Interface Redesign: Testing-solutions.com

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Executive Summary

Testing-solutions.com contacted INP Associates to redesign a new interface layout for their website (http://www.testing-solutions.com/). A history of user complaints regarding the current interface's design, as well as results from a recently conducted user test, assisted in the decision to pursue a redesign. The website's aesthetics, lack of white space and focus were a few of the common user complaints reported. User testing revealed confusion surrounding the usability of both the drop-down menus and pop-up menus located within the navigation bar. This redesign will tackle the above-mentioned problems and offer solutions to resolve these matters, as well as additional issues.

This document is composed of four major sections, as well as, an appendix, which consists of screenshots of the current home page and sub page interfaces. The sections are:

- **Analysis of Current Interface:** The current interface is discussed and interface elements are identified. The strengths and limitations of the existing interface are documented.

- **Redesigned Interface Wireframes:** Digital wireframes, displaying placement and modification of key interface elements are found for both the home page and the sub page.

- **Analysis of Redesigned Interface:** Improvements in the redesigned interface are discussed, while also documenting how the redesign will address the limitations of the current interface.

- **Implementation Options:** Several approaches to implementing the redesigned interface are reported, with examination of disadvantages and advantages for each. The recommended approach is identified.

The redesigned interface contains numerous advantages over the current interface, including the following improvements:

- Content is grouped into divisions, providing for easier page scanning
- Redesigned local navigation is more accessible and better defined
- Indenting and bold text applied to local navigation clearly denote hierarchy of information
- Page balance is consistent and weighted appropriately
- Page headings match navigation labels on *all* pages
- Text within divisions of content have added padding, creating needed white space
- Links are displayed as descriptions within given content and not as PDF icons
- Consistency is implemented throughout the site with regards to link style, alignment and layout of both global and local navigation
- Removal of animated advertisements eliminate distraction of focus areas

- Aesthetics are more clean cut and pleasing to the eye; color scheme lightened for contrast

Analysis of Current Interface

The interface for Testing-solutions.com (see Appendix A) uses fixed-width implementation, with left-aligned navigation bar and content. The global navigation bar uses both drop-down menu and pop-up menu technologies concurrently, creating unnecessary displays. The current interface is best viewed at 1024x768 resolution, as viewing at 800x600 creates horizontal scroll bars and cuts off the news box display. Text color is lacking some needed contrast in the navigation area and other site colors are not the best choices for extended viewing. The existing graphics consist mainly of an uninformative Flash banner. Testing-solutions.com loaded slowly, arriving at 12.50 seconds on a 56k modem connection (calculations based on tests run at Dr. Watson – http://watson.addy.com).

Interface Elements

Elements from the current Testing-solutions.com website that will be brought forward into the redesign (some with modification) include:

- Simplified global and local navigation bars
- Company logo
- Breaking news feature
- Course and workshop links
- Cross-linking technology (with-in site links)
- Download section for course catalog (portfolio)
- Banner advertisement (non-Flash)
- Footer (copyright and contact information)

Strengths

One of Testing Solutions' biggest strengths is their global navigation bar. The site employs the Gestalt rules of proximity and similarity to this important website element. By placing the navigation buttons closely together and apart from other page contents proximity is applied and a grouping is created. Additionally, the text font and color located in the global navigation are similar in appearance further marking the navigation area as a separate section of the page. This navigation is found in the same position through out the website, creating consistency for the user experience.

Another strength of the site is their simplistic and dependable design of the interface. Pages are not overly weighted with graphics, with focus being directed to content. Most pages are also not overly long in length and do not require excessive scrolling. The site reinforces where the user

has navigated to by using page headings at the top of most (not all) pages that matches the navigation labels.

Additional noteworthy strengths include with-in site links and repetition. With-in site links help guide the users to areas they might not have noticed otherwise and are considered a good industry practice. Repetition is administered by consistently presenting content in a similar page layout. The site also displays the same footer on every page, another constant for the user to access from anywhere within the website.

Limitations

One of the current interface's main limitations is the layout and design of the home page content. Information on the page is scattered and no hierarchy of information is provided. This layout is not easily scanned and needs division of content. The focus of the page currently is the news feature due to its black box and lack of other hierarchy on the page. Some links are inappropriately aligned, breaking the Gestalt rule of proximity and adding to the scattered feeling. Several links are also displayed as ugly PDF icons instead of descriptive text. The site's aesthetics are in need of an overhaul with regards to colors, page balance, and contrast. All text is in need of padding, which would resolve the lack of white space on the page. Additionally, boxes containing form information need padding to give the text more breathing room inside of their containers. The existing boxes contain text with no padding at all, making text appear directly next to the line of the box. The lack of white space results in hard to read, cramped content and an overall unprofessional feel.

Another major limitation within the current interface is the local navigation design. The site uses both a drop-down menu and a side pop-up menu (when mousing over a global navigation button) to display local navigation. Employment of more than one menu is unnecessary and only lends to confusion for the user. The local navigation links within the drop-down menu are grouped too closely together, making it hard to tell what words belong together as a link. The site does employ a color change upon rollover to indicate link phrasing, however this tactic is messy and color choices are unappealing. Drop-down menu navigation seems ad hoc as some links within the courses category navigate to the training category. Additionally, the drop-down menu itself is not consistent about whether or not it collapses upon navigating to various pages. It should be noted that the drop-down menu is not collapsible by the user.

The side pop-up menu allows for navigation to local pages that are not displayed within the drop-down menu, creating even more confusion of how site navigation works. Furthermore, the pop-up menu displays several links as being on pages where they are not actually found. For instance, the Core Workshops link shows three additional links using the pop-up menu. Those three links are not found on the Core Workshops page, they are available only through the use of the pop-up menu. While the pop-up menu has link arrangement that is improved, rollover colors are again unappealing and need additional contrast. Also, it can be difficult to use pop-up menus for navigation as the menus have a tendency to disappear right before you make your selection. The

site's current local navigation design does not provide an efficient way to inform users of all the different sections of their site. Navigational issues such as these frustrate users and will only lead to traffic loss of the site.

Finally, some additional limitations worth note include the current implementation of left-aligned fixed-width layout and printing issues. By using a fixed-width layout viewings at 800x600 resolution create horizontal scroll-bars and cut the news feature box in half. Moreover, the page lengths become exceedingly long and require scrolling. Viewings at 1024x768 are preferable, however printing issues come into play for both resolutions. The fixed-width layout and location of global navigation bars result in losing text on several pages upon printing. It should be noted that print preview did find pages that word wrapped content at both resolutions. However, this technology was not found to be used consistently.

Logo
Tagline

| Banner advertising for upcoming courses and trainings |
| (Non-Flash) |

Home   About   News   Services   Training   Course Dates   White Papers   Partners

Welcome to Testing Solutions Group's Home Page

Aliquam nec turpis. Nullam dui lectus, gravida et, fringilla eu, gravida nec, libero. Maecenas purus ante, dignissim vel, fermentum rhoncus, ornare vel, purus. Phasellus fringilla ante id lorem. Vestibulum mi. Vivamus pellentesque pharetra wisi. Suspendisse nec risus. Curabitur dapibus risus eu leo. Proin a lacus. Vestibulum porttitor lobortis augue. Praesent vehicula fringilla mi. Ut iaculis accumsan ligula. Cras ac sapien ac mi interdum consequat. Aenean nulla.

Services we provide include:

* Services Link 1 - Duis blandit lacinia ligula. Mauris ut metus eget turpis.
* Mauris ut metus eget turpis venenatis mollis. Services Link 2 - volutpat diam.
* Vivamus molestie metus eu est auctor feugiat.
* Cras porttitor - Services Link 3. Duis blandit lacinia ligula.
* Aenean placerat volutpat diam. Sed erat metus, volutpat a.
* Services Link 4 - Maecenas nec wisi eu lectus ornare rhoncus.

Upcoming Courses and Workshops

Course Link 1
Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text

Course Link 2
Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample text Sample

Workshop Link 1
Sample text Sample text Sample text Sample text Sample text Sample text

Breaking News

Image	Link 1
	Sample text Sample text
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	Sample text Sample text

Image	Link 2
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Image	Link 3
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Image	Link 4
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Download Our Course Catalog

Email Address: [   ]

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Logo
Tagline

Banner advertising for upcoming courses and trainings
(Non-Flash)

Home   About   News   Services   **Training**   Course Dates   White Papers   Partners

Training

Certification Courses

Core Workshops

Additional Workshops

Public Schedule

Course Catalog

Training
Advertisement

Partner
Advertisement

Custom Training Solutions for Testing

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Analysis of Redesigned Interface

The redesigned interface offers numerous solutions to the before-mentioned limitations and addresses the complaints found in the user tests. The most remarkable change is the redesign of the home page. By grouping like information together into boxes division of content is created, making the content easier to scan. The Gestalt rule of similarity is applied by using boxes with the same borders and widths. This arrangement of information also gives the page a more balanced feeling and distributes the focus more evenly through out the page. Removal of the Flash banner advertisement lessens distraction on the page. Each box contains scope links to specific sections of the site, allowing the user another avenue of navigation. Padding is applied to all text inside of the boxes creating white space and improving reading ability. Alignment of content and links is also consistent, developing a more clean cut and organized website.

Divisions were made on the home page for welcoming the user and explaining a little of who Testing Solutions is and what they do, upcoming courses and workshops, breaking news and downloading the course catalog. The news box's prior dark border has been changed to a less noticeable border, which matches the other divisions. An addition of images (GIFS recommended) would bring interest to the section, while keeping page download to a minimal. The download our course catalog box has also been altered, with a phrasing change from portfolio to catalog. The box provides a simple email address form request and then the ability to download the course catalog. All sub pages consist of local navigation on the left-hand side within a box and a larger box containing content relevant to the current sub page. The company's logo is found in its prior location, scaled down in size. The footer was brought forward from the existing interface and will be consistently applied to each page.

Another solution provided is the reconstructed, repositioned and simplified navigation bars. The global navigation bar has been moved to the top of the page, under the logo and masthead. This position is a standard location in the industry and makes room for the local navigation on the left-hand side of the page. Both navigation bars will remain in said positions, adhering to the design principle of consistency. Bolding text and underlining the link of the page the user is currently visiting reinforces they have navigated to the chosen area. Indentation is applied to the local navigation bar, as well as the above-mentioned techniques, confirming the hierarchy of content. Link rollovers are recommended to further validate navigation ability. The Gestalt rule of proximity is again applied to both navigation bars, constructing links that are closer together than to other page elements, marking them as a group. Finally, all pages are better categorized and available through the use of the redesigned navigation, resolving issues of pages being found by chance.

The redesigned interface is best viewed at 1024x768 resolution, the same as the prior interface. Printing issues can be addressed by the use of Cascading Style Sheets, which allows for page design to be changed to a style more suitable for printing. With the use of CSS pages could be printed with text only omitting navigation bars and graphics. It is recommended this technology be used consistently throughout the site.

Implementation Options

Coding implementation for the redesigned interface of Testing-solutions.com has several available approaches, each possessing their own positive and negative aspects. The first approach would be to code the page with fixed-width elements, with each division receiving this treatment. The divisions could then be positioned with use of the Cascading Style Sheet attribute absolute positioning. The benefit of using this approach is complete control of where the divisions fall within the page. Site appearance would not be altered from the original, planned design. Alignment would not become an issue, as position is explicitly specified within the style sheet. A disadvantage of this approach would be the layout remains exactly the same regardless of the user's resolution. At 800x600 resolution, this layout will create horizontal scroll bars and cut off portions of page elements. At 1280x1024 resolution the page will have a lot of dead space on either side of the elements, although center alignment would minimize this effect.

The second approach uses the same fixed-width elements, while using the CSS attributes for relative positioning to set placement of elements on the page. Relative positioning allows for element placement relative to its natural position on the page. This method is hard to control and each browser will interpret these commands differently. This is a big disadvantage because your page will look different depending on what browser is being used. The same layout disadvantages would apply as the above-mentioned approach, with regards to resolution. These attributes are also not well supported and therefore not recommended.

A third approach would involve fixed-width elements such as the navigation bars to be stationary in position while allowing content divisions to be variable-width. This would accommodate for page layout issues, as the variable-width element would expand or condense depending on given resolution. The disadvantages of this approach would be loss of control of the variable width element. Line lengths could become longer or shorter than intended and appearance could be drastically changed. Moreover, Explorer for Windows does not widely support fixed positioning.

Of these approaches, the first is recommended. While this choice might not be best for viewing the site at 800x600, it provides important control over the design and layout. In deciding the recommended approach, recent studies were taken into account that show the majority of users now have displays of 1024x768. Centering the fixed-width page elements absolutely will lessen extra dead space by dividing it evenly to each side. This will help displays set to higher resolutions. Additionally, it should be noted only the width of the divisions would be coded as absolute, allowing for expansion of content vertically. This expansion would have to be monitored to ensure page lengths do not become exceedingly long.

In regards to the previously mentioned printing issues, Cascading Style Sheets are recommended to implement efficient printing of content.

Appendix A

Figure 1: Home Page Top (1024x768 resolution, 17 inch monitor, window maximized)

Figure 2: Home Page Bottom (1024x768 resolution, 17 inch monitor, window maximized)

Figure 3: Training Page Top (1024x768 resolution, 17 inch monitor, window maximized)

Figure 4: Training Page Bottom (1024x768 resolution, 17 inch monitor, window maximized)