XML Authoring On Mobile Devices



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Mobile Devices

Continuously increasing number
Sometimes the only device available/accessible
Mobile devices move from play to work
Interesting article:

Wikipedia vs. the Small Screen

"The fact that people increasingly use the Internet with a smartphone, and only a smartphone, has disrupted television, books and news, among other things, and media companies have scrambled to adjust."

"...the foundation has formed a team of 10 software developers focused on mobile. In July, for the first time, mobile users could edit and create articles."

http://www.nytimes.com/2014/02/10/technology/wikipedia-vs-the-small-screen



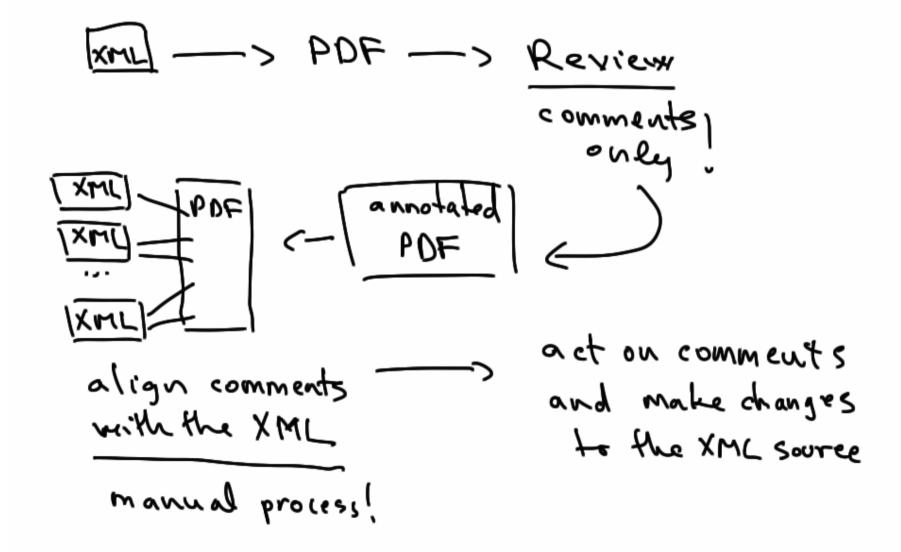
XML Publishing and Mobile Devices

No options a couple of years ago Many options now:

For DITA see for example http://www.mobiledita.com

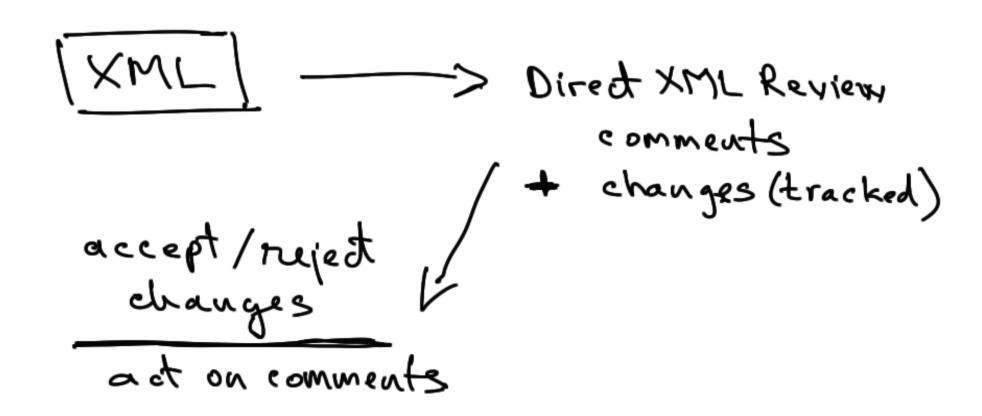


Traditional Review Process



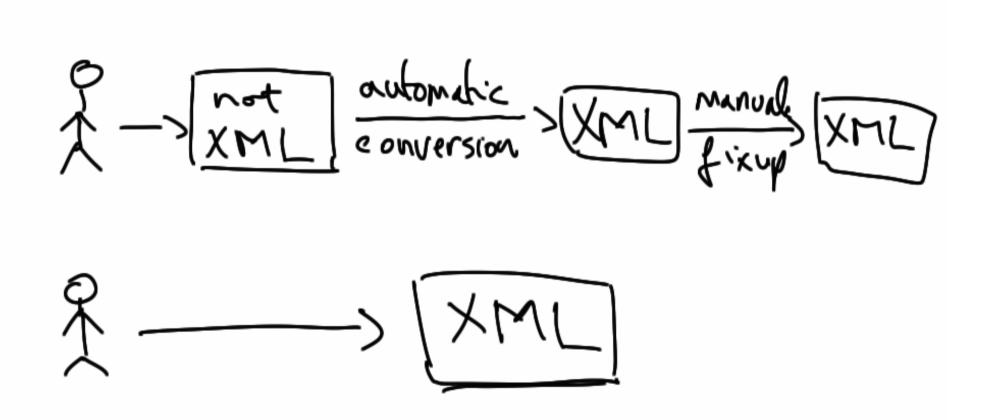


Direct XML Review





XML First Workflows





Moving XML on Mobile Devices



Technology Choices

- Native application
- Web application



Web Application

- Mobile-first development
- Not only mobile!

Reuse existing technology

Client side vs server side processing

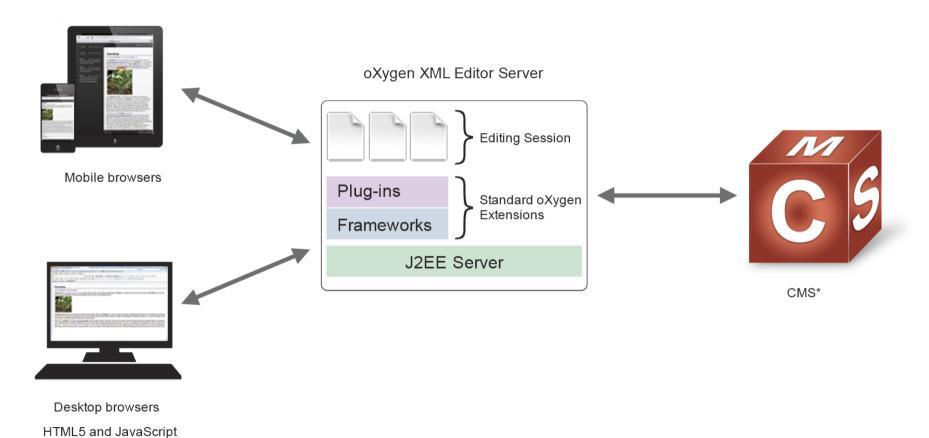


Rendering XML

- Directly inside HTML
- Draw it on a canvas
- Convert to HTML5



Current Architecture



* Not provided



Advantages

- Reuse almost all existing support from oXygen
 - CSS used for XML is converted automatically to match the generated HTML5 code
 - custom actions run on the server
 - validation runs on the server
- Minimal processing on the client side
 - Battery friendly
- Potential for collaborative editing (the model is on the server so can be shared)
- Reuse existing connection plugins to different repositories



Disadvantages

- HTML5+Javascript+browsers is not the ideal development platform
- Network connection is required
 - No offline access
 - Performance may suffer on very slow connections
- Actions that require user interaction need a web specific implementation for the user interface



Demo

- Review
 - Comments/Annotations
 - Add and delete text
 - Manage changes and annotations
- Full Editing
 - Enter and change markup
 - Edit attributes
- Create XML
 - Use inline actions and form controls



Leverage device specific input methods

- Speech recognition
- Hand-writing recognition



Not only mobile devices

- TV
- Laptop/Desktop
- Any device with HTML5+Javascript support!



Plans for the Future

- Use XML for some applications like:
 - XML-based blog
 - XML-based wiki-like website
- Integrate with Google Drive, DropBox, etc.
- Offer alternative UI templates
 - Current UI uses JQuery Mobile
- Explore creating a hybrid application
- Try to provide collaborative editing



Thank you!

Questions?

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For more information about oXygen please see www.oxygenxml.com