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WiTTReader

Facsimile-Reader with
extracted and highlighted
WiTTFind-hits



Outline

- What does interoperability mean?
- What is the current status?
- Live demo of the current status
- What's new?
- Live demo of the new technologies



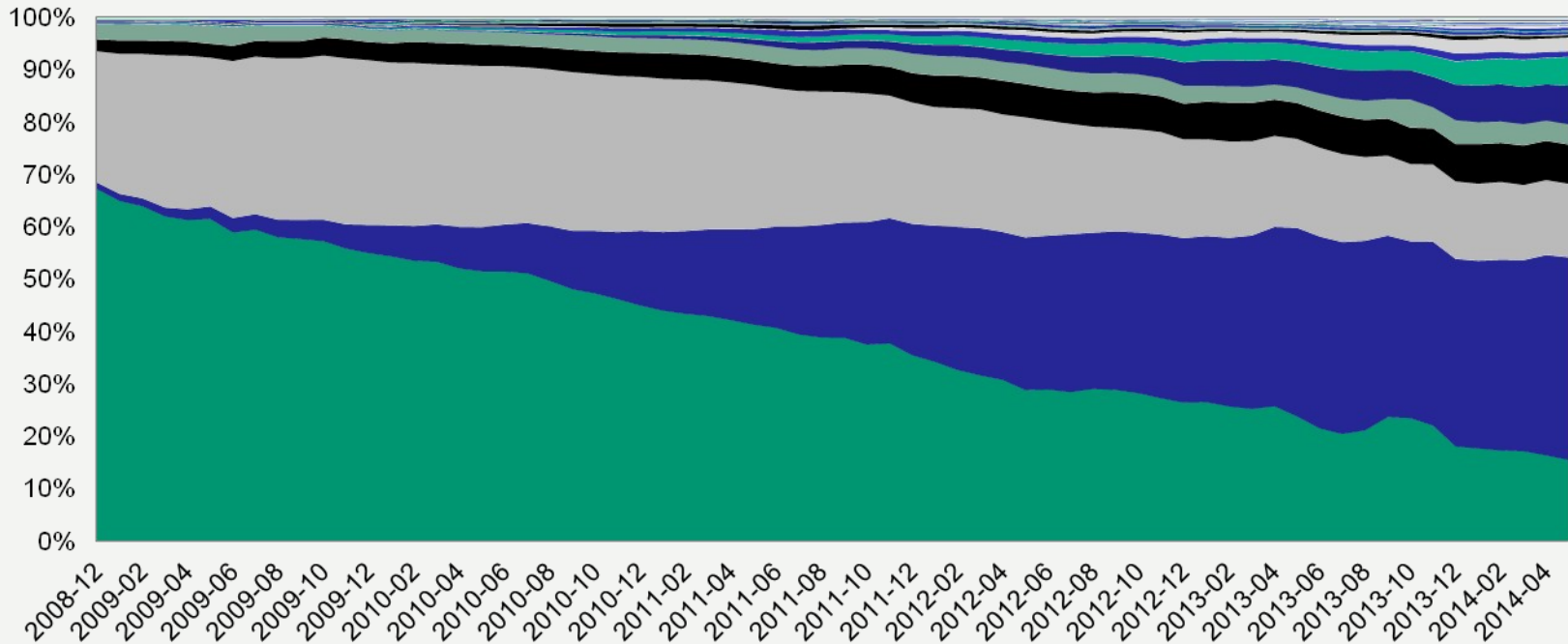
Interoperability

Application $\xrightarrow{?}$ User

- For the last few years, diversity in IT has been on a steep rise.
- This means that interoperability is a more important concern than ever.
- For our purposes, it can be roughed down to this:
 - Established open standards
 - Developers who enforce them
- Example of such a standard: JQuery, abstracts client processes in order to improve interoperability. It is supported by all important browsers at this point.



Usage Share of Web Browsers



- | | | | | | |
|-------------|----------------|--------------------|---------------|------------------|------------|
| ■ IE | ■ Chrome | ■ Firefox | ■ Safari | ■ Opera | ■ Android |
| ■ iPhone | ■ Nokia | ■ UC Browser | ■ BlackBerry | ■ iPod Touch | ■ NetFront |
| ■ Maxthon | ■ IEMobile | ■ 360 Safe Browser | ■ Sony PS3 | ■ Yandex Browser | ■ Mozilla |
| ■ Dolfin | ■ Silk | ■ Sogou Explorer | ■ Unknown | ■ Samsung | ■ Chromium |
| ■ AOL | ■ QQ Browser | ■ SeaMonkey | ■ Jasmine | ■ Openwave | ■ Obigo |
| ■ RockMelt | ■ SonyEricsson | ■ Sony PSP | ■ Flock | ■ Puffin | ■ Iron |
| ■ Pale Moon | ■ TheWorld | ■ Phantom | ■ AppleWebKit | ■ Other | |

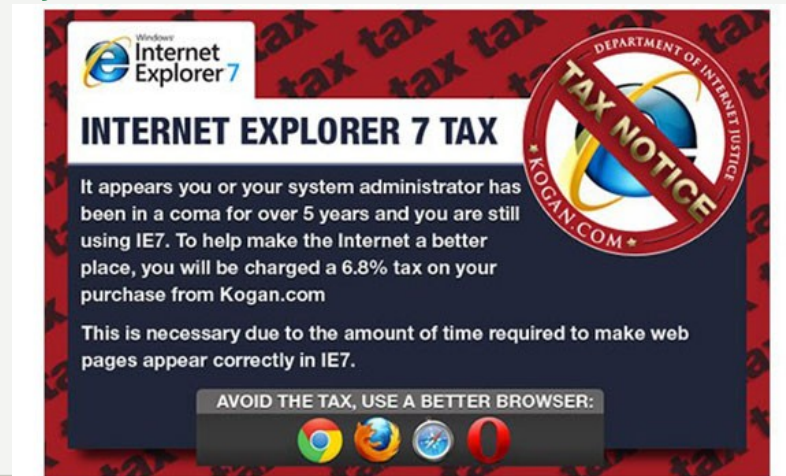


The Problem of Internet Explorer

- Even though its percentage share is falling, Internet Explorer is very much in use.
- Why is this a problem?
 - Internet Explorer is known for its slow update frequency, leading to a variety of security issues, as well as its bad performance.
 - Even though the newest version, IE 11, is considered to be better than its predecessors, it still lags behind its main competitors, Firefox, Chrome and Safari.
 - Additionally, many users are still equipped with one of the older versions, which do not display many websites correctly.

The Problem of Internet Explorer

- For all these reasons, and many more, some companies and web developers, among them Google and Facebook, have finally decided to no longer support IE 7.
- This just showcases the importance of interoperability – not even its still significant market share, neither the fact that it was made by one of the most powerful organizations in the world could save it when its compatibility was just too low.





How did we do?

- Try it out! We tested it on many popular current browsers (Chrome, Firefox, IE 11, Safari, Opera and the Android web browser), and we still have to find an incompatibility of any kind.



Current status

- Fully implemented in PHP
- Presentation of a single siglum with all corresponding pages
- Static size
- Index of coordinates in a simple text file



Coordinates

- A list of coordinates for all the siglen

```
Ts-213,0r[1]/Ts-213,0r.jpg/style="top:244px; left:330px; height:39px; width:250px;"  
Ts-213,1r[1]/Ts-213,1r.jpg/style="top:249px; left:143px; height:39px; width:705px;"  
Ts-213,1r[2]/Ts-213,1r.jpg/style="top:376px; left:134px; height:99px; width:847px;"  
Ts-213,1r[3]/Ts-213,1r.jpg/style="top:518px; left:134px; height:70px; width:847px;"  
Ts-213,1r[4]/Ts-213,1r.jpg/style="top:593px; left:134px; height:178px; width:847px;"
```



Live demo of the current status



New technologies

- Implemented in Javascript with jQuery and turn.js
- Creation of a collection with all WiTTFind-hits included
- Availability of all the TS-213 pages at once
- Dynamically load only of the required pages
- Resizable
- Index of coordinates in a JSON file
- New Helpbox
- Possibility to switch between the hits



Collection of all WiTTFind-hits

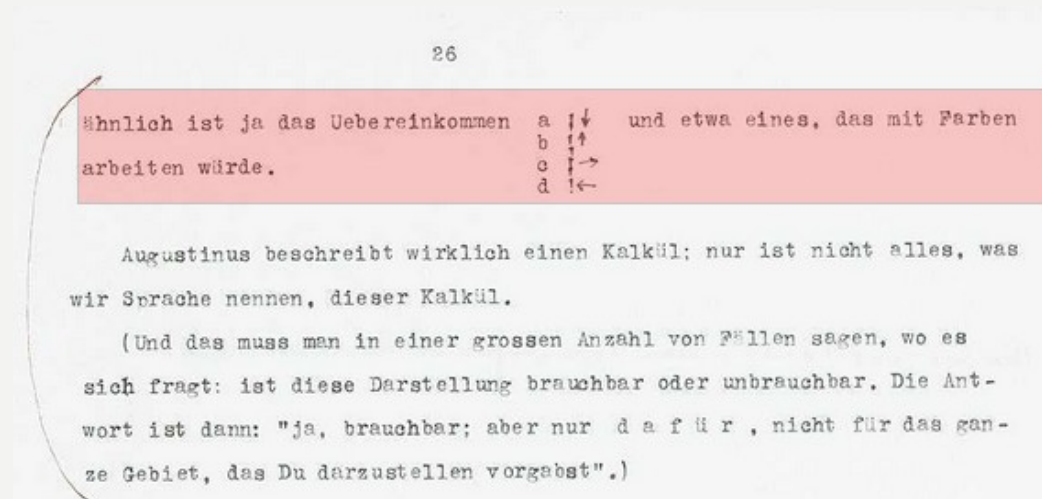
- Central part: 'Ts-213_X_ciswab.xml.wfc.out'
- Contains information the search engine returns after each query
- 'n' attribute of the hit-tag → Siglum information
- Flexible Design
 - Easy implementation of additional services (no pipeline)
 - Easy possibility to add information to the .out - file
→ Without interfering with existing utilities

```
<hit n="Ts-213,i-r[7]_1" f="Ts-213,i-r" abnr="7" satznr="15" no="0">  
<match from="10562" to="10571" pos="7" token="verstehen" tag="VVINF" id="35613" gc="+V+refl+tr" ic=":1mGc:1mGi:3mGc:3mGi:OI" />  
</hit>  
<hit n="Ts-213,ii-r[14]_1" f="Ts-213,ii-r" abnr="39" satznr="91" no="1">  
<match from="43494" to="43503" pos="4" token="verstehen" tag="VVFIN" id="35613" gc="+V+refl+tr" ic=":1mGc:1mGi:3mGc:3mGi:OI" />  
</hit>  
<hit n="Ts-213,ii-r[14]_2" f="Ts-213,ii-r" abnr="39" satznr="92" no="2">  
<match from="43914" to="43923" pos="2" token="verstehen" tag="VVFIN" id="35613" gc="+V+refl+tr" ic=":1mGc:1mGi:3mGc:3mGi:OI" />  
</hit>
```



Highlighting

- Siglum → Page and paragraph of the hit
- CSS-script does the highlighting
- Runs for all currently shown excerpts





Choices

- Why highlight a paragraph instead of a word?
 - Because Wittgenstein wrote in short paragraphs (2-3 sentences, very seldomly more than 5), and his work is only understandable in context
- Why not join the pipeline of content presentation for the reader?
 - Because changes there could effect the reader, which is supposed to stand independently
- Why not ask the search engine only for the information we need right now?
 - Because the search engine is the only module that needs to have access to the actual data. By minimizing the accesses to it, we can turn it into the only service which needs to be run on our servers – all other work can then be finished locally




Index in JSON format

- Much better accessibility than with a plain text file

```
"coordinates": [  
  {  
    "siglum": "Ts-213,i-r[1]",  
    "coordinates": {"top": "6%", "left": "36%", "height": "3%", "width": "24%"}  
  },  
  {  
    "siglum": "Ts-213,i-r[2]",  
    "coordinates": {"top": "8%", "left": "12%", "height": "3%", "width": "81%"}  
  },  
  {  
    "siglum": "Ts-213,i-r[3]",  
    "coordinates": {"top": "11%", "left": "12%", "height": "3%", "width": "69%"}  
  },  
]
```

Helpbox with user guide

BEDIENUNGSANLEITUNG 

WITTRReader 2014

1. Blättern durch alle Seiten
 - zur nächsten Seite mit dem Pfeil nach rechts,
 - zur vorherigen mit dem Pfeil nach links
2. Blättern durch alle Treffer von WITTFind
 - zum nächsten Treffer mit n,
 - zum vorhergehenden mit p

Beim nächsten Start die Anleitung nicht mehr anzeigen

LMU

LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

Centrum für Informations- und
Sprachverarbeitung (CIS)
Wittgenstein Scholarship 2014



**Live demo of the
new technologies**

Wittgenstein Scholarship 2014 CIS, München, June 5. and 6.



Possible next steps

- User language dependent
- Correspondent edition to the shown facsimile