



Ministry of Education

Web Applications User Interface Guidelines

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Ministry of Education - Information and Technology Management Branch

❖ IM / IT Standards & Guidelines ❖

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Introduction

This document will outline some basic guidelines for creating usable web applications. Note that there are no rules but rather guidelines. The first section will outline guidelines for **process**. The second section will deal with user **interface principles**. The third section contains guidelines for actual **interface elements**. The last section references current **government look and feel standards** for public facing web sites.

What we want is for our users to feel “mastery” over the application. See: <http://www.useit.com/alertbox/20040830.html>

Process Guidelines

If there is one aspect of application development that will help the most but is considered the least, it’s probably getting the input of users early and often in the application development cycle. This will save time and money later on. It will also lead to a better application – more usable and, therefore, more used.

Developers should consult with end users before any real screen design is undertaken. Then drafts should be created (paper prototypes, wire screens, card sorting, mock-ups, etc) and the users should be given an opportunity to review the drafts. This should be an interactive process. Do it until the benefits (i.e. change requests) drop off or become requests that have little impact (either don’t change the outcome or are used by a very small part of the user group).

Combine or replace these draft reviews with user testing. Big gains can be achieved in one or two rounds of user testing with as few as five users. See: <http://www.useit.com/alertbox/20000319.html>

Once you’ve arrived at a design that tests well and does not generate significant change requests, then you can start to build the application screens. Note that this doesn’t mean that the developers cannot begin design of the application’s functions before this stage, but be sure that any development does not limit the options for the screen designs.

Please read **this article before beginning design work**: <http://www.useit.com/alertbox/application-mistakes.html>

User Interface Principles

Organizing Principles

There are five basic ways to organize information to choose from:

1. Alphabetical – best for large bodies of information
E.g. dictionary, phone listing
2. Chronological – used to demonstrate changes, make comparisons or show progression,/evolution
E.g. histories, life cycles
3. Location (Space) – used to examine or compare information that comes from diverse sources or locations
E.g. map, human body for medical study
4. Category – used for grouping similar or related items
E.g. online store organized by types of products
5. Continuum (Rating Scales) – used to organize by magnitude, or to assign value
E.g. prices, sizes, scores

Interaction Principles

1. Orientation – where am I?
 - what page
 - where in the information design
 - where is my task
2. Affordances & Associations – What can I do and what will “it” do?
 - tells a user what they can do with a design element (e.g. links will navigate)
 - beware hidden and false affordance (e.g. black text as link or blue underlined text not a link)
3. Feedback – What did the application do?
 - can require a response or not
 - can be explicit or implicit
 - can result in navigation or not
4. Progressive Disclosure – manage complexity for the user
 - sequencing the information – matching user expectations
 - present basics while offering access to complex
 - base it on task analysis, workflow analysis and user testing

For more see: <http://www.useit.com/alertbox/tabs.html> and <http://www.useit.com/alertbox/breadcrumbs.html>

Interface Elements Guidelines

Text, Labels

- less is more – users are often scanners not readers
- use text blocks and white space as design, use bullets, heading, paragraphs
- fonts can indicate hierarchy of information

Colour

- be cautious of using colour as the only means to convey information – use redundant means
- use high contrast between text and background to ease reading
- be aware of colour blindness in users

Page Layout

- stick to conventional page layouts unless you have data to support others
- consider different layouts for info page versus application/form pages

Form Structure

- minimize or eliminate “extraneous” navigation
- should contain three common elements:
 - orientation & identification
 - data
 - actions

Wizards & Guides Structure

- limit or remove navigation “outside” the wizard
- consider “Save & Close” functionality for long or “interruptible” tasks

Images

- often a picture isn’t worth a thousand words when conveying info
- words work better than icons for links and buttons
- keep images small
- should have meaning, not just decoration

Icons

- can be tricky as meaning can be difficult to associate reliably
- make sure you do user testing
- consider value of metaphors in icon design

Navigation Bar

- no hard limit on number of items
- direct link to information architecture
- three states for links on nav bar: active, pending and inactive
- can be used for orientation as well
- user must know they are links
- can be horizontal (seems to be more popular) or vertical

Search

- can be challenging for user to understand search (users confuse logical And/Or – mental models of search can vary)
- don't rely on search – good navigation will be better than search
- consider search scope
- usually placed on top of page
- results should display search criteria

Controls

- radio buttons – for mutually exclusive selections
- check boxes – for selecting more than one at a time
- drop downs – usually no more than 12-15 items
- command buttons – for actions on data or objects
- for more see: <http://www.useit.com/alertbox/20040927.html> and <http://www.useit.com/alertbox/20001112.html>

Government Look and Feel Standards

The BC Government has created a suite of templates for public facing web sites. Designers need to follow these standards unless given a specific exemption by Public Affairs Bureau.

See:

<http://intranet.gov.bc.ca/oco/standards.htm>

http://gww.fin.gov.bc.ca/comm_policy/PAB_Internet_Standards/index.htm

(Note, you will need an IDIR ID to see these sites.)

Screenshot of sample page using current template (templates may be available on request):

The screenshot shows the British Columbia government website. The header includes the BC logo and navigation links for 'All B.C. Government' and 'Advanced Education'. A search bar is present with a 'Go' button. The main content area is titled 'Campus 2020: Thinking Ahead' and features a news release dated April 23, 2007, about the release of the Campus 2020 report. A thumbnail image of the report cover is shown, along with links for 'News Release' and 'Full Report' (3mb). The footer contains links for 'COPYRIGHT', 'DISCLAIMER', 'PRIVACY', and 'ACCESSIBILITY'.