HERE Maps API - Converting a map screen pixel to a geo coordinate

This article explains how to convert a map screen's pixel to a geocoordinate. This is useful when we want to know the geocoordinates of the point user had clicked.

Prerequisites

HERE Maps API supported web browser (basically any modern web browser). The example assumes you have already added the HERE Maps to your web page as explained in the previous article HERE Maps API - Add Maps To Any Web Page

Important note about maps credentials

Nokia provides several services options within the Maps API offering. The service is free to use, but you must obtain and use authentication and authorization credentials to use the services. Please read the Terms and Conditions and check the Pricing Plans page to decide which business model best fits your needs. Authentication requires unique Maps API credentials, namely an AppId and a token. You can get these credentials free for free following the instructions here

Implementation

To achieve what we are about to do, we will need to use a method called `pixelToGeo()`, definition below:

```
pixelToGeo (coord) : nokia.maps.geo.Coordinate - this will translate a projected pixel
coordinate into a GEO Coordinate.
```

We also need to use the `EventListener()` and `addListener()` method, which is defined by the HERE Maps API reference as follows: `addListener (type, listener, useCapture)` ObjectRegisters an event listener, depending on the `useCapture` parameter, on the capture phase of the event flow or its target and bubbling phases.

Parameters: {String} type Specifies the event type associated with the event for which the user is registering. {Function} listener The function to be called if the event occurs.

Example code

This example will add a new eventListener on the map and register the "click" event to fire the function `eventListener()`. We will get the position user had clicked and this will be converted from a pixel projection coordinate to a `geo.Coordinate`. The result is sent to screen with JavaScript `Alert()` method. Remember to add in your own AppId and Token.

```
function addClickListener(map){
 map.addListener("click", function (evt){
  alert("in EventListener");
  coordinate = map.pixelToGeo(evt.displayX, evt.displayY);
  alert("Adding a Marker at: "+ coordinate.toString());
  map.objects.add(new nokia.maps.map.Marker(coordinate));
 });
 }
```

A working example can be found at:

http://heremaps.github.io/examples/examples.html#geocoordinate-on-click

For more on the HERE Maps API

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

- HERE Maps API

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You may also access the interactive API explorer

- API explorer

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