Enhancement of Feratel Webcam Annotations and Analysis of Annotatable Contents

The current markup is tested against Google’s structured test tool to see recommendations and failures. As an example Ischgl webcam web page is used.

1) Current Annotation Situation

The result in the structured data test tool as below:

<table>
<thead>
<tr>
<th>Detected</th>
<th>8 ERRORS</th>
<th>1 WARNING</th>
<th>2 ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VideoObject</td>
<td>1 ERROR</td>
<td>1 WARNING</td>
<td>1 ITEM</td>
</tr>
<tr>
<td>BreadcrumbList</td>
<td>7 ERRORS</td>
<td>0 WARNINGS</td>
<td>1 ITEM</td>
</tr>
</tbody>
</table>

There are 2 annotations found. “BreadcrumbList” type has the following errors:

As stated in the error, “rel = alternate” is not recognized by Google’s structured test tool. The lines regarding

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1. [https://www.feratel.com/webcams/](https://www.feratel.com/webcams/)
2. [https://search.google.com/structured-data/testing-tool](https://search.google.com/structured-data/testing-tool)
the errors in “BreadcrumbList” type are as in the following:

For “VideoObject” which is considered as the main annotation regarding the web content, the following annotation is observed in Google’s structured tool:

As it can be seen, description value is required (and recommended).

2) Enhancement of the Annotation

To improve the quality of the annotation following implementations are added:

- As a description “Wo liegt X?”@de or “The Community of X”@en (X stands for Ischgl in this case) part could be added.
- A “Place” type should be added with the following properties:
  address: {
    “@type” : PostalAddress,
    “addressCountry” : (Austria - This information can be fetched from Breadcrumblist),
    “addressRegion” : (Tyrol - This information can be fetched from Breadcrumblist),
    “addressLocality” : (Ischgl - This information can be fetched from Breadcrumblist),

  “email” : (info@ischgl.com) (This information can be fetched from floating text)
  “telephone” : (+43-50990-100)(This information can be fetched from floating text)
- The “VideoObject” type should be extended with the following properties: (Note that not all are video objects. Some are just images, which in this case MediaObject should be used.)

  ```json
  { 
    contentUrl : http://streamsrv15.feratel.co.at/streams/1/05576_5a995836-f322Vid.mp4?dcsdesign=WTP_feratel.com // Please make it consistent if the streaming link changes.
    encodingFormat : (mp4) // If It is a image “jpeg” or so.
  }
  ```

- The value of “name” property for “VideoObject”(or MediaObject) should change to the one in the crousel as well as thumbnailUrl, which means it will be array of annotations.

3) The Resulting Annotation Example

There are some more minor changes. You can read the comments for all changes in the following example. The enhanced annotation should look like this:
"@context": {
  "@vocab": "http://schema.org/",
  "@language": "en"
},
// Normally, "@context": "http://schema.org/" just works fine. But if you want to include language tags which will enrich the semantics, that is the way. You can check the following link for further details: https://www.w3.org/TR/json-ld/#string-internationalization
"@type": ["VideoObject","Place"], // Place type is added
"name": "Ischgl - Idalpe", // updated from "Ischgl",
"contentUrl": "http://webtv.feratel.com/webtv/?design=zwspg-DA7D2F22-8600-464D-904F-CD8801446C56cam=557561g-oncl46fcl=1", // new added
"encodingFormat": "mp4", // new added
"uploadDate": "2016-06-30",
"aggregateRating": {
  "@type": "AggregateRating",
  "@id": "http://www.feratel.com/webcams/oesterreich/tirol/aggregateRating" - removed, Why?
  // 2 - It does't comply with LOD principles, there is nor rdf and html representation neither the page exist, it redirects to the mainpage.
  // 2 - If you use this url to describe this instance, other instances of aggregate rating should have different URIs since they describe different instances which is not the case in the implementation. URI = Uniform Resource Identifier - "IDENTIFIER"
  "ratingCount": "169",
  "worstRating": "1",
  "bestRating": "5",
  "ratingValue": "3.5"
},
"description": "Ischgl is situated at 1,377 m above sea level in the province of Tyrol. The community has 1,500 inhabitants and covers an area of 183,3 km². ", // newly added
"address": { // newly added
  "@type": "PostalAddress",
  "addressCountry": "Austria",
  "addressRegion": "Tyrol",
  "addressLocality": "Ischgl",
  "email": "info@ischgl.com",
  "url": "www.ischgl.com"
}
The Google structured result is as following:

The annotation in JSON-LD format as it follows, you can copy and try yourself:

```
{  
    "@context": {   
      "@vocab": "http://schema.org/",   
      "@language": "en"   
  },  
  "@type": [  
    "VideoObject",  
    "Place"  
  ],  
  "name": "Ischgl - Idalpe",  
  "contentUrl": "http://webtv.feratel.com/webtv/?design=v3&pg=DA7D9F22-8600-464D-9D4F-C6DB01C5E6C5&arr=5575&lg=en&sc=0&flc=1",  
  "encodingFormat": "mp4",  
  "uploadDate": "2016-06-30",  
  "description": "Ischgl is situated at 1,377 m above sea level in the province of Tyrol. The community has 1,500 inhabitants and covers an area of 103.3 km².",  
  "aggregateRating": {  
    "@type": "AggregateRating",  
    "ratingCount": 160,  
    "worstRating": 1,  
    "bestRating": 5,  
    "ratingValue": 3.5  
  },  
  "address": {  
    "@type": "PostalAddress",  
    "addressRegion": "Tyrol",  
    "addressLocality": "Ischgl",  
    "email": "info@ischgl.com",  
    "url": "www.ischgl.com",  
    "addressCountry": {  
      "@type": "Country",  
      "name": "Austria"  
    }  
  }  
}
```

The annotation provides structured data for a video object about Ischgl - Idalpe, including metadata such as the name, thumbnail URL, and address. The place type is added, with an updated name from "Ischgl" to "Ischgl - Idalpe". The update from the previous URL "http://www.feratel.com/uploads/tx_iccferatelwebcam/webcams/D80B637C-5F72-41E3-82CA-66D3D97C8F7B.jpg" which gives 404.
"encodingFormat" : "mp4", //new added
"uploadDate" : "2016-06-30",
"aggregateRating" : {
  "@type" : "AggregateRating",
  // 1- It doesn't comply with LOD principles, there is nor rdf and html representation neither the page exist, it redirects to the mainpage.
  // 2- If you use this url to describe this instance, other instances of aggregate rating should have different URIs since they describe different instances which is not the case in the implementation. URI = Uniform Resource Identifier - "IDENTIFIER"
  "ratingCount" : "160",
  "worstRating" : "1",
  "bestRating" : "5",
  "ratingValue" : "3.5"
},
"description" : "Ischgl is situated at 1.377 m above sea level in the province of Tyrol. The community has 1.500 inhabitants and covers an area of 103,3 km²."
},
"@context" : {
  "@vocab" : "http://schema.org/",
  "@language" : "en"
},
"@type" : ["VideoObject","Place"],
"name" : "Ischgl - Partadschgrat",
"thumbnailUrl" : "http://wtvpict.feratel.com/picture/40/5576/6BC02474-633C-4CC0-B5F8-6DF098327B40.jpeg?design=noxdesign&dcsdesign=WTP_feratel.com_Webseite",
"contentUrl" : "http://webtv.feratel.com/webtv/?design=v3&pg=DA7D2F22-8600-464D-9D4F-CDB04014A6C5&cam=5575&lg=en&c1=0&flc=1",
"encodingFormat" : "mp4",
"uploadDate" : "2016-06-30",
"aggregateRating" : {
  "@type" : "AggregateRating",
  "ratingCount" : "160",
  "worstRating" : "1"
"bestRating" : "5",
"ratingValue" : "3.5"
},
"description" : "Ischgl is situated at 1.377 m above sea level in the province of Tyrol. The community has 1.500 inhabitants and covers an area of 103.3 km²."
"address": {
   "@type" : "PostalAddress",
   "addressCountry" : "Austria",
   "addressRegion" : "Tyrol",
   "addressLocality" : "Ischgl",
   "email" : "info@ischgl.com",
   "url" : "www.ischgl.com"
}
]

4) Other Annotatable Contents

- In the “Lift/Slopes⁴” part, there are considerable amount of instances to be annotated. The current annotations have BreadcrumbList and VideoObject which could/should be extended to SkiResort. Number of lifts and pistes can be added as amenityFeature⁵.

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⁵ http://schema.org/amenityFeature
⁶ http://schema.org/openingHours
Point\(^7\) (or address).

Start of season in Berwang?

**Winter season:** Dec 16, 2017 – Apr 08, 2018
Opening hours: daily 09:00 am – 04:40 pm

**Summer season:** May 19, 2018 - Oct 07, 2018
Opening hours: daily 09:00 am – 04:30 pm (except Tuesday)

Contact

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- Top-Hotels\(^8\) section has only 4 hotels for 2 regions (for Tirol 1 hotel, for Salzburg 3 hotel). These hotels can be annotated by using Hotel\(^9\) types with name, description, contactPoint, containsPlace for Restaurant and Bars, amenityFeature for Sauna,Spa,Pools and starRating which can be seen in the title.