NAMI Finger Lakes Website Redesign

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Client Description

Our client is the National Alliance on Mental Illness (NAMI) in the Finger Lakes region. NAMI is an organization that seeks to provide support for families and friends of people diagnosed with major mental illnesses, to educate families and the public about mental illness, and to advocate for these families and their ill relatives. They are a non-profit organization run completely by volunteers who all have relatives suffering from mental illness. Their current site can be found at www.namifingerlakes.org.

The site is geared toward friends and family members of those struggling with a mental illness. It's purpose is to provide information, resources, and free support to those people who find themselves in such situations. With this goal in mind, the website's primary content revolves around the support and education programs that NAMI-Finger Lakes provides, including board minutes, newsletters, and general support information.

Some of the interactive elements the client was looking for include a calendar to display events, an easy to use interface to upload and edit tems from their book database, and the ability to upload files such as newsletters. They also asked us to implement a link to Amazon.com that activates a donation service from Amazon where a small portion of that user's purchase is donated to NAMI-Finger Lakes. We implemented all of these features as well as a login system so only site administrators have permission to upload, edit, and delete information from the site. After discussing various forms of implementation for some of these features, we utilized Google Calendar because of its ease of use and dynamically updating features via a Gmail account. They are currently hosted through Lightlink, a service that supports PHP and MySQL for our book database implementation, and will be used to host the site shortly.

We believe we can implement all of the features listed above in an efficient manner, as well as completely redesign the current site layout. Our client specified that they wish the new site to loosely resemble the national organization's website in style enough that someone could recognize the two sites are related. We plan to spend a good deal of time designing a clean, efficient layout that stands out visually and has much improved navigation. If time runs short, we may sacrifice some of the extra features such as extra Javascript functionality that would make the site more visually stimulating. We believe effective scheduling should avoid this problem, but some issues arise unexpectedly that take much longer to resolve than expected.

Project Requirements

Jean Poland and Deb Grantham, our clients from NAMI, would like the website to more efficiently display information about NAMI. The current website is content-heavy, but the design is such that large blocks of text are disorganized and difficult to read. We are being given a good amount of freedom, so we would like to implement several user interaction features. Our client would like to expand the functionality beyond that of a static information-based site, so we will add a login system that gives administrators posting and editing privileges for updating the site. The following images are the before and after screenshots of the home page:
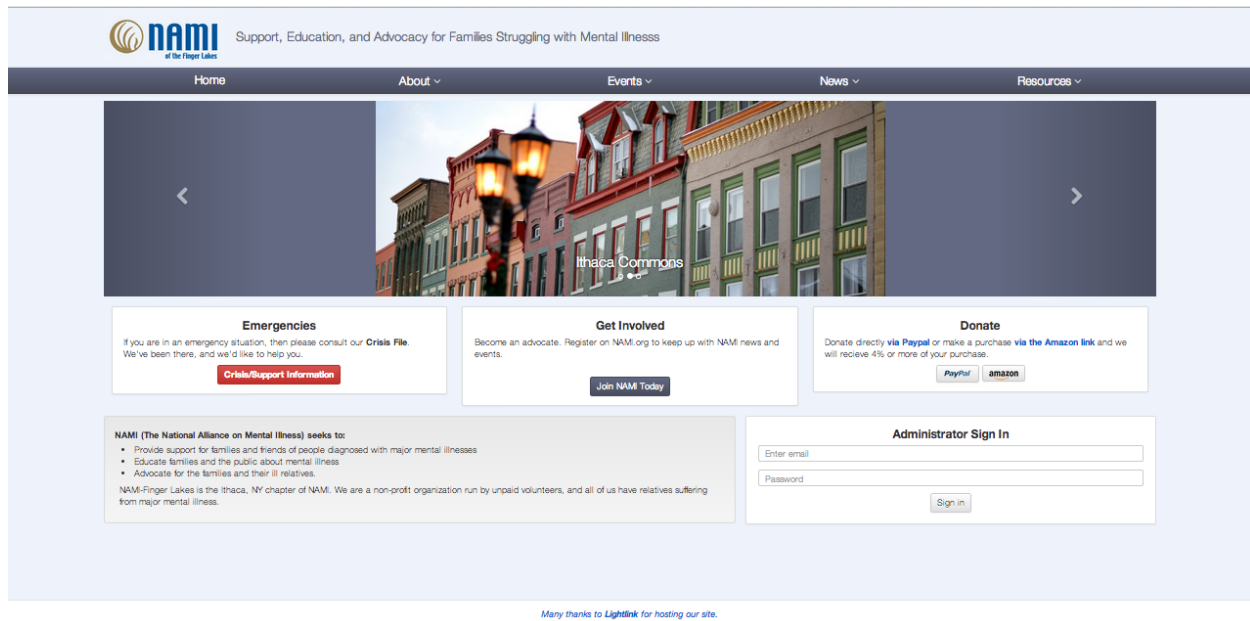
In terms of the actual visual design, the website currently has a navigation bar with good sections ("about us," "get help," etc.) but long streams of text for each section. We will add subheadings and have dropdown menus under each section in the navigation bar. There is currently not much of a color scheme so we will add one, most likely one that is uniform with the national NAMI website (https://www.nami.org/) (light blue, purple), so people can associate the two sites.

NAMI currently has a database of books about mental health that can be borrowed from the association. Like a library book system, registered users will be able to check out books from NAMI, view which ones are available, and even add books to the database (if they donate books). Since the database is fairly large, we will also implement a search functionality where people may browse books by author, and search books by title, author, date or tags. We will use Javascript and AJAX wherever possible to make the user experience seamless and avoid creating unnecessary pages.

One of the goals of the website is to motivate people to follow the NAMI's local activities and to frequently return to the website. We will do this by enabling a log-in system, creating a dynamic book database, and revamping the design. But one of the most important current features is the little news banner on top of the website (above the navigation bar) that gives information about coming events. This area, as well as the "Crisis file" button in the navigation bar, must be emphasized with additional styling. It will jump out to the user, as it is an element that can make users visit frequently.

<u>Website Layout</u>

Home	About	Events	News	Resources
Emergencies	History	Events	Newsletters	Emergency
Get Involved	Year at a Glance	Calendar	NAMI in the News	Donate
Donate	Contact		Annual Reports	Get Involved
				Library

We have divided the website into the following categories and subcategories as shown on the table above. Links to all of these elements will be displayed in a horizontal navigation bar with dropdown menus, which will appear on the top of every single page. The home category is the one exception that will not have a drop down menu since the links will be visible from the home page itself. Right over the navigation bar, there will also be a search bar where viewers can search the entire website for certain keywords. This search will run on the entire website (most likely using a search engine API such as the Google Custom Search Engine) and return relevant articles, information and events. Next to this search bar, on the right extremity of the nav bar, will be the user login form or the sign out link depending on the user's status. The organization's logo will be on the top left and also serve as a link to the home page.

In the Home category there will be a link to a donate page which will present the users with two options, a link to donate through paypal and a link to amazon that donates a percentage of the purchase to the organization. There will also be a link to a page about how to get involved and a link to a Crisis document which has emergency information.

The About category will feature information about NAMI Finger Lakes. This content already exists on the current site: there will be a long blurb about the organization's history, names & contact information for all members of the committee, officers and directors, and links to NAMI's annual reports.

The News category will show a list of coming events and new publications, articles, and books. It will feature a calendar subsection, where viewers will be able to access a large calendar with all schedule NAMI events. It will also have a list of all current and past NAMI newsletters, available in PDF form.

The Resources category is one of the most important ones. It will show detailed descriptions of all the support programs offered and sponsored by the organization, as well as contain links to the Emergency page, a page to get involved, a library page, and a donation page. The Get Involved page will provide the user with resources and information on how to get involved

in the community through volunteer work and other opportunities. The Library page is where most of the PHP/database interactivity will occur. Users will be able to view the list of mental health books that NAMI has available, as well as perform a basic search on the database (searching every category) and an advanced search (specific by category).

Database Design
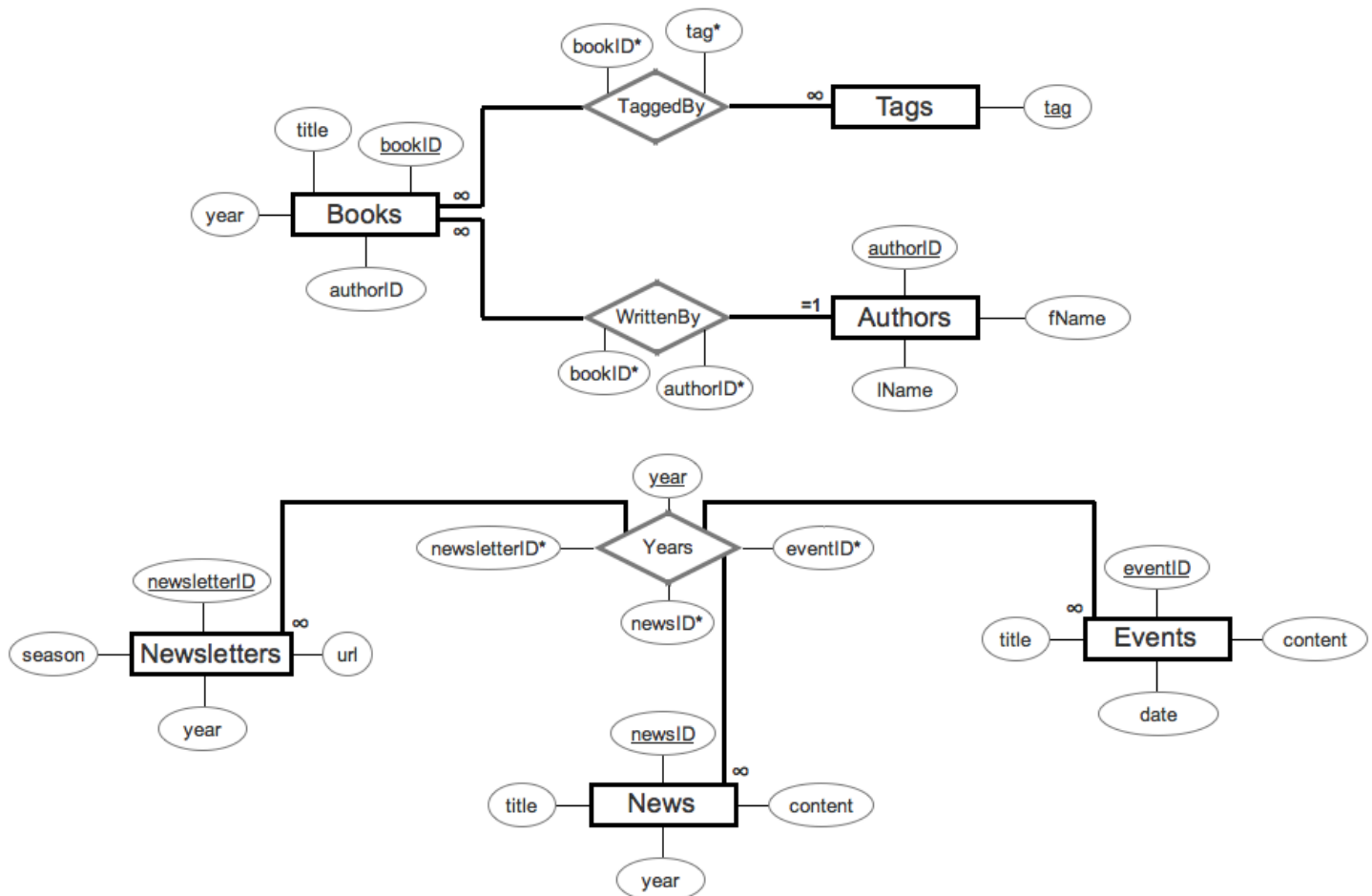
Our client wishes to have a book database implemented that stores searchable information as well as tag words that can be associated with certain books. This is so people can visit the site, browse the books onsite, and search for books by various information, including tag words. Our client also wishes to be able to add current and upcoming events to the Events page, in addition to past News and Newsletters to the News page.

The above ER Diagram accomplishes our client's wishes by breaking up the Library information into three entity sets- Books, Tags, and Authors.

- 'Books' keeps a list of book entities which contain the book's title, an authorID that points to the book's author, and a bookID for relational purposes.
- 'Tags' keeps a list of tag words that will be searchable in the site, as well as tagIDs for relational purposes.
- 'Authors' keeps a list of authors' first and last names, as well as IDs for relational purposes.
- 'TaggedBy' is a relationship set that links a book in 'Books' to zero or more tags in 'Tags'. A tag can be linked to zero or more books.
- 'WrittenBy' is a relationship set that links a book in 'Books' to exactly one author in 'Authors'. An author can be linked to zero or more books in 'Books' since an author can be the writer of multiple books.

Books(bookID : INT, title : VARCHAR(200), year : YEAR(4), authorID : INT)
Authors(authorID : INT, fName : VARCHAR(20), lName : VARCHAR(20))
Tags(tag : VARCHAR(20))
WrittenBy(bookID* : INT, authorID* : INT)
TaggedBy(bookID* : INT, tag* : VARCHAR(20))

____ denotes primary key (underline)
* denotes foreign key

- 'bookID' is a foreign key for WrittenBy linking to its parent table Books, and is also a foreign key for TaggedBy linking to its parent table Books; on update it cascades, and on delete it cascades.
- 'authorID' is a foreign key for WrittenBy linking to its parent table Authors; on update it cascades, and on delete it cascades.
- 'tag' is a foreign key for TaggedBy linking to its parent table Tags; on update it cascades, and on delete it cascades.

The field 'title' in Books is not unique because there can be more than one book with the same title, as long as they were published in different years.

We have also added entity sets 'Newsletters', 'News', and 'Events' to store relevant information. We are going to implement a "Year at a Glance" feature where the user can view all News, Newsletters, and Events for a given year. As a sidenote, 'News' will store information about NAMI Finger Lakes in the local news, where as 'Newsletters' will store information about the seasonal newsletters the organization publishes.

- 'Newsletters' keeps a list of the organization's seasonal newsletters which contain the url used to access the PDF file, the season it was published (Fall, Winter, Spring, or Summer), the year it was published, and a newsletterID for relational purposes.

- 'News' keeps a list of all news stories published about NAMI Finger Lakes. This includes the title of the story, the year it was published, the content in the story, and a newsID for relational purposes. Some stories are simply a title with no content, so the content field can be null.
- 'Events' keeps a list of current and upcoming events at NAMI Finger Lakes. This includes the event title, date, and content that provides more details on the event. There is also an eventID for relational purposes.
- 'Years' is a relationship set that links newsletters, events and news published in the same year. Some years may not contain a newsletter, news story, or event, so their respective paths can be null, and some can contain more than one per year.

Newsletters(newsletterID : INT, url : VARCHAR(100), year : YEAR(4), season : VARCHAR(6))
News(newsID : INT, title : VARCHAR(100), year : YEAR(4), content : VARCHAR(8000))
Events(eventID : INT, title : VARCHAR(100), date : DATE, content : VARCHAR(8000))
Years(year : YEAR(4), newsletterID* : INT, newsID* : INT, eventID* : INT)

____ denotes primary key (underline)
* denotes foreign key

- 'newsletterID' is a foreign key for Years linking to its parent table Newsletters; on update it cascades, and on delete it cascades.
- 'newsID' is a foreign key for Years linking to its parent table News; on update it cascades, and on delete it cascades.
- 'eventID' is a foreign key for Years linking to its parent table Events; on update it cascades, and on delete it cascades.

User Testing

We tested the site with two different people. Tester (a) is a 21 year old male undergrad using Google Chrome and tester (b) is a 26 year old female grad student using Safari.

Second Round of tests (c) A 14 year old sibling (d) 52 year old (not so tech savvy) mother

1. Find NAMI's contact info
    a. Found it right away. Went to about tab and to the contact section.
    b. Also found it quickly but first went to resources tab before looking at about tab. Only took a couple seconds longer.
    c. Found easily

      d. Missed the contact link on the about me tab and took a while to retrack her steps
2. Find the crisis/support information in case of emergencies
      a. Looked for it in resources page and could find it, eventually found it in home page. Either it doesn't stand out enough in home page or we should also include it under resources.
      b. Found it right away on the home page
      c. Found right away (started test on home page)
      d. Found right away (started test on home page)
3. Find calendar of events
      a. Found it right away
      b. Found it right away
      c. Found right away
      d. Found right away
4. Find and open a newsletter from 2010
      a. Went to news page right away but didnt find the newsletters right away, he started looking at the 2010 section of NAMI in the news
      b. Went to news page and found it right away
      c. Went to news and found right away
      d. Went to news and found right away
5. Find a news story from 2009
      a. Found it right away
      b. Found it right away
      c. Remembered it from news page and found right away
      d. Went to news and found right away
6. Register as a NAMI advocate
      a. Remembered it was on the home page and found it right away
      b. Went to get involved section under resources and found it
      c. Started on home page and found right away on home page
      d. Started on home page but didn't see it and went to resources and found it under get involved section
7. When was NAMI of the Finger Lakes founded?
      a. Went to history section of about
      b. Clicked directly on about page
      c. Went to about and found right away
      d. Went to about and found right away
8. How can you donate money to NAMI
      a. Went to home page
      b. Remembered from previous task that it is also under resources tab
      c. Started on home page and found right away
      d. Started on home page, found it on home page, but first instinct was to go to resources since she remembered seeing it
9. Where would you log in if you had an account

        a. Found it on the top right corner of the page right away
        b. Also saw it right away
        c. Started on home page, found right away
        d. Started on home page, found right away

10. Find where the library book information is
        a. Went to resources and scrolled down
        b. Went to resources but because she was using a smaller screen library wasn't seen on the page right away, took no longer than 5 seconds and then scrolled down.
        c. Went to resources and found right away
        d. Went to about page and then resources and found right away

The major changes we made in regards to user testing was adding some links to multiple pages (important pages such as getting involved, donating, and emergency links). This allowed users a much higher chance to find important links.

Final Changes

Front End

We made several minor visual modifications that we saw necessary from the feedback from user testing. On the home page, we added two images of the Finger Lakes to the carousel. We added a favicon of the NAMI logo so that the website could be easily recognized among tabs. We reworked most of the visual structure by centering headers, buttons, and important forms. In the events page, there is now a nifty calendar icon next to the Calendar header with a PHP-generated element displaying the current date. We also moved a few elements to pages where they better fit the headers (i.e., "Annual Reports" in the "News" section, "Library" in the "Resources" section, "Year At A Glance" in the "About" section).

We styled all administrative forms, from the event editor to the form which adds books to the library; the biggest change was our display of the library system, with a long table. The tags, inside their own column, are styled to stand out according to the website's color scheme. When a user searches for something in the library, the page refreshes and scrolls directly down to the library search results.

Finally, we made several visual tweaks to make sure that the website is ready for consistent use in all types of formats, dynamically adjusting elements based on the width of the display.

Back End

After extensive discussion with multiple TAs we decided to add some more PHP functionality to the website. While our original plan was to simply dynamically display a list of resources and search those resources, we also implemented a dynamic display of upcoming events, existing newsletters, and a "year at a glance" feature that allows any user to view all NAMI related news in any year since 2005. Additionally, the administrative user has the ability to update events, newsletters, annual reports, news, and the resources library making the website easy to manage and update for the client. We implemented all of the functionality that the client requested plus the year at a glance function and improved content management.

One change that we made to our original plan was our implementation of searching the library of resources. Although the client did not request it, we were planning on implementing an advanced search (i.e. searching through multiple categories). However, the list of resources is very limited and thus it did not seem practical to implement an advanced search for a simple list. We implemented a search that searched (using partial expressions) all the categories and listed any result that matched the search term.

We implemented error handling in all files by printing error messages to the user rather than going through error logs like we originally planned. We also mentioned in our first milestone that we planned on implementing a library check out system for the list of books. However, this was not a feature requested by the client and was mostly a miscommunication on our part and we decided to toss this feature since it was not a relevant feature for the organization. Other than these three changes, we implemented everything we originally planned plus the additional features discussed above.