the Bridge:

A website for older adults

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March 12, 2014

Social website for older adults

We propose a website for older adults that is designed to encourage connectedness and reduce social isolation. The site name will be *the Bridge* to emphasize the idea of connecting people.

Concept

The purpose of the project is to enrich the lives of older adults by enhancing their social well-being. The intent of this project is to give older adults that live in some form of isolation something to look forward to everyday that is not related to medical care. With that in mind, we intend to provide a highlight for every day that will create a sense of anticipation.

Unlike other social networks that provide immediate gratification or fulfillment, we intend to post updates at scheduled intervals. This approach creates two forms of motivation:

- Looking forward to something**:**
  I want to see how many people said they remember the first mainland surfing competition. It was held at Corona del Mar in 1928. Tom Blake was the winner.
- Not wanting to miss something
  Today is the anniversary of the first mainland surfing competition. It was held at Corona del Mar in 1928. Tom Blake was the winner. I hope the Bridge posts that.

Target audience

The target group is older adults, aged 75 to 95 who live in some form of isolation and have no specific disease or disability, only the typical age-related changes in visual functioning, hearing, motor skills, and cognitive processing abilities.

Based on research on the usage of social networks for elders, we have determined that a social network designed specifically for these constituents must focus on sharing and memories. Also, a need for a limited technology learning curve is prevalent. Blogs, RSS feeds, and track back technologies are not suitable for seniors. Security is also key.

Personas - Henry
Henry is 70-years-old and in excellent health. After his wife died, he moved from Montgomery, Alabama to a suburb in Los Angeles to live with his son's family. Both his son and daughter-in-law work and their children are grown and live away.

Henry does not drive. A runner throughout his life, he continues to participate in 5K running events. Though he is not a recluse, most of the interaction in his life is with people twenty years or more younger than him.

Henry's youth coincides with the height of the civil rights movement, both in time and place. Regarding his running, he is often heard saying, "You grow up black in Alabama in 1950, you'd learn to run fast, too."

Henry is not at all bitter. He will tell you he has had a good life and credits that to his good wife who he misses very much.

He sees his life experiences as his contribution to the "growing up of America." He describes American history in the context of a whole person. "Back then, the country was young, and just like a rebellious teenager, had a selfish and ignorant side. America had to grow up to come to terms with who it is and what's really important."

In Alabama he was a good friend to many people who struggled to share his sensibility.

Henry has a lot of wisdom and guidance to give to people that have lived through hard times. He can put things into perspective. Another common saying of his, "You got to heal on the inside if you're really looking for a cure."

Personas - Ben

Ben is 85-years-old and in excellent health. He lives in a retirement home tucked in the farmlands near Reading, PA. Ben served in the US Army World in War II and the Korean War, the former taking him to Europe, the latter taking him to Asia. An avid runner his whole life, he continues to run and recently fractured his foot. He plans to be back on the track as soon as the doctor gives him the okay.

Most of Ben's interaction is with other seniors at the retirement home and care providers. He is close to his children and grandchildren, but no one in his life shares his passion . . . and I mean PASSION for running.

One story he likes to tell, "I couldn't have been more than 4 or 5 when I remember hearing one of my older brothers talking about 'catching girls.' Well, I took that to mean I had to learn to run fast if I expected to be a married man one day. But it paid off. I fell in love crossing the finish line at the Boston Marathon in 1955. There was the prettiest girl smiling and cheering. I didn't know who she was, if she was married or had a boyfriend, but I crossed that line, ran right up to her, grabbed her and kissed her, and said 'My name's Ben and I just ran 26 miles to kiss you.' Three months later we were married. I like to move fast."

Research on Designing Web Sites for Older Adults

Our research found two studies that focused on how older adults interact with web sites and software programs. The recommendations of these studies, plus those from the National Institute on Aging are summarized below: [1, 2, 3] We used these recommendations to develop the project's wireframes.

- Reduced visual acuity is probably the best-known aging problem. Sites that target seniors should use at least 12-point fonts as the default.

- Use large text for hyperlinks and command buttons and other interaction objects. This is especially important for two reasons: 1) to ensure readability, and 2) to make them more prominent targets for clicking. Also, you should use white space to separate interaction objects to decrease erroneous clicks and increase the speed at which users hit the correct link. These objects should be reasonably large to facilitate easy clicking.

- Pull-down menus, hierarchically walking menus, and other moving interface elements are problematic for seniors who are not always steady with the mouse. Better to use static user interface widgets and designs that don't require pixel-perfect pointing.

- Use a sans serif typeface, such as Helvetica that is not condensed. Avoid the use of serif, novelty, and display typefaces.

- Use 12 or 14 point type size for body.

- Use uppercase and lowercase letters for body text.

- Only use underlining for links.

- Left justified text is optimal for older adults.

- Color: Avoid yellow, blue, and green in close proximity. These colors and juxtapositions are difficult for some older adults to discriminate.

- Backgrounds: Use dark type or graphics against a light background or white lettering on a black or dark-colored background. Avoid patterned backgrounds.

- Incorporate text within the icon if possible and use large buttons that do not require precise mouse movements for activation.

- Use pull-down menus sparingly.

- Avoid automatically scrolling text. If manual scrolling is required, incorporate specific scrolling icons on each page

- Let the user stay in control.

- Provide clear feedback on actions.

- Use the users' language; minimize jargon and technical terms.

Demonstrated need

Isolation is often a part of aging that research as determined can reduce the quality of a person's life. Social media could help older adults feel more connected and less isolated. Unfortunately, many older adults find social media overwhelming and confusing. Yet studies show that adults age 65 and older want to use online social media to share information. Creating a website with simplified interactions and content targeted to them would give these older adults a tool with context and interactions catered to them and lessen their isolation.

Related/comparable websites

We are not aware of related or comparable websites and received no input on this from peer reviews. The vast majority of sites targeted for older adults are information- and resource-based. That is, they provide a list of resources that are of interest to older adults, such as elder-care services and long-term care. Information-based sits provide a wide range of information on topics that are pertinent to older adults; AARP is one of the most popular. But none provide an opportunity for older adults to connect with others.

Required functionality

This project is scoped to our abilities as novice coders.

Use case
The initial use cases will consist of gathering historical events that occurred between 1925-1975 and posting two of the events per day on a website. Users will click a button to declare "I was there!" or "I remember that!" or "I don't remember that." A counter will indicate the number of responders for each response type.

Access control
The use cases we are developing for the project will not require secure access. This approach provides the following benefits:
* Give users immediate gratification
* Create interest for older adults that may be distrustful of account-based websites

We anticipate there will be use cases that require access control for future applications. For those use cases, users can create a moniker to make them recognizable to peers similar to authors of blogs. Protecting the IP address and geo-location will be necessary. These use cases are out of scope for our current project.

Other material
* PHP will be used to post the current date and historic trivia.
* A MySQL database will store historic events that will be randomly posted to the site.
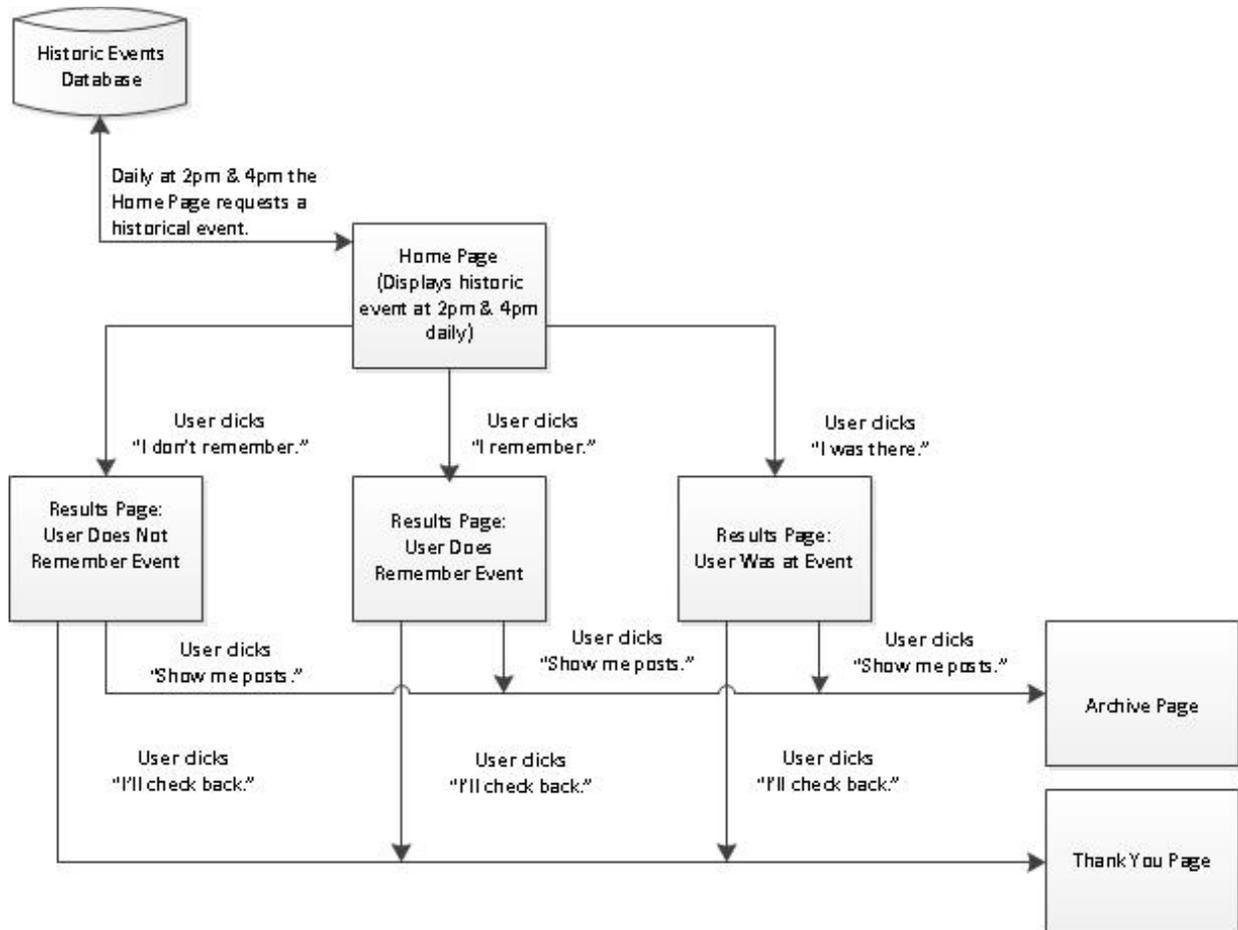* Static HTML will be used for to announce upcoming posts.

Future phases
Future phases of the project could include more complex interactions, including memory sharing. However, this proposal describes the Phase I implementation.

Information flow

The following shows the basic information flow for the website:

```
                    ┌──────────────────┐
                    │ Historic Events  │
                    │    Database      │
                    └──────────────────┘
                            ▲
                            │
         Daily at 2pm & 4pm the
         Home Page requests a
         historical event.
                            │
                    ┌──────────────────┐
                    │    Home Page     │
                    │ (Displays historic│
                    │ event at 2pm & 4pm│
                    │     daily)       │
                    └──────────────────┘

   User clicks              User clicks              User clicks
 "I don't remember."       "I remember."            "I was there."

┌──────────────┐      ┌──────────────┐      ┌──────────────┐
│ Results Page:│      │ Results Page:│      │ Results Page:│
│ User Does Not│      │  User Does   │      │ User Was at  │
│Remember Event│      │Remember Event│      │    Event     │
└──────────────┘      └──────────────┘      └──────────────┘

   User clicks              User clicks              User clicks
 "Show me posts."        "Show me posts."         "Show me posts."          ┌──────────────┐
                                                                            │ Archive Page │
                                                                            └──────────────┘
   User clicks              User clicks              User clicks
 "I'll check back."      "I'll check back."       "I'll check back."        ┌──────────────┐
                                                                            │Thank You Page│
                                                                            └──────────────┘
```

Mockups

The following sections show mockups of the website.

Site layout

To reduce visual noise, the site design will use a simple two-column layout, with a strong graphic image (the site logo) in the left panel and text and/or buttons in the right panel.

Site navigation will be kept to a minimum to reduce the cognitive load.

The site logo will anchor each page visually and establish a sense of predictability and comfort for users.

Although the logo will use a serif font to evoke a historical, journalistic quality, instructional and informational text will use 12 pt. Helvetica typeface to reduce eyestrain and increase legibility for the target audience.
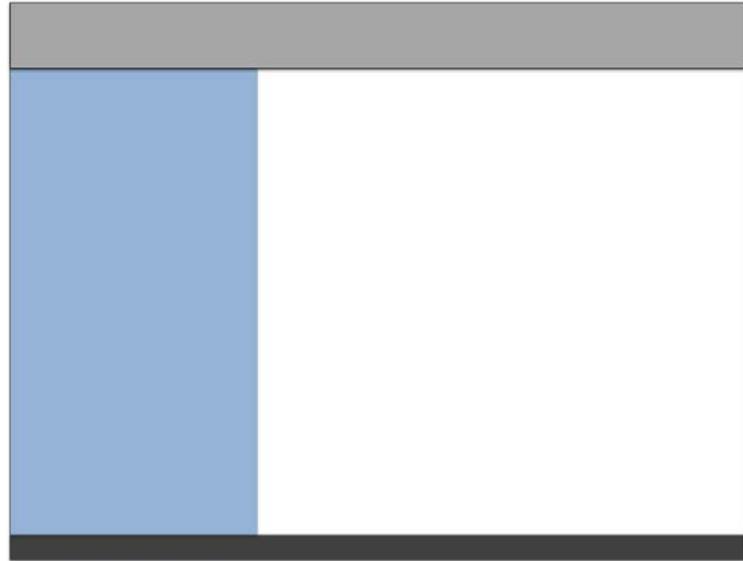
Buttons and icons

The buttons will be large, easy to read, and easy to click for older users to accommodate impaired vision and fine motor skills.

I don't remember that!

I remember that!

I was there!
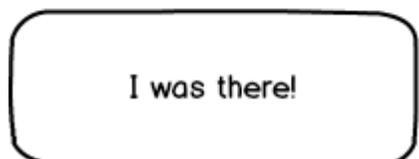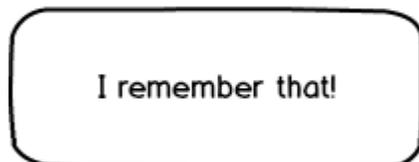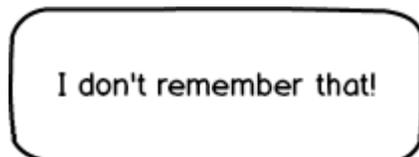
Home Page

- The Home Page is designed to be simple for elderly users.
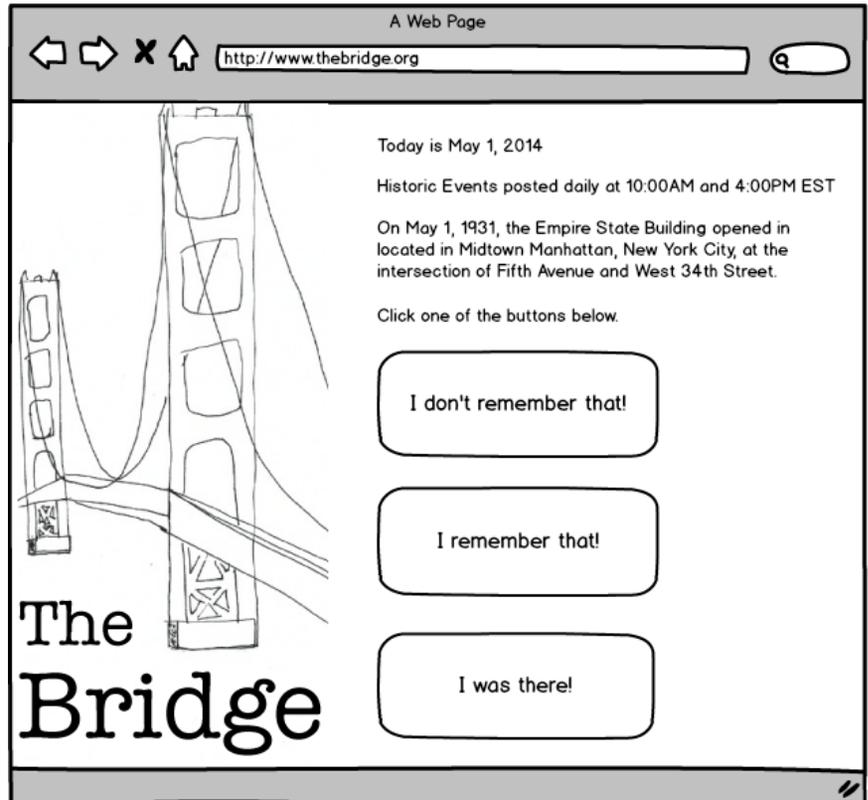- The large graphic is used to attract users and to then push their focus to the right, or content portion of the page. With repeated use, the eye is trained to focus on the right of the screen and create a comfort level with a predictable layout.
- The current date will use PHP.
- The information announcing the times for upcoming posts will be static html.
- The historic trivia post will use the PHP random statement to pull a factoid from the database –OR– we may add a button to "Show me another historic fact."
- The historic trivia post will be repeated on each page to provide continuity.
- The design is purposely simple to reduce "visual noise."

A Web Page

http://www.thebridge.org

The Bridge

Today is May 1, 2014

Historic Events posted daily at 10:00AM and 4:00PM EST

On May 1, 1931, the Empire State Building opened in located in Midtown Manhattan, New York City, at the intersection of Fifth Avenue and West 34th Street.

Click one of the buttons below.

I don't remember that!

I remember that!

I was there!

Results Page

- The Results page appears when the user clicks a button from the Home Page.
- The message in the first sentence varies based on which button they click. We intend to use the PHP switch statement for this section of the page.

A Web Page

http://www.thebridge.org/?reports=was_there

You are number 4 reporting from The Bridge that YOU were THERE!
Wow! That had to be so cool!

On May 1, 1931, the Empire State Building opened in located in Midtown Manhattan, New York City, at the intersection of Fifth Avenue and West 34th Street.

Show me posts I may have missed.

I'll check back!

The Bridge
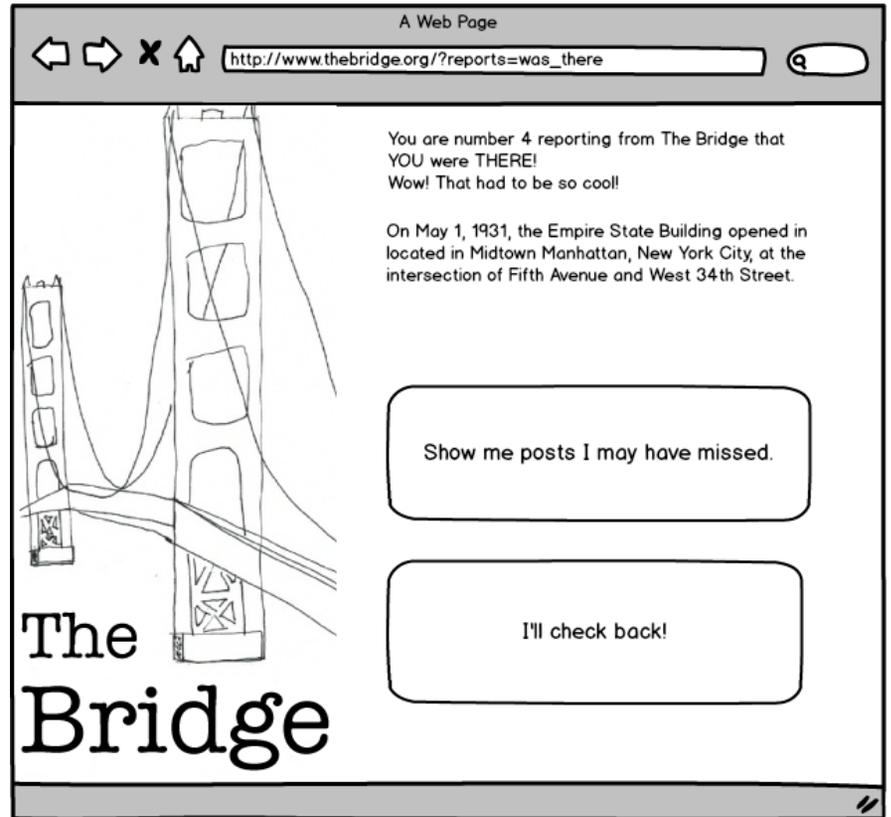
Archive Page

- The Archive page appears when the user clicks the "Show me posts I have missed" button from the Results page.
- If time allows, we will add a search or filter function to this page.
- If time allows, large up and down buttons will be added (instead of a scroll bar) to help the user page up and down through the archives.

A Web Page

http://www.thebridge.org/archives

On May 1, 1931, the Empire State Building opened in located in Midtown Manhattan, New York City, at the intersection of Fifth Avenue and West 34th Street.
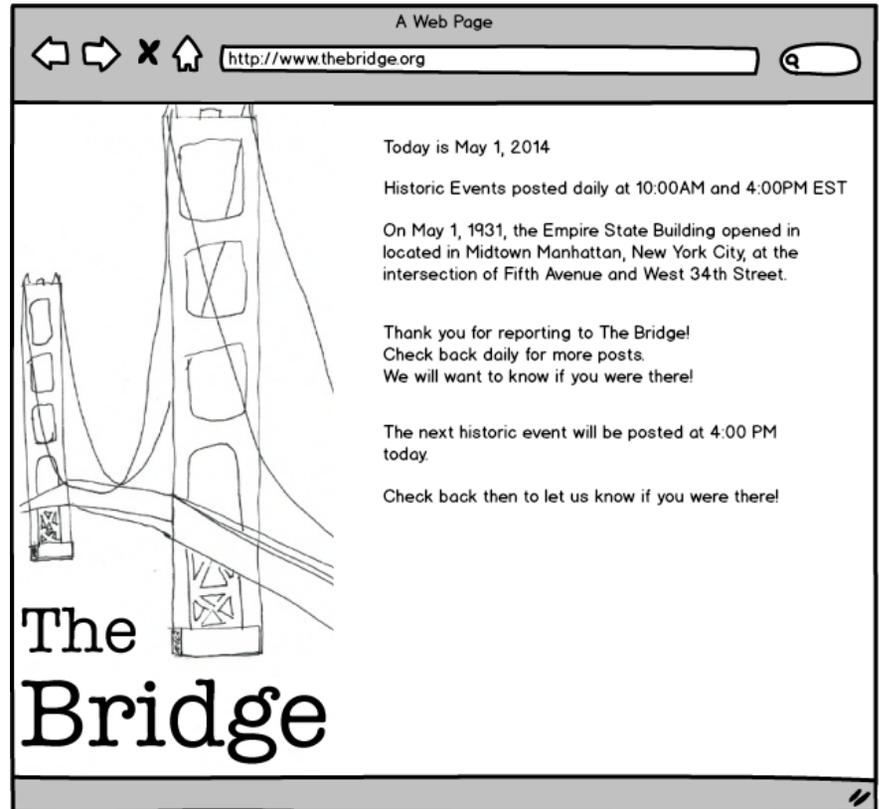
On April 29, Cleveland Indian Wes Ferrell pitched a no-hitter against the St. Louis Browns at League Park in Cleveland, Ohio, striking out eight, and hit a home run with a double and four runs batted in.

On April 28, 1955, WBIQ TV channel 10 in Birmingham, Alabama (PBS) begins broadcasting.

On April 27, 1944, Boston Brave Jim Tobin pitched a no-hitter against the Brooklyn Dodgers (2-0) at Braves Field in Boston, Massachusetts.

On April 26, 1941, a tradition begins, 1st organ at a baseball stadium played at the Chicago Cubs' Wrigley Field in Chicago, Illinois.

Up

Down

the Bridge

Take me to the Home page.

-

Thank You Page

The Thank you page appears
when the user clicks the "I'll
check back" button from the
Results page.

A Web Page

http://www.thebridge.org

Today is May 1, 2014

Historic Events posted daily at 10:00AM and 4:00PM EST

On May 1, 1931, the Empire State Building opened in
located in Midtown Manhattan, New York City, at the
intersection of Fifth Avenue and West 34th Street.

Thank you for reporting to The Bridge!
Check back daily for more posts.
We will want to know if you were there!

The next historic event will be posted at 4:00 PM
today.

Check back then to let us know if you were there!

The
Bridge

References

1. Jakob Nielsen's Alertbox.
2. National Institute on Aging and the National Library of Medicine. Making Your Web Site
Senior Friendly: A Checklist. ND. Web. Accessed 21 July 2013.
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3. Chisnell, Dana and Ginny Redish. *Designing Web Sites for Older Adults: Expert Review of
Usability for Older Adults at 50 Web Sites.* Washington, DC: American Association of Retired
Persons, 1 February 2005. Web. Accessed 21 July 2013.
<http://assets.aarp.org/www.aarp.org_/articles/research/oww/AARP-50Sites.pdf>