Interface Redesign

Ace Landscaping, Lawn Care, Grading and Snow Removal
acelawncare.com

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December 12, 2012

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Executive Summary

Ace Landscaping, Lawn Care, Grading and Snow Removal contracted with INP Associates to create a new interface layout for their website (http://www.acelawncare.com). The interface redesign targets multiple issues, offering a solution that addresses and resolves the problems.

This report is organized into four major sections, with an appendix containing screenshots of the current home page and sub page design. The sections are:

Analysis of Current Interface
- The current interface is deconstructed into component elements and the existing design is evaluated based on interface design principles.

Redesigned Interface Wireframes
- Digital wireframes, showing placement and arrangement of interface elements, are presented for both the home page and a sub page.

Analysis of Redesigned Interface
- Improvements in the proposed interface are discussed, as well as how the new interface addresses limitations in the existing design.

Implementation Options
- Three approaches to implementing the redesigned interface are presented, with a consideration of their advantages and disadvantages. The recommended approach is identified.

The redesigned interface offers a number of advantages over the existing interface, including the following enhancements:

- All pages utilize the same basic template leading to greater consistency in the precise location of interface elements

- All levels of navigation are now presented in a single area

- Navigation from the bottom of the page is much easier

- Alignment of elements is improved

- Access to the search function is more visible throughout the site

- Company contact information is available on all pages

- Advertisement of the availability of a free quote is more visible

Analysis of Current Interface

Layout

- The interface for Acelawncare.com (see Appendix A) uses predominantly fixed-width elements, both for the overall interface as well as its sub-elements (navigation bars, content areas, etc.) and assets.

- Variable-width elements can be found in very limited use on the level 3 testimonial pages and help form the overall interface on the testimonial page about "John in Troy". Additionally, the in-site search located on the home page is centered across the width of the browser window.

- The majority of the site is left-aligned. The pages showcasing pictures of the company's work are center-aligned.

- The site is designed for optimal display at 800 x 600, but some pages have interface widths of up to 875 pixels.

Color and Graphics

- The site relies heavily on a blue-based color scheme which is well-balanced with the use of white. This color scheme makes for a very clean-feeling site.

- What is assumed to be the company's logo is only present on the home page.

- Navigation bar links, both global and third-level, utilize rollover graphics with three states – normal, current, and hover. The global navigation uses rounded rectangles while the third-level navigation utilizes elongated ovals.

- Flash is utilized both for the player featuring the company's commercial on the home page as well as for fourth-level navigation in the Lawn Services section.

- Page headings are displayed in rectangles with heavily rounded corners above the global navigation.

- Some background and stylistic graphics appear repeatedly throughout the site – the background gradient located at the top of the page, blue square bullets, blue square bullets with exclamation marks, and a blue horizontal rule with circles on the ends.

- While the Testimonials section largely utilizes thumbnails, some other areas of the site use code to display larger graphics at smaller sizes.

  Non-optimized images result in page weights of up to 160k, large enough to require more than half a minute for download and rendering on a 56k modem (calculations based on tests run at WebSiteOptimization.com http://www.websiteoptimization.com).

Interface Elements

The Acelawncare.com interface contains the following elements which should be retained (with modifications to some elements) when creating the redesigned interface:

- Global navigation, as well as third- and fourth-level navigation
- HTML text navigation
- Breadcrumbs

- Graphical elements
  - Photos of landscape work
  - Photos of company equipment
- Company commercial video
- Contact information
- Request a Free Quote button
- Site search
- Copyright information

Interface Design: Strengths

The primary strength of the current Acelawncare.com interface is its adherence to certain interface design principles and to some of the Gestalt rules of visual perception.

- The site attempts to maintain general consistency in the location of interface elements throughout the home page and subpages, such as the global and third-level local navigations, section headings, breadcrumbs, and copyright notice.

- The site utilizes good contrast throughout, featuring dark text and graphics on predominantly white backgrounds.

- White space is used well in content areas throughout to prevent the user from feeling overwhelmed.

- Pages are well-balanced and easy to move through.

- Each separate level of navigation follows the Gestalt rules of proximity and similarity by keeping the buttons close together and by utilizing similar shapes, fonts, and colors.

- The use of horizontal rules throughout the site, both to separate the global navigation, the content and the footer as well as on the testimonial page, provide closure around different areas of the page.

An additional strength of the current interface is that it does not force too much information on the user at a given time.

- Due to the fixed-width nature of the site, line lengths are kept to a reasonable size. This also allows images to maintain their locations relative to nearby text.

- Larger subject areas (e.g. lawn services) are further divided into subpages to prevent excessive scrolling.

Interface Design: Areas for Improvement

Limitations in the current interface center on inconsistencies in the widths and positioning of interface elements.

- Interface widths vary from 793px to 875px, which cause global elements to appear to jump around when a user navigates from page to page. Accordingly, when viewed at a screen resolution of 800x600, some pages trigger horizontal scrollbars while some do not (compare Figures 1 and 2 with Figures 5 and 6).

- Due to the variable interface widths, alignment is inconsistent – while the global navigation buttons have horizontal rules present to show connection with the

masthead's background image, they are almost entirely out of alignment on the home page.

- While the site attempts to maintain general consistency in the locations of interface elements, some pages (such as the sample photo pages) forego some elements completely.

- Breadcrumbs and content areas have inconsistent indentations from the left-margin. This is even more noticeable in sections where a third-level of navigation is not present.

- Printing becomes an issue on pages that have widths that exceed 800px, causing some of the content on the right-hand side to be cut off.

The layout and positioning of different types and levels of navigation are also a problem.

- While the overall website is fairly simple to navigate, different levels of navigation are located in different areas – the global navigation is horizontal near the top of the page, the third-level navigation is located on the left-hand side of the page, and the fourth-level navigation (in the Lawn Services section) is horizontal and at the top of the main content section.

- Additionally, the design of the navigation links as a whole is inconsistent. The global and third-level navigation are presented in rounded-shapes with blue gradients, but so are the un-clickable page headings. The fourth-level navigation links are presented via Flash in cramped gray rectangles with a spinning cube shape.

- HTML text navigation is also inconsistent - some pages have the current page removed completely (the home page) while others do not.

  Additionally, different levels of navigation seem to handle this HTML text navigation in different ways - some pages have the current level of navigation (all second-level pages), some pages have the next lower level of navigation (lawn services page), and some pages treat the current level of navigation as a series of pages (some third-level pages in the lawn services section).

There are also some more general issues with the overall design of the interface.

- The site search function is located only on the home page, underneath the page footer, and is centered relative to the browser window instead of the interface.

- The aesthetic of the website is hurt by the excessive use of the blue clip-art-like shapes as well as unnecessarily large and inconsistent font sizes.

- Large amounts of white space appear to the right of the content on all fixed-width, left-aligned pages when they are viewed at resolutions above 800x600. Similarly, some photo pages are fixed-width, center-aligned and have white space issues to both the left and the right of the content.

- Lower resolutions (e.g. 640x480) encounter difficulties with horizontal scrolling as parts of the global navigation fall beyond the horizontal fold.

Redesigned Interface Wireframes

Home Page

Sub Page

Ace Landscaping, Lawn Care & Snow Removal   [   ] (Search)

○ Home
○ Our Company
● Services
  ☐ Lawn Services
  ☐ Landscaping
  ☐ Snow Removal
○ Testimonials
○ Support
○ Contact Us

Ace Landscaping,
Lawn Care, and
Snow Removal
1415 Wordsworth
Ferndale, MI 48220
(248) 548-5570

Lawn Services Header

Home > Services

Lawn Services
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Testimonial Header

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Read more...

[Free Quote]

Lawn Services | Landscaping | Snow Removal
Home | Our Company | Services | Testimonials | Support | Contact Us
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Analysis of Redesigned Interface

The redesigned interface for Acelawncare.com offers a number of benefits over the existing interface design and addresses the limitations mentioned above. The most significant improvements concern changes to the site's navigation link structure.

- The navigation bar and breadcrumbs are present on all pages and presented in a consistent manner. Doing this allows the user to both browse to their intended destination and return to their previous locations quicker and more efficiently.

- Relocating all navigation to a single location on the left-hand side of the interface accomplishes many things:
  - Navigation will not be cut off on the right side of the screen at lower screen resolutions.
  - The entirety of the navigation bar can easily be hidden via code for printing purposes, preventing content from being cut off by the right margin.
  - The hierarchy of the site becomes more apparent when all the links are grouped properly.

- The current page is unlinked in the navigation bar, the breadcrumb trail, and the HTML text navigation to prevent user confusion as to what page they are currently on.

- HTML text navigation includes the current level as well as higher levels of navigation on separate lines.

Additional improvements focus on strict adherence to the placement of interface elements.

- All pages will use the same basic template ensuring that all have a consistent design and equal overall widths.

- All interface elements are located at the same place throughout the site for greater consistency. The user should not have to relearn where things are as they navigate through the site.

- The new interface has a stricter eye towards alignment. By utilizing three-columns, content can be left or center-aligned relative to the rest of the content in its column and vertical alignment is possible across the columns.

- The search bar is relocated to a more traditional and expected location at the upper right and is included on all pages for quick access.

- The company's contact information is moved to the left-hand column and is also included on all pages for user convenience.

- Breadcrumbs are located on all pages and located in a consistent location at a consistent indentation, aligned with the content area.

- The button advertising a Free Quote is located on each page to boost potential sales.

Implementation Options

The redesigned Acelawncare.com interface can be implemented a few different ways, with each approach offering different advantages and disadvantages.

Approach 1: Fixed-Width, Left-Aligned

The new interface could be coded entirely fixed-width and left-aligned, with three columns (global navigation, content, and sidebar) of fixed size over a masthead spanning the total width of the columns.

- The masthead would contain the company's logo and the search box.

- The left-most column would hold the global and local navigations as well as the contact information.

- The middle column would contain the main page content and applicable pictures, as well as breadcrumbs, the HTML global navigation, and copyright information.

- The right-most column would hold the sidebar which would feature either the company's commercial (home page only) or featured customer testimonials (sub pages) as well as the button/graphic advertising the availability of a free quote.

The main advantage of this entirely fixed-width design is that there is precise control over the location of all elements across different screen resolutions and window sizes. All elements will remain aligned as intended and line lengths will remain reasonable.

The main disadvantage is that there will continue to be a large amount of empty space to the right of the interface when displayed at higher resolutions.

Approach 2: Fixed-Width, Centered

This approach sets up the interface elements similarly to the first approach, with the sole exception being that the interface is centered across the entire browser window.

This approach has the same advantages as noted in the first approach and remedies the main disadvantage by spreading the empty space equally between the left and right sides of the interface.

Approach 3: Fixed-Width and Variable-Width Columns

This approach utilizes both fixed-width and variable-width elements.

- The masthead would be variable-width and span the total width of the columns.

- The left- and right-hand columns would both be fixed-width.

- The middle column would be variable-width and would expand or shrink to fill the available space in the browser window.

The main benefit of this approach is that empty space outside the interface is not an issue, as there is none. Additionally, provided the outer columns are not set too wide, printing should not be an issue as the content will adjust to fit.

The main disadvantage is that line lengths in the main content section might stretch to a point where they are no longer comfortable to read at higher resolutions.

Recommended Implementation

Of the approaches described above, the third approach is recommended. That approach removes the large amounts of empty space on screen at higher resolutions and has the added advantage of putting more content above-the-fold when space allows it.

A fourth alternative, coding all three columns with variable-widths, is not advised as control over the alignment of interface elements would be seriously hampered.

Appendix A

Figure 1-2: Home Page Top

Figure 1: Home Page Top (visible above the fold) (1024 x 768 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 2: Home Page Top (visible above the fold) (800 x 600 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 3-4: Home Page Bottom

Figure 3: Home Page Bottom (1024 x 768 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 4: Home Page Bottom (800 x 600 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 5-6: Sub Page Top

Figure 5: Sub Page Top (visible above the fold) (1024 x 768 window with size menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 6: Sub Page Top (visible above the fold) (800 x 600 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 7-8: Sub Page Bottom

Figure 7: Sub Page Bottom (1024 x 768 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)

Figure 8: Sub Page Bottom (800 x 600 window size with menu bar, status bar, and two toolbars enabled, 19" widescreen monitor)