 500 ) {
    $("#iterator").text("Wait until 500 to see the map move! : "+i+"/500");
    return nokia.maps.util.Coroutine.sleep(10);
   }

   // pan the map to the new position after the loop is over
   this.map.pan(0, 0, 400, 400);
 });

 // Define the 2nd coroutine display iteration in console.log every 100 miliseconds
 this.loggingCoroutine = nokia.maps.util.Coroutine.create(
  "printing", function( scope, context ) {
   $("#printerlog").text( 'logging count = ' + i);
   return nokia.maps.util.Coroutine.sleep(100);
 });

}
```

```
function runCoroutines(){
 // 1st coroutine, init the iteration.
 var coroutine1 = iterationCoroutine();

 // 2nd second coroutine, init the logging.
```


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```
  var coroutine2 = loggingCoroutine();

  // Add an observer to the 1st coroutine for it's status
  coroutine1.addObserver("status", function( context, key, value, oldValue ) {
   if ( value == nokia.maps.util.Coroutine.TERMINATED ) { // When gets terminated
    nokia.maps.util.Coroutine.kill( coroutine2 ); // kill the 2nd coroutine
    $("#showCoords").text( "coroutine1 has finished, and coroutine2 was terminated.");
   }
  });
 }
```

A working example can be found at:

http://heremaps.github.io/examples/examples.html#coroutine

For more on the HERE Maps API

Please check out the HERE Maps API full documentation and API reference here:

- HERE Maps API

You may also access the interactive API explorer

- API explorer

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