


## Workshop Submission #7

### Workshop Title:

Web Applications: What's the Standard?

### Abstract (50 words):



Web applications present special challenges to interface designers. Typical GUI interaction cannot easily be mimicked in HTML. Web site guidelines are not rich enough for complex, highly-interactive applications. In this workshop we will look at the unique issues of web applications and through discussion, will attempt to create some standards.

### Targeted Audience:

Intermediate  
Advanced

### Duration

One day

### Topic Category:

Issues and strategies for experienced usability professionals

### System, Product, or Project Focus:


Web

### Keywords:

Interaction design  
Standards and/or guidelines  
User interface design

### Participant selection criteria

We invite position papers from people who have worked with web applications, either designing them or attempting to create standards for them. We particularly welcome papers from people who have worked on complex applications. We also invite position papers from those who have done usability testing on web applications and who have good ideas to share, even if they have not done actual design work.



Potential participants will be asked to submit a 3-5 page position paper describing their experiences with web applications. Ideally, this will include:

- A "case study" description of the application, the scope of the problem(s), how the participant was involved, and what attempts were made to solve the problem(s)
- Example screen shots from the application depicting various problems and solutions (these screen shots will be shared with workshop participants during the workshop, so confidential material should not be submitted)

- An analysis of what worked or did not work
- Any lessons or best practices the participant would recommend based on this experience
- Questions the participant has for other practitioners and hopes to have answered during the workshop
- A statement of the potential participant's goals for the workshop
- A short biography of the potential participant

Prior to the workshop, the organizers will compile the questions and goals, so that they can be posted during the workshop.

### **Detailed description of content with session timeline**

#### ***Description***

More and more companies are embracing “thin client”—systems where only the interface exists on the user’s desktop machine (usually in a web browser), and all the business rules and “guts” of the software reside on centralized servers. On the technical side, it is understandably attractive for corporations to avoid having to maintain multiple software applications on hundreds or thousands of employee machines. By running applications on a server with users accessing them via a web browser, installation, upgrade, and maintenance headaches are reduced and desktop hardware can be cheaper.

Additionally, companies assume that because everyone is familiar with web browsers, web applications are easier to use. Unfortunately, this assumption is often incorrect. There are two basic reasons.

#### ***Technical Issues***

First is the technical problem of HTML. Designed for formatting text, HTML is ill-suited for creating complex, highly interactive interfaces. Users have become accustomed to modern window-based interfaces, and to the flexibility and ease in accessing data which those interfaces provide. Using HTML to build GUIs means taking a giant step back in design flexibility and available controls.

For example, it is common in window-based applications for controls to dynamically interact; changing the selection in a dropdown list can immediately change the data and controls available to the user. With HTML, the designer must either use Javascript to provide this behavior (with all the problems inherent in Javascript) or require the user to click a submit button before displaying the new data and controls. Users of complex systems have become accustomed to interacting with their data quickly and with a minimum of keystrokes. They will not be happy with an interface that impedes their progress.

#### ***Standards Issues***

The second problem for web applications is the lack of standards. Although users may be familiar with browser controls such as the Back button, and web conventions like underlined text being a link, there is little else on the internet that is consistent from one web site to another, or from one web application to another.

Other GUIs (Windows, Macintosh, etc.) have well-researched and documented standards for interaction, and you can rely on these standards when building applications. For example, users already know how pull-down menus work, how to use dialog boxes, and how to drag and drop. So when designing an interface, you can be fairly confident that by providing the standard cues, users will have little trouble using at least those elements of the interface.



Although there are beginning to be some loose standards for web sites (such as positioning of logos or search boxes, display of links, etc.), these standards are not particularly useful when designing applications. For example, what is the best way to provide the user with a linear path in an application (as dialog boxes do in window-based applications). How should actions be distinguished from navigation? How and when should data be saved? Without standards, we can't make any assumptions that users will know how to interact with our applications.

Join us for a discussion of web applications. While we don't expect to solve technical issues, we do hope the outcome of this workshop will be the beginnings of a standard for web-based application interaction.

### **Agenda**

8:30-9:00	Introductions, sharing expectations, overview of the day by workshop leaders
9:00-10:00	Small Groups Focus area 1 discussion: topic TBD (see below)
10:00-10:30	Break
10:30-11:30	Reports from Small Groups
11:30-1:30	Small Groups Focus area 2 discussion: topic TBD (see below) Groups should organize discussion and break for lunch as they wish
1:30-2:30	Reports from Small Groups
2:30-3:45	Small Groups Focus area 3 discussion: topic TBD (see below) Groups should organize discussion and break as they wish
3:45-4:45	Reports from Small Groups
4:45-5:15	Final Discussion: What have we learned—best practices, open questions
5:15-5:30	Close—next steps, recommendations

### **Details of the Day**

During the day we will choose three focus areas for discussion. (More below on how the focus areas will be selected). For each category of focus, we'll break into small groups to discuss:

- what worked well, or pitfalls to avoid (based on participant's experience, and information from position papers)
- what best practices we can recommend based on this discussion
- unanswered questions, based on this discussion

Each small group will report back to the larger group, and there will be some time for the whole group to discuss the results and make recommendations towards a standard.

The workshop leaders will review all position papers, and recommend focus areas for discussion, based on common experiences. Prior to the workshop, we'll circulate this list by email and solicit further recommendations from participants. We'll finalize the list of topics to discuss at the workshop.

Possible discussion topics could include:

- How best to create modal behavior, such as that provided by modal dialog boxes in windowed applications.
- Buttons, links, menus, and navigation bars: how to help users distinguish between actions and navigation.
- How best to provide data interactivity (e.g., the user makes a selection which affects other potential selections and/or available data on screen)

### **Dissemination of Results**

The workshop leader will produce a report from the workshop for publication in either the UPA Voice or User Experience.