



Increased content accessibility for wikis and blogs

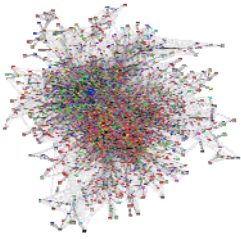
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At a glance



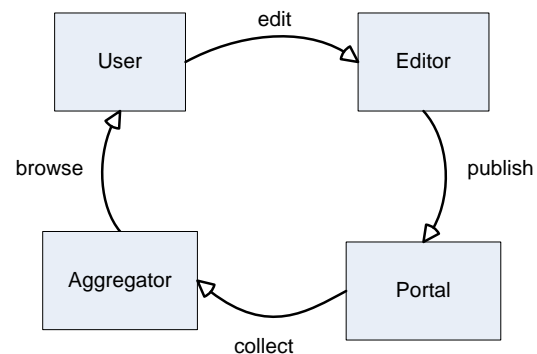
- Content in social media applications is contributed by users, who are
 - non-experts in web page design
 - unaware of accessibility guidelines
- Social media content is provided in a structured way (by filling predefined forms) and is exported in a structured format
- We introduce the framework for aggregators of social media sources, which will become a one-stop-shop solution for social media readers
 - Structured content and User presentation preferences will be used in the adaptation process in order to improve web accessibility



Content lifecycle



- Accessibility of social media content is supported by
 - Template driven editing of content (HTML forms)
 - Content distribution standards (RSS, Atom)
 - Aggregation (of presentation-independent data) and redistribution
 - End user browsing solutions (browser plugins, extensions and add-ons)



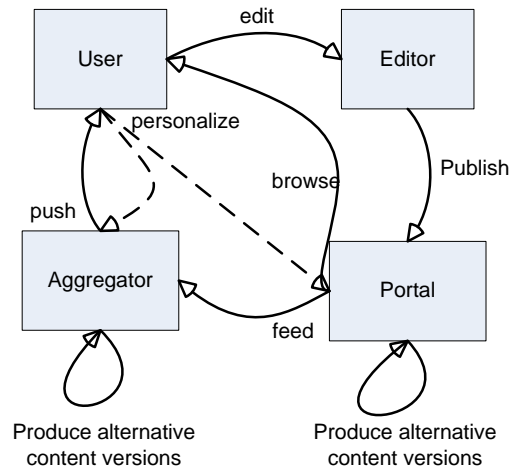


Our suggestion



• Increased accessibility with limited user awareness

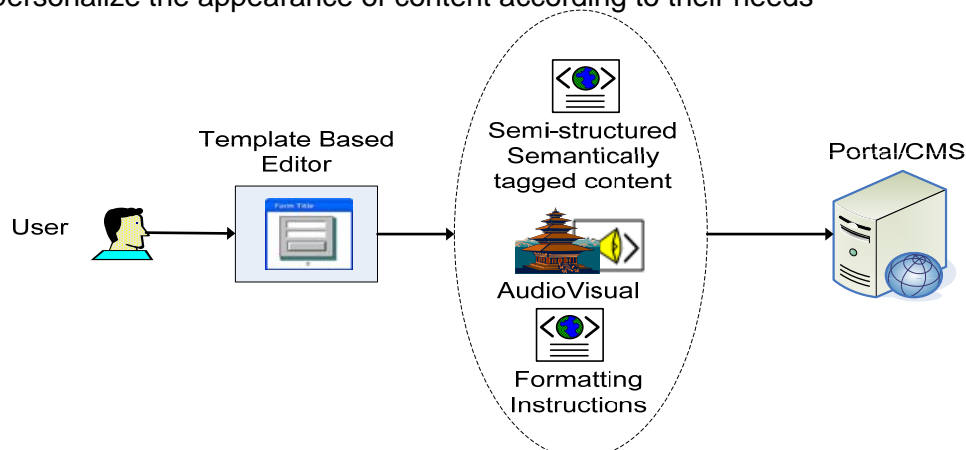
- Users
 - As writers will provide content, **metadata** and optionally **alternative content formats**
 - As readers will provide **browsing preferences**
- Social media software
 - will wrap user-provided content in well structured and meaningful feeds and increase the available content formats
- Aggregators
 - will collect readers' preferences and provide alternative versions of content when necessary

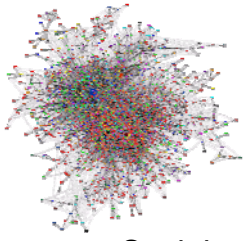


More specifically 1/3



- Extent content editors in order to allow writers to:
 - provide plain content (image, text, video)
 - choose among a range of different presentation options
 - attach useful metadata (selected language for text; format, sampling dimensions and alternative representations for image, video and audio)
- and readers to
 - personalize the appearance of content according to their needs

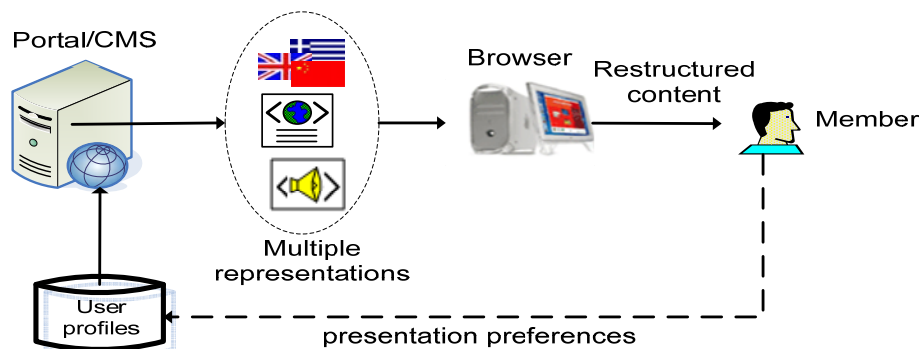




More specifically 2/3



- Social media software
 - will gather the preferences and presentation needs from users (user profiles) and create formatting instructions for content (font size, colors, language, audio or visual representation - in the form of XSL files)
 - will recompile content and provide additional content formats (e.g. using text to speech applications, translators etc)
 - will assemble content to XML feeds
- The combination of XML feeds and XSL will provide restructured content, which matches user browsing preferences



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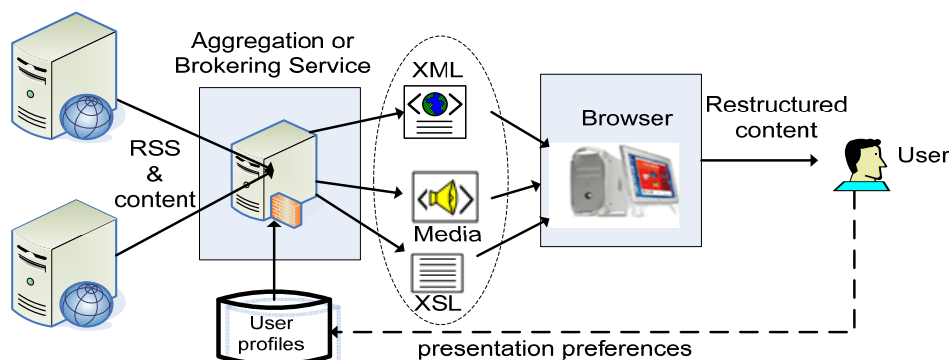
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More specifically 3/3



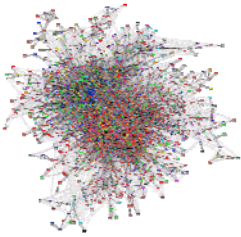
- Content aggregation services
 - will store user (reader) profiles
 - will gather RSS (XML) feeds and audiovisual alternatives
 - will provide more content alternatives, where needed
 - will present the reconstructed content to the user
- All user's preferences and disabilities must be considered



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End users



- Can still use widgets or browser extensions and toolbars for supporting screen readers or other devices in order to read contents from social media

but have the alternative

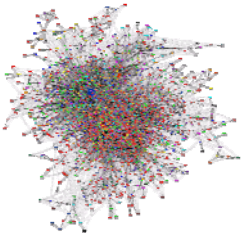
- To be totally unaware of accessibility extensions, of supportive services and tools
- In this case they have to simply logon to the aggregation service, set up their profile and browse the social media



Conclusions



- We presented a flexible architecture for the production, management and delivery of user-created content
- The content creation process is template-driven and leads to structured and semantically enhanced content
- The content management process incorporates reformation services that produce alternative representations of the original content
- The content delivery process collects presentation preferences from end-users and restructures content to meet their accessibility requirements



What is next?



- Implementation and testing
 - Hundreds of blog or news aggregators
 - Many of them offer personalized services
 - None of them (as far as we know) offers personalized presentation options especially for people with disabilities
- The service
 - will read the RSS feeds of existing blogs
 - will create a simple user profile (language, disabilities)
 - will reformat content according to the preferences of each user



Thank you!



Questions?

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