Inserting data to Wikivoyage templates

solutions, problems, and needs

Roland Unger
WikidataCon 2017, Berlin, 2017/10/28
By the way...

- ...Wikivoyage is the Wikimedia travel guide, i.e. the sister of Wikipedia and Wikidata
- 19 languages
- 27,000 sites at Wikivoyage/en, 16,000 at Wikivoyage/de
- 9 years’ experience on German Wikivoyage with data bases: location data base, Wikidata
Mayor Wikidata-based applications

• Infoboxes ("quickbars")
  ▪ fetching data like region, count of inhabitants, contact information of tourist offices, and for location maps
  ▪ With edit link to Wikidata in case of missing and different values

• Listing templates
  ▪ presenting data of institutions like hotels, museums, and so on. About 40 parameters can be specified. Most of them can be stored on Wikidata
  ▪ About 3,500 Lua code lines

• ...

• Kartographer map support
Examples

Dresden

<table>
<thead>
<tr>
<th>Bundesland</th>
<th>Sachsen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Einwohner</td>
<td>531.982 (2014)</td>
</tr>
<tr>
<td>Höhe</td>
<td>112 m</td>
</tr>
<tr>
<td>Tourist-Info</td>
<td>+49 (0)351 501 501</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.dresden.de">www.dresden.de</a></td>
</tr>
</tbody>
</table>

Lage

Karte vom Standort

Volks Mehod Hotel (沃克善美酒店), NO.1, Zhenxun Rd, Nanxun District, 313000 Huzhou, China. Tel.: +86 139 4961 4920. Das empfehlenswerte Hotel hat recht schöne Zimmer und ein angenehmes Ambiente. Im Zimmerpreis enthalten sind WiFi und Frühstück. Toilette und Dusche haben eine Glasfront, deren oberer Teil (ca. 30% der Türhöhe) allerdings offen ist. Check-in: 12:00. Check-out: bis 17:00. Preis: ab EUR 50. Akzeptierte Kreditkarten: Visa, Unionpay. [Letzte Änderung: Dez. 2016] [Info | bearbeiten]
Property-related problems

• Name of the first-order administrative entity for all countries of the world
  ▪ Simple: getting last-order entity
• Simplifying the instance of an institution P31 (interchange station ➔ railway station)
• Handling overseas territories (language, currency may differ)
  ▪ Maybe different language, currency, international calling code...
Software-related problems

• Slashing computing time: templates were used up to 200 times per article
• Expensive Lua calls, in particular for getting entity objects for countries and cities with a huge number of properties
• Example: city of Bremen (https://de.wikivoyage.org/wiki/Bremen)
  ▪ With optimization: 165 listing templates need 2.500 msec
  ▪ Without optimization: estimated 20 sec
Solutions

• Tables, tables, tables...
  ▪ To prevent expensive access to Wikidata
  ▪ Worldwide list of administrative regions to ignore or to accept
  ▪ List with all data needed settlement → administration entity → country → Wikidata
  ▪ List of known instances

• Digging through up to five successive levels and comparing instances with data stored in Lua tables
  ▪ P31 → P279 (subclass) → P279 ...
Future solutions and apps

• SPARQL queries to simplify code and reduce computing time
• Enhanced Lua interface
  ▪ Filtering entity objects to reduce computing time. Normally only a small set of properties are really needed
    o Yesterday’s talk: it will be available soon
  ▪ Additional comfortable Lua functions
  ▪ Maximum count of values for a property excluding null values
• Direct editing of Wikidata entities
• Travel planner
• Review forum
Thanks

- I thank you for your attention.
- If you have questions please contact me at the conference.