

Designing Next Generation Web UI in a Declarative XML Framework

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Objective: introduce the audience to new approaches to web user interface design and development

Audience: technical audience with an interest in web applications and/or user interface design; no specific expertise assumed

Format: talk with slides and demonstrations, 60 min (approx)

Description:

Today's desktop applications are not the best we can do in terms of user experience, nor do I believe that most web applications benefit from the same designs that work well on the desktop. We can borrow ideas and design principles, but the graphical user interface elements and layout don't always translate well. Most desktop apps were created to let you create and modify documents: word processor, spreadsheet, graphic design tools, etc. Most web apps let you ask questions, find information and perform transactions. As you search for information or finalize a transaction, a conversation takes place. You ask questions, fill out forms, click links, and the landscape changes. It's a completely different experience than the one you have on your solitary desktop, and provides fertile ground for innovative design. There is an opportunity to take ideas from desktop applications and apply them to the web. In addition, there are requirements of a web application that suggest alternate user interface constructs.

We are also seeing the emergence of a new way to develop graphical user interfaces. XML-based languages are emerging to describe GUI. Mozilla's XUL, Konfabulator Microsoft's XAML, and LZX from Laszlo Systems are a few examples of this trend. The declarative approach removes a lot of unnecessary procedural code. It simplifies the programmer's task of creating the initial state of an application, facilitating prototyping and flexible design.

This talk will focus on applications and components developed for the Laszlo Presentation Server. Live examples will demonstrate how the platform enables compelling user experiences. Laszlo's new component framework shows user interface design techniques, such as animation and dynamic keyboard navigation, and may be the first UI framework written entirely in declarative XML. We will dive into practical benefits of using a declarative XML approach, drawing from the specific experience of developing the Laszlo component framework.

Some examples that may be demonstrated during the presentation:

Flight reservation

<http://www.laszlosystems.com/lps/my-apps/travel/>

The active display provides immediate feedback during the user interaction of selecting filters to narrow flight choices.

Calendar Application, Dean For America campaign

<http://cal.deanforamerica.com:8080/lps-1.0.2/calendar/index.html>

This demonstrates a rich, interactive experience that includes effective space sharing and practical animation. To see the calendar in action, go back to February or before, during the period that the campaign was active.

Paint Selector

<http://www.behr.com/behrrx/workbook/index.jsp>

Animated transitions and dynamic content encourage creative color choices.

Speaker background:

Sarah Allen developed much of the component framework for Laszlo Presentation Server 2.0. Sarah began developing Internet software in 1995 as an engineer on Macromedia's Shockwave team, which developed one of the first technologies to bring moving images and sound to the web. She led the development of the Shockwave Multiuser Server, and later the Flash Communication Server, introducing streaming video and multi-party communication in Flash Player 6.

Prior to joining Macromedia, she developed software tools for multimedia, digital video, and graphic arts at Adobe, Aldus, and The Company of Science and Art (CoSA). She was named one of the top 25 women of the web by SF WoW (San Francisco Women of the Web) in 1998. She has degrees in Computer Science and Visual Arts from Brown University.