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.”

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

XML $\rightarrow$ PDF $\rightarrow$ Review

Comments only.

XML $\rightarrow$ PDF $\rightarrow$ annotated PDF

Align comments with the XML.

Manual process!

Act on comments and make changes to the XML source.
Direct XML Review

XML

- Direct XML Review
- comments
- changes (tracked)

accept/reject changes

act on comments
XML First Workflows

- Manual conversion of not XML to XML
- Manual fix-up of XML
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

Mobile browsers

Desktop browsers
HTML5 and JavaScript

oXygen XML Editor Server

Plug-ins
Frameworks

Editing Session

Standard oXygen Extensions

J2EE Server

CMS*

* 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