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# Microformats for Gastronomy Businesses



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# Agenda

- Introduction
  - Problems and Use Cases
  - What are microformats?
- Methodology used
- Overview of the resulting Formats
- Next Steps

current problems:

- manual data input, dissemination of data and interaction of systems (e. g. on gastronomy search sites like <http://www.essenfinden.at>)
- limited searchability (keyword based search out of context)

## possible solutions:

- adding metadata for machine readability and interpretability through:
- external documents: RDF, OWL, ontologies (Antoniou and van Harmelen, 2008; Allemang and Hendler, 2008)
- internal documents: RDFa, microformats (Adida and Birbeck, 2008; Khare and Celik, 2006)

# Example

```
<span class="adr">
```

```
<span class="postal-code">A-3874</span>
```

```
<span class="locality">Haugschlag</span>
```

```
<span class="street-address">Haugschlag  
160</span>
```

```
<span class="country-name">Austria</span>
```

```
</span>
```

# What are microformats?

Additional markup in a webpage:

```
<html>
```

```
<span class="vevent">
```

```
  <span class="summary">GWTTRA Conference 2012</span>
```

```
  from <span class="dtstart">2012-04-19</span> to
```

```
<span class="dtend">2012-04-21</span>
```

```
is held at <span class="location">
```

```
<span class="vcard">
```

```
<span class="org fn"><span class="organization-name">Vintage
```

```
  Plaza</span></span>, <span class="adr"><span class="locality
```

```
  none">Portland</span><span class="street-address">422
```

```
  Southwest Broadway</span> <span class="country-name
```

```
  none">USA</span></span></span>.
```

```
</span> </span>
```

```
</html>
```

# Examples in the Tourism Domain

- Contact information (address format):  
<http://www.golfresort.at/>
- electronic business card (vCard):  
<http://www.gasthof-stollhofer.at/>

- Definition of the problem and the field of application
- Information extraction and search for existing solutions
  - If none are found ->
- Extract structure from relevant websites
- Find suitable solutions for parts of the structure
- Define your own solutions for those parts where no partial solution exists
- Define allowed content for complete structure
- Normalize (using XMDP)



# Result: beveragecard format

- Root element: „beveragecard“
- Required element: beveragename: free string value
- Optional elements:
  - Containers:
    - beveragecard: contains elements of type „beveragetype“
    - beveragetype: contains types of beverages (e. g. soft drinks)
  - Optional elements:
    - beveragename: string
    - description: string
    - ingredient:
      - amount: float
      - price:
      - season:
      - region:

# Result: menucard format

- Root element: „menucard“
- Required element: dishname: free string value
- Optional elements:
  - Containers:
    - validity: time span for with menu is valid
    - dishtype: e. g. soup
    - dish:
      - Optional elements:
        - dishname: string
        - description: string
        - ingredient:
        - sidedish: float
        - price:
        - healthinfo: e. g. „suitable for diabetics“

# Result: gastronomy business format

- Root element: „business“
- Required element: business: free string value
- Optional elements:
  - garden: boolean
  - type: type of restaurant, string
  - review: review microformat
  - geolocation: geo microformat
  - address: hcard microformat
  - onlineorders: boolean
  - ...

- Spread the use of this technology
  - Education
  - Projects (showing advantages and problems)
- Encourage Software Creation
- Further Research concerning Impediments

# Questions and Comments?

