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An essay about MapML, TL;DR

Aug 13, 2020

A few weeks ago, I hastily wrote about my thoughts towards the W3C/OGC Joint Workshop Series For Maps On The Web AKA "let's work on MapML"; but the original writing caused quite a stir among some of the readers. That stir, combined with finally being able to enjoy the countryside for the fist time in this weird COVID-19 year, led me to rewrite parts of the statement, and expand on some sub-topics that I didn't cover at first.

The end result is a (somewhat informal) essay about maps on the web about 7000 words long; it might take half an hour to read it in full. I encourage you to do so, but if you're short on time, this summary should give you an overall idea on where I stand in regards to web maps:

Part 1: The motivations of an outspoken Spaniard

I might not be like you. I'm a <u>FLOSS</u> nerd, involved in <u>OSM</u>, <u>OSGeo</u> and Leaflet; I speak for myself; and I am bound by some cultural, moral and political biases. The explanation of my background and biases should help everybody else understand my *position* and *motivations* about maps on the <u>WWW</u>.

Part 2: The Mutant Hacks of the Terms Of Service

Of all the work I've done in Leaflet, perhaps the most interesting piece from a "why does this even exist?" point of view are the plugins in which I use <u>DOM</u> mutation observers to overcome *legalese* restrictions that otherwise would create *performance* issues.

In an ideal world, the *root* non-technical reasons for these hacks should not exist. Standardization cannot affect those reasons.

Part 3: Three Vertical Elephants

Somebody needs to say this: the majority of the web browser market is held by an oligopoly which also holds a big chunk of the web maps market. As a consequence, any standard that web browsers implement is liable to affect or be exploited by web browser makers/maintainers. I think there is a real risk there.

(Due to my biases) I think it's of paramount importance to be aware of the possible worst-case scenario consequences of a standard for maps on the web. These

consequences can be reason enough for me to reject any proposals.

Part 4: Thumbs-up for document accesibility

I can navigate through web maps using a thumbstick. To me, this poses some accessibility questions to me - should any web map implementation be able to be modified to accept such interaction?

Looking at how the <video> HTML element fared over the years can offer some insight. There's a specific set of low-level interactions, and for a time we had a (mostly) consistent UI for video players, until web authors started to put custom UI on top.

The boundary between a *video asset* and a *video player application* is more or less intuitive, but I don't *yet* think that we have a clear distinction between *map assets* and *map viewer application*. This might be a problem, and maybe tile pyramids can help.

Part 5: The Gold, the Moor, and the Sausage Machine

I make actual proposals (even though they might seem radical, weird, random and/or outlandish): don't cap interoperability by means of <u>ToS</u>; standards should enforce code licensing in addition to granting patent rights; fix the "layer" nomenclature; create a P2P protocol for distributing map tiles; browser implementations of slippy (pannable-zoomable) interfaces should be generic (i.e. <slippy>) and not geographical (i.e. <geo>/<mapml>); create a <u>SVG</u>-like markup language for low-ish level OpenGL/WebGL triangles; and a wishlist of how I'd like <u>DOM</u> subtrees to behave.

I shall welcome comments to my essay, preferably in the form of (argumented) written articles/essays.

(Addendum 2020-09-09: Do read also Cory Doctorow's musing about adversarial interoperability and intellectual property)

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