Multimedia im Netz

Online Multimedia

Winter semester 2015/16

Tutorial 11 – Major Subject
Today’s Agenda

• Metadata Bingo
• MPEG-7
• Electronic Books
• (if time: Mashups-Showcase)
Breakout: Metadata Bingo.

- Draw a 5x5 grid on a sheet of paper (A4, use all space)
- Write down these 25 terms in a **random order**: 

<table>
<thead>
<tr>
<th>Essence</th>
<th>Content</th>
<th>Embedded meta data</th>
<th>MPEG-7</th>
<th>ID3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial Segment</td>
<td>Segment-graph</td>
<td>high level, structured meta data</td>
<td>High level unstructured meta data</td>
<td>Low level meta data</td>
</tr>
<tr>
<td>GraceNote</td>
<td>Feature extraction</td>
<td>Fingerprint</td>
<td>Temporal Segment</td>
<td>EXIF</td>
</tr>
<tr>
<td>Dublin Core</td>
<td>RDF</td>
<td>Shape Descriptor</td>
<td>Automatic Score Transcription</td>
<td>Shazam</td>
</tr>
<tr>
<td>Moving Pictures Expert Group</td>
<td>Still Region</td>
<td>Structural Relation</td>
<td>Above</td>
<td>Resource</td>
</tr>
</tbody>
</table>
MPEG-7

• What is it?
  A very broad standard for multimedia content description (Metadata)

• Idea:
  standardize the way metadata is created and searched

• Aspects of the standard:
  – Description Schemes
  – Descriptors
  – Description Definition Language
Annotation - Caliph / Emir

[Image of a computer interface with text and a screenshot of a web page]

https://github.com/dermotte/CaliphEmir

Picture: Joel Goodman, http://joelgoodman.photoshelter.com/gallery-image/01-01-2016-New-Years-Day-Revellers/G0000BJ3yOKL5bj0/I0000d8BEomSjDVc
Segment Graphs / Description Schemes

Source: https://homepages.thm.de/~hg10013/Lehre/MMS/SS04/seibel/
Example

Segment Image

Is composed of

(Component) A  (Component) C  (Component) B

Is below Is close to

Is left of
Breakout: Create a Segment Graph

• Photo removed in public PDF version.

Picture by Joel Goodman,
http://joelgoodman.photoshelter.com/gallery-image/01-01-2016-New-Years-Day-Revellers/G0000BJ3yOK15bi0/I0000d8BEomSiDVc
Electronic Books
Electronic Books

• Briefly: e-Book
• Idea: Read books on digital media, e.g. computers, tablets...
• Various formats (.awz, .epub, .mobi)
• Not only digital versions of printed books, but also solely digital books (e.g. those that were not accepted by print publishers)
ePub

• Container format for e-books
• Open standard to replace / extend the *Open eBook Publication Structure, OEBPS*
• Look inside an ePub:

http://www.gutenberg.org/ebooks/1661
## ePUB - Standard Structure

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mimetype</td>
<td>MIME type, e.g. application/epub+zip</td>
</tr>
<tr>
<td>META-INF/</td>
<td></td>
</tr>
<tr>
<td>container.xml</td>
<td>Format definition</td>
</tr>
<tr>
<td>OEBPS/</td>
<td></td>
</tr>
<tr>
<td>content.opf</td>
<td>Meta data, e.g. Dublin Core</td>
</tr>
<tr>
<td>chapter1.xhtml</td>
<td>Chapter (actual book content)</td>
</tr>
<tr>
<td>ch1-pic.png</td>
<td>Image file</td>
</tr>
<tr>
<td>css/</td>
<td></td>
</tr>
<tr>
<td>style.css</td>
<td>Layout</td>
</tr>
<tr>
<td>myfont.otf</td>
<td>Font</td>
</tr>
<tr>
<td>toc.ncx</td>
<td>Table of contents (XML)</td>
</tr>
</tbody>
</table>
Round-Up Quiz

2. What are problems with using MPEG-7?
3. Can you use ePub on an Amazon Kindle? Discuss the implications.
Preparation

• As a final chapter of this semester, we will dive into the Polymer Library (sorry, no Angular this semester)
• It is necessary that you read at least some introductions or do some tutorials before we talk about Polymer.
• Here are some links that are highly recommended:
  – MUST DO: https://www.polymer-project.org/1.0/docs/start/what-is-polymer.html
  – https://www.polymer-project.org/1.0/docs/start/quick-tour.html
  – https://angular.io/docs/js/latest/guide/
  – https://github.com/timjacobi/angular2-education
Thanks!

What are your questions?