Interface Redesign

Villageofdexter.org

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Executive Summary

INP associates was contracted to create a redesigned interface for the Village of Dexter Michigan's website (www.http//villageofdexter.org). A comprehensive analysis of the current website was preformed and key issues regarding the interface were identified. This document seeks to highlight these issues and provide possible solutions to correct them.

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

Analysis of the Current Interface

- The current site was deconstructed in to individual elements. These elements were then evaluated for their adherence to interface design principals.

Redesigned Interface Wireframes

- A redesign of the current site was implemented in the form of wireframe mock-ups. These diagrams outline improvements to menu position and content layout.

Analysis of Redesigned Interface

- The redesign elements were evaluated and compared to the current site's elements.

Implementation Options

- Options for the implementation of improvements are discussed and a recommended approach is presented.

During the redesign process the several improvements were identified including:

- Page widths have been widened to allow for more content to be available 'above the fold' and to reduce horizontal 'dead space'.

- Content areas remain consistent regarding their locations.

- Large images have been removed and replaced with smaller images reducing the page weight across the site.

- New colors have been assigned to the site to reduce link misidentification.

- Contact information and 'Quick Links' have been relocated and are now available across the entire site.

Analysis of Current Interface

Layout:

- The interface for Villageofdexter.org uses fixed width elements across the entire site. Pages do not collapse upon themselves making them easy to scan regardless of browser window size.

- The site maintains a fixed width of 850 pixels, making it slightly larger than the 800 pixel monitors used by approximately 0.6% of monitors currently in use. Visitors using this resolution are forced to use the horizontal scroll bar to view information on the right hand of the screen. Alternatively, at greater resolutions (1024x768 and above), the visitor experiences 'dead space' to the left and right of the body of the site.

Colors and Graphics:

- The site uses a pallet of six colors

  - White: background
  - Grey: content header backgrounds
  - Purple: header text, important information and links
  - Black: page content
  - Blue: visited links
  - Red: emergency information

- The site incorporates the use of HTML table borders to distinguish between global navigation buttons.

- The site uses multiple large images on many of its main pages. The Village of Dexter logo image is a tremendously large file at 214 kb. The home page and global navigation pages contain additional large images of up to 108 kb. At over 300 kb of image data alone, a visitor using a 56k connection could experience download times of over a minute and a half (based on tests run at Dr. Watson http://watson.addy.com).

Interface Elements:

The Villageofdexter.org website is comprised of the following elements. These elements will be included in some form in the redesigned interface and will feature improvements when applicable.

- HTML text global navigation
- Grouped HTML cross links
- Link to the village's Facebook page
- Links to events and surveys
- Contact information on the homepage
- Footer navigation containing Contact Information and Site map
- A visitor counter (non-functioning)

- Graphics
  - Logo
  - Various images village locations
  - 'Find us on Facebook' image

Interface Design: Strengths

Villageofdexter.org maintains a relatively clean and uncluttered layout. The site follows several of the principles of visual design and the Gestalt rules of visual perception.

- The use of underlined links throughout the site assists in identifying what is a clickable element. Changing colors of visited links also assists in user navigation.

- The use of consistent global navigation and footer navigation allows the user to quickly locate and advance though the site.

- The site attempts to group similar information using light-grey heading backgrounds. According to the Gestalt principle of closure, users tend to draw mental boxes around groups of information that have the suggestion of residing within a container.

- Most pages on the site conform to proper uses of white space, line length and text alignment for their content areas. This aids in the readability of large sections of content. Some exceptions are outlined below.

Interface Design: Areas for improvement

Areas of improvement have been identified including the proper use of colors, consistent content positioning, the use of meaningful labeling and the reduction of page weight due to large images.

- While the sites color contrast appears clean and crisp, the choice of purple and blue text may lead to user confusion while navigating the site for the following reasons:

  - According to the Gestalt principle of similarity, users tend to view elements of the same color as serving the same function or purpose. The current color scheme makes it very difficult to differentiate between sections of content, headers, and links.

  - Users have been trained to identify purple text as a visited link and blue text as an unvisited link. The current site uses the exact opposite approach regarding the colors of links.

  - The color purple can difficult to view for extended periods of time. It has also been shown to increase anxiety in many cultures.

- Inconsistencies regarding the positioning of content areas are an issue within many pages on the site. Users expect to see order when presented with similar groupings of information. When advancing through the global navigation, some content areas appear to jump from one location to another. This practice is in conflict with a major concept of interface design, the use of repetition. This may increase the time visitors spend searching a page for information and may lead to users abandoning the site altogether.

- The site lacks any form of local navigation and does little to inform the user of their location within the site structure. The title of the page being viewed does appear within the logo image at the upper right of the screen, however, navigation buttons do not change when a page is active.

- Content areas with confusing headings or layout were found on several pages, most notably on the 'Reference Desk' page. While the page attempts to conform to a hierarchical structure, the font weight and color of the sub-categories as well as their positioning make it very difficult for users to identify what category they are scanning.

- Inconsistencies were found in the labeling of links to PDF files. It is useful to visitors to know the file type and size of a document they are about to open. Many users may perceive unlabeled files as links to other pages within the site.

- The center alignment and vertical stacking of the footer navigation links adds excessive white space to the bottom of several pages. These links could be relocated to a utility navigation bar at the top of the page.

- As mentioned in the 'Layout' section above, the use of large images on many of the site's pages will lead to excessive download times for visitors using slower connections. Any image that will be incorporated in to a site redesign should be optimized for the absolute minimum file size possible.

Redesigned Interface Wireframes

Home page

Village of Dexter
Tagline

Telephone: (734) 426-8303
Fax: (734) 426-5614
Hours: Monday - Friday 9:00 am - 5:00 pm
Email: msherry@villageofdexter.org

Mailing Address: 8140 Main Street Dexter, Michigan 48130 **Physical Address:** 8123 Main Street, 2nd Floor Dexter, Michigan 48130

| Business | Community | Downtown | Government | Services | Reference Desk | Facebook | HOME   SITE MAP |

Announcements

Easter Egg hunt

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Image

Master Plan Survey

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Image

Tree Orders Due

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Image

Spring Clean-up day

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Image

DDA Job Openings

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Image

Bidding on Mill Creek

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Image

Quick Links

Cityhood Information

Community Calendar

Email Updates

Farmers Market

Community Garden

Newsletter

Property tax Information

Waste Management Holiday Schedule

Calendar

Date: Event

XX.XX.2011: Event #1

XX.XX.2011: Event #2

XX.XX.2011: Event #3

XX.XX.2011: Event #4

XX.XX.2011: Event #5

XX.XX.2011: Event #6

Sub Page

Village of Dexter
Tagline

Telephone: (734) 426-8303
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| Business | Community | Downtown | Government | Services | Reference Desk | Facebook | **HOME SITE MAP** |

Community

Etiam vel egestas massa. Maecenas sit amet ipsum ut metus hendrerit lacinia non quis quam. Curabitur blandit convallis sapien semper semper. Donec ac quam sem. In eget diam eget velit hendrerit auctor vitae id mi. Nulla facilisi. Fusce cursus pretium hendrerit. Mauris tristique libero vitae augue luctus venenatis. Aliquam id diam libero. Mauris porttitor egestas vulputate.

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Image

Community Links

Dexter Chamber of Commerce

Dexter Community Schools

Dexter District Library

Huron-Clinton Metroparks

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XX.XX.2011: Event #6

Analysis of Redesigned Interface

The redesign of Villageofdexter.org resolves several issues outlined in the previous sections.

By expanding the horizontal margins of the page width, the most important content is now 'above the fold', making it visible to the user without the need for scrolling.

- The contact information, previously only displayed on the home page, has been physically condensed and is now presented in the upper right-hand corner of the screen across the entire site.

- The 'Quick Links' section is now accessible from all pages.

- On the home page, the 'Announcements' section now resides within the main content area and allows for the quick identification of important information.

- Space has been made for a community calendar displaying important upcoming events.

- The large images on the main pages of the website have been removed. On the home page, smaller images related to announcements now serve as a visual maker for the user. On subpages a single, smaller image resides within the main content area.

- The Facebook button has been moved to the upper portion of the screen and is now available on all pages.

- Content no longer jumps from the left to the right of the screen when accessing a new page. The redesign positions all main content on the left hand side of the screen placing it within the visual path users tend to take when viewing a website.

Relocation and modifications have been made to the global navigation, sub-navigation and links within the site.

- The redesign implements a highlighting effect on the main navigation bar for active pages. This is a vast improvement on the current navigation menu that offers no indication of the user's current location within the site.

- The sub-navigation menu and home button have been relocated and to a utility menu located adjacent to the main navigation menu. The 'Contact the Village' mailto link has been removed and its address is now displayed in the upper-right hand corner with the other contact information.

- Links have been left aligned to increase their scannabilty.

- While not show in the redesign diagrams, content and links should be differentiated from each other by using black for content, blue for unvisited links and purple for visited.

- Links related to specific pages have been relocated to their own content area.

Implementation Options

Approach 1: Center Aligned, Fixed Width

- The site could be coded using a fixed width. Pages could then be center aligned insuring that the appearance of 'dead space' to the left and right of the page remains minimal. Pages would be broken in to 3 content areas.

- The top content area contains the logo, contact information text, the main navigation menu, and the utility menu. This area would span the entire upper portion of the page and use fixed dimensions to insure that buttons do not collapse upon themselves at smaller screen resolutions.

- The second content area would reside on the left hand side of the page. This area would contain the main content of the page. While it would maintain a fixed width, allowing text to remain at a readable line length, it would be coded with a varying height allowing the page to expand with the addition of additional content.

- The third content area would be placed on the right hand side of the page and contain the 'Quick Links' content and 'Community Calendar' content. It would be coded using fixed height and width dimensions ensuring that all content contained within remains 'above the fold'.

- The advantage of this design is that content remains in consistent locations and allows the user to quickly orient themselves when navigating between pages.

- The increase of horizontal 'dead space' at large screen resolutions is a disadvantage in this approach.

Approach 2: Fixed Width, Left Aligned

- This approach is identical to the first except that pages are left aligned in the browser window.

- While maintaining the fixed dimensions of the content areas, users will experience large amounts of 'dead space' to the right of the page at larger screen resolutions.

Approach 3: Fixed and Variable-Width Content Area

- A third approach would include both fixed and variable-width content areas.

- In this approach, the top and left content areas would expand as the browser window size was increased while the right-hand content area would remain set at it fixed dimensions.

- While this approach eliminates horizontal 'dead space' to the left and right of the page, line length in the left-hand content area may become too long for users to easily read. An increase in the amount 'white space' within the top and left content areas would also be expected at larger browser window sizes.

Recommended Implementation:

Of the three approaches outline here, the first is recommended. This approach solves two major issues with the current layout by reducing excessive horizontal 'dead space' and ensuring that content remains 'above the fold'.

Appendix A

Figure 1: Home Page

Figure 1: Home Page

Figure 2: Sub Page

Figure 2: Sub Page