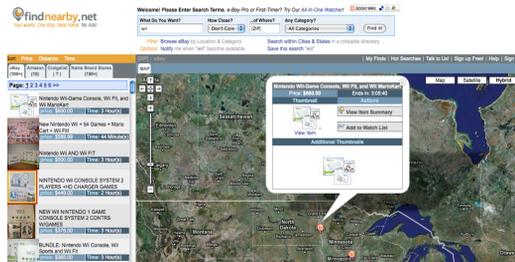


REMIXING THE WEB: FUNDAMENTALS OF MASHUP DEVELOPMENT

What is a mashup?

"A mashup is a web application that combines data from more than one source into a single integrated tool" (Wikipedia)

Most common example: the use of cartographic data from Google Maps to add location information to real-estate data.



```

trim($InfoArray[$i][2][1]); //to
$InfoArray[$i][3] = "... $div->p[2];
$InfoArray[$i][4] = ((strpos('
$div->p[2], "in beiden Richtungen
frei")===false)?1:0);
$output=$output."<traffic<name>".
$InfoArray[$i][0]. "</name><from>".
$InfoArray[$i][1]. "</from><to>".
$InfoArray[$i][2]. "</to><comment>".
$InfoArray[$i][3]. "</comment><notfrei>".
$InfoArray[$i][4]. "</notfrei></traffic>";
$InfoArray[$i][4]. "</notfrei></traffic>";
}

```

```

<?xml version="1.0" encoding="utf-8"?>
<lakes>
<lake>
<name>Genfersee</name>
<capital>Genf</capital>
<latitude>46.45</latitude>
<longitude>6.516667</longitude>
</lake>
<lake>
<name>Bodensee</name>
<capital>Kreuzlingen</capital>
<latitude>47.633333</latitude>

```

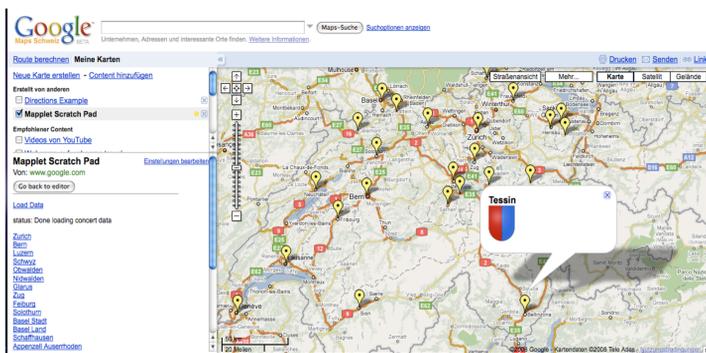


How does it work?

The web service retrieves the data from one or more sources via a structured data file and combines it. The goal of a mashup is to present information to a user in a usable format.

Example: information about real-estate properties is shown on a map. The user can see where the properties are located.

FIRST STEPS WITH GOOGLE MAPPLETS

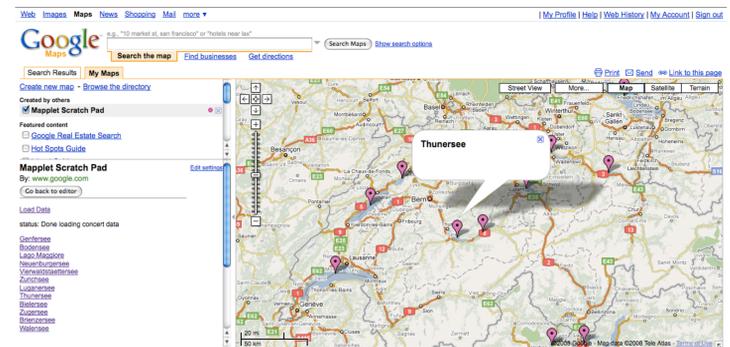


Swiss Cantons and Swiss Lakes

Our first task was to create two mashups based on Google Mapplets. One mashup was about the Swiss cantons; the other one was about the Swiss lakes. In both cases, we manually produced the XML data file.

What we learned

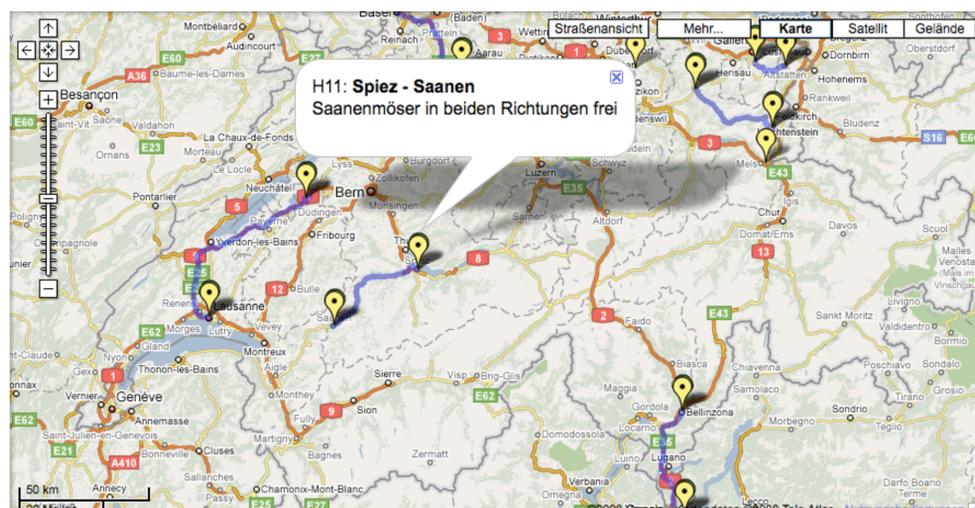
- HTML
- How to retrieve data from an XML file
- Javascript
- How to write Google Mapplets



FINAL PROJECT

Monitoring the traffic on the Swiss mainroads

We created a mashup that retrieves data from swissinfo.ch. These data contain information about the traffic on the main roads in Switzerland. This information is then displayed on a map.



What we learned

- Screen scrapping (fetching data from a website that does not provide an API)
- How to deal with unstructured data
- How to organize and structure the data for further use
- How to use Google Maps Geocoder to get the coordinates of a location