Publishing with HTML & CSS

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More and more data are available on Internet, using various Web standards such as HTTP, HTML, CSS and SVG. Of course, browsers are the classical way to reach these data, and these softwares are often viewed as the only way to access web pages where the data are presented.

With powerful Web standards and interoperable technologies, many end-user softwares and libraries have been developped to help people using and manipulating these technologies. Web browsers are now some of the most optimized, innovating and astonishing softwares. Web frameworks and templating libraries are now widely used, with huge communities and mature best practices.

This increadible amount of knowledge has helped the Web to become what it is: the best place ever created to store, present, manipulate and share data, using different media including rich text, images, audio and videos.

But real-world people and companies need paper, for many evident reasons going from legal issues to love of printed objects. Even if dematerialization solutions are growing, we believe that printed paper will be for a long time a common way to share information, just like it has been since the Gutenberg Bible.

Kozea thinks that publishing technologies can highly benefit from the Web standards, its mature communities and the brilliant open tools developped to manipulate them.

HTML –and especially HTML5– is a very good format to organize information. Its simple and yet powerful features include semantic structures, metadata, cross-references, *etc*. Moreover, HTML is really easy to generate, adding nearly unlimited templating possibilities.

To present the content, CSS is the perfect companion to HTML. CSS2 and some modules of CSS3 standardize features needed to get high-quality documents for print: pagination, page margins, page numbers, hyphenation, *etc*. CSS is also very easy to generate, allowing complex mechanisms of shared stylesheets and variables to be managed by dedicated pre-processors.

These features are generally poorly implemented in browsers, as they deeply rely on a one-page rendering surface. Their pagination capabilities, mainly used for the *Print* feature of the browsers, generate low quality documents that often can not be used for profesionnal purpose.

That's why Kozea created WeasyPrint, an open-source HTML/CSS to PDF converter, especially designed to generate high quality printable documents. This original renderer is now used by Kozea to generate each month hundreds of documents from simple invoices to whole reports. The growing number of contributors and feature requests prove that this need is shared by a lot of people and companies around the world.

Using a web browser to view, create and edit HTML documents that can be exported to PDF files is a wonderful innovative use of interoperable Web standards.

As director of Kozea and developer of WeasyPrint, I would like to attend the *Publishing using the Open Web Platform* workshop to meet other actors intersted in HTML/CSS-based solutions, discuss new CSS features dedicated to print, and share the solutions we have built to fit the needs of our clients as well as to solve our own problems.