



Avokado

Evaluation, Interpretation, and Redesign of Reddit

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Part 1

Reddit

We chose Reddit as the user interface we wanted to evaluate because Reddit is a commonly used website and application that has a rather crude interface compared to other frequently visited websites. Most of the members in our group use Reddit and have experience with some of its more poorly designed features. Reddit's interface has not been updated in a while and we want to make the user interface more modern and make it more efficient and design-oriented. We feel that Reddit is more targeted towards computer-savvy people or users who have been on Reddit for years. The interface is overwhelming and daunting to the average, inexperienced, or new user. Updating this interface would make the site more welcoming to newer users while keeping the functionality that expert or experienced users require.

Step-by-Step Walkthrough

A primary motivation for using Reddit is to ease boredom or obtain knowledge about specific tasks or hobbies. A typical user would type reddit.com into their address bar or click a bookmark to Reddit in their browser. For casual to experienced users (which we assume is Reddit's major demographic), if they were not already signed in they would do so by clicking the "Sign In" link in the top right-hand corner of the web page. Upon signing in to their Reddit account, they would be redirected to their front page, which is a collection of posts from subreddits that the user subscribes to. If the user is not looking for anything in particular they would scroll through their front page, glancing at post titles until something catches their eye. They would expand the post to view the picture, read the text post, or be redirected to an external website containing the indicated article. They would then scroll to the bottom of the post to see other user's comments, given that the post is located on Reddit and not an external website. The user may post a comment related to the article or respond to another user's comment.

Impressions

Our first impression of the user experience was that it was complex because it was so cluttered, making it difficult for a new user to navigate the website. Three positive aspects are: 1) A lot of information is relayed in a small space, increasing efficiency, 2) The bulk of subreddits are listed at the top of the homepage, eliminating the need for extra steps, and 3) The user can expand a post on the main page to see its content and not have to navigate to a new page, which makes it quicker for the user to view the post without losing their place on their homepage. Three negative aspects are: 1) The layout looks cluttered and there are some unnecessary elements (i.e., link to log-in or

sign-up is right above a login box), making it overwhelming and time-consuming to understand for new users 2) Viewing comments requires opening a new page or tab, which is inefficient because it forces the user to sift through multiple pages to find their previous place on the main page, and 3) The large amount of information on the homepage can make it overwhelming for a new user and make it hard for them to complete a given task. We conclude that the Reddit interface demonstrates overall poor design. The main goal of a website is to attract new users, but Reddit's layout may confuse inexperienced users and deter them from returning to the site. This matches with our negative initial thoughts on the experience when observing a first-time user struggle to use the platform. After our initial observations, we discovered more design flaws across the site the more we used it.

Potential Users

Three potential users include: 1) Expert users who often use the site for many niche purposes and those who are more active participants in the community, 2) Casual users who use the site for general entertainment, and 3) Infrequent users who may be redirected to the site from other sites or sources, like Google. Expert users use this site often anywhere they can acquire access to it and when they feel like browsing. They may also go to Reddit to get access to news and access specific information about their hobbies. Casual users use this site occasionally in a school or work environment when they are bored or have free time. Infrequent users may land on this site when browsing the internet at home or at work.

Accommodation for Disability

Users who are blind can listen to text posts using system applications but cannot listen to the comment section due to failed system integration. The site itself has limited accessibility features for the disabled. However, trigger warnings do exist on certain posts containing sensitive material.

Usability Goals

Effectiveness

Reddit effectively acts as a platform for user-submitted content. Users are able to make posts, discuss, and view content, as that is purpose of the interface.

Efficiency

Reddit is efficient for casual to expert users but seems inefficient for infrequent or new users. There are many features to streamline the process but these features are hard to discover. Once users surpass the learning curve and master the site's features,

it becomes relatively easy to navigate the site. For example, the large amount of content displayed per page uses up the screen space efficiently for frequent users but is a bit overwhelming for newer users who are not used to these features.

Utility

Reddit provides the tools needed to make posts, discuss, and view content. There are clearly marked buttons redirecting the user to a dedicated interface for each of these tasks.

Learnability

Reddit has a steep learning curve due to its complexity. Sign-up is required for guidance and the provided guidance is still relatively unclear and unhelpful.

Eight Golden Rules

Consistency

Site functionality, labeling, and structure are consistent. However, depending on the subreddit, the graphical elements or theme may differ. In the user's settings, the user is able to disable custom subreddit interfaces so that the site consistently remains in the default theme.

Universal Usability

Users are granted the freedom to contribute content. However, limitations may exist such as requiring an account to be a certain age before it can post in a certain subreddit. Site functions are not immediately obvious to new users due to the lack of guidance.

Informative Feedback

Overall, the site delivers good informative feedback that is not always explicit but is easily interpreted. After posting, users are redirected to their post and given options to monitor or modify it. When subscribing to a subreddit the green "subscribe" button turns into a red "unsubscribe" button. When landing on a page that no longer exists, the site provides a 404 error instead of redirecting the user to the home page.

Closure Dialogue

There is a submit and cancel button for commenting and posting. Making an account leads you to the home page with the added features that only registered users can access. Submitting posts or comments will direct you to the individual post, showing the result of your actions.

Prevent Errors

Accidentally deleting a user account is prevented using confirmation dialogue boxes and it is a generally hidden feature. Submitting posts or registering user accounts with missing or invalid fields are prohibited and the system will prompt the user to reenter information until it is valid .

Reversal of Actions

Posts can be deleted or edited easily with a visible button. Changing outdated or wrong user information is easy through user preferences. However, when on a subreddit, clicking an external link will cause the user to lose their place on the current Reddit page that they were previously on. The user can hit the back arrow in their browser but they may lose their place on the page when they go back to Reddit.

Internal Locus of Control

Users can customize the content they wish to view and are empowered to post whatever content they want given the broad range of subreddits. Users can also create subreddits, become admins to certain subreddits, and change the subreddit layout. Users can also customize visual elements in their settings. Every subreddit that allows people to tag their posts can be filtered according to tag (i.e., NSFW).

Reduce Short-Term Memory Load

Reddit does not require users to retain information from a previous page to the next because each page is self-contained. Comments are stacked under the original post, with replies indented under comments. Each subreddit has a sticky sidebar containing relevant information and rules, regardless of where you navigate throughout the subreddit.

Part 2

Metaphors and Affordances

A primary example of an affordance used in Reddit's interface is the post titles on the home page. The post titles are large and blue indicating that they are clickable and clicking will link you to the contents of the post, which it does. Similarly, buttons on Reddit, like buttons to submit posts or submit comments, have embellishments like buttons in the real world, making them look clickable. They are visually pleasing and functionally intuitive. Near the top of the website, the word "search" appears in a rectangular text field immediately followed by a magnifying glass icon. This visual is standard for websites, so most users understand that they must click the "search" rectangle and replace the text with a query.

A main metaphor in the design is tabs, located near the top of the page, used to view different assortments of posts on the home page. For example, clicking the "New" tab will show the user the newest posts submitted to Reddit. When the user is on a certain tab, that tab moves to the front and the other tabs move to the back. This is similar to sifting through folder tabs in a filing cabinet to find different information. Another metaphor is Reddit gold. Reddit Gold is purchased by users for users to acknowledge that the other user likes or appreciated that post or comment. Reddit Gold symbolizes achievement as a gold medal would in real life. Finally, Reddit users have an inbox which is accessed by clicking an envelope in the upper right-hand corner of the site. The envelope is universally understood by users to mean "mail."

Interaction Types

Of the four interaction types, Graphical User Interface and menu interactions apply to the Reddit interface. Information on Reddit is presented to the user with its GUI. There are a plethora of menus and buttons that guide the user in navigating the website. Reddit is also a menu interface. Reddit provides the user with a menu with the subreddits that they are subscribed to. This is a simple menu; each item on the list doesn't link to a submenu. The menus are expanding because a lot of options tend to be displayed, depending on how many subreddits that user is subscribed to. Question and answer and command-line interface do not apply to Reddit's interface. The site does not prompt many things from the user, instead, the user is often acting upon the GUI.

Interview Questions

Questions

1. What about the site makes you want to come back and what deters you from returning?
2. Are there any features that you ignore?
3. How likely are you to recommend Reddit to a friend?

Responses

Derek:

1. I like that the site offers reliable and organized information and community-approved content. What deters me is the layout; it often looks too boxy and rigid for its own good compared to most modern website styles.
2. I ignore most of the sorting options in the sorting tabs, as well as the personalized list of subreddits. I tend to use a few subreddits that I can navigate to on my own rather than the subreddit list feature.
3. I would mostly recommend Reddit to a friend who wants to find a niche of content and information for their given hobbies, or just general news/video feeds.

Lauren:

1. I enjoy that a lot of information is presented in a small space; there is very little unused space. This also serves as something that deters me because sometimes I am looking for something more simple/mindless like Facebook.
2. I ignore the "gilded", "promoted", and "controversial" post sorting tabs. I don't understand the use for the "controversial" post sorting, the "promoted" tab is usually empty, and I am not interested in seeing only "gilded" posts from random subreddits.
3. I am extremely likely to recommend Reddit to a friend, moreso if that friend has a niche interest. Reddit provides information for smaller hobbies in a visually-pleasing manner.

Personas

Primary User - The Experienced Reddit User

This is the user who goes to Reddit for specific content and participates in community discussion.



Name: Ellis Wheeler

Quote: "I like having a medium to share and learn about circuses with other circus owners and experts."

Background: Ellis is 25-year-old upper middle class male and he is the owner of Grandaline Circus. He manages the business, handles finances, and hires and maintains circus performers.

Characteristics: He is motivated and always eager to learn. He also performs in his circus acts so he likes to stay up-to-date and relevant with his tricks.

Goals: His goal is to have financial success with his business but also for his audience to have a memorable experience.

Interests: He enjoys learning new performance tricks and learning new ways to capture the audience's attention. He loves talking about the circus to anyone who will listen; he is very passionate about the subject. He does not spend much time on the computer/Internet for leisure purpose, but rather for research purposes and to take part in community discussions involving circuses, tricks, performing, and business management.

Secondary User - The Accidental User

This user may be using search engines and be linked to Reddit without the intention of specifically visiting Reddit.



Name: Lucy Bassman

Quote: "I don't know much about social media but I am eager to learn and find new sources of information!"

Background: Lucy is a 45-year-old American female. She is a mother of three. She is a history professor with a Ph.D. in History, teaching at Harvard University. In her free time, she likes to do scholarly research on American history using the internet.

Characteristics: She often uses the computer and Internet for university-related tasks. She knows how to use technology but is not an expert at it. She will occasionally use Facebook to keep up long-distance relationships with family and friends.

Goals: Lucy has a passion for history and information, so she hopes to continue her pursuit of knowledge, primarily focusing on history.

Interests: Lucy's interests outside of her family life are mostly academic. She enjoys researching and writing about historical topics. She also enjoys critical writing and encourages her students to perfect critical thought as much as they can in her courses. She uses the Internet primarily during her office hours, researching and reviewing information for her teaching or grading.

Scenarios

Scenario 1

Ellis had a circus-goer commit a crime on his grounds. He is dealing with the legal issues surrounding it and decides to browse Reddit to talk to other circus owners about it and gain some insight on the situation. He goes on the Reddit homepage, opens up his list of favorite subreddits, and sees many to choose from. He knows exactly where his circus subreddit is on the alphabetical list. He then navigates to the circus subreddit where he sees many top posts about circus activity. He decides to search specifically involving crimes in circuses. He navigates through the results by top posts and recent posts to find something relevant. After he is satisfied with the posts and reads the discussions, he decides to share in the comments the details of the intriguing events in which occurred at his circus, asking how to handle the future legal proceedings and how to handle the impact on customers and on the business.

Scenario 2

Lucy was grading a student's critical essay and came across an argument which she found polarizing regarding the Louisiana Purchase. She decides to research this on the Internet for her own further understanding. Lucy goes on Google's search engine and looks up some keywords related to the topic. One of the top results is a link to a Reddit discussion on the Louisiana Purchase. The post title is a question, which leads Lucy to click on it hoping to find the answer easily. Upon reaching the site she sees an assortment of links at the top of the page (the subreddit shortcuts). The information on the page appears to be scattered and unrelated to the Louisiana Purchase. Eventually, she finds the main body of the post. After reading the question about the Louisiana Purchase she then tries to look for an answer. She scrolls down the page and finds a couple messages that appear to be comments, but no distinction is made for a definite answer. Lucy dismissed these as ordinary user comments and didn't put any value to them. She then left the page to search for information and answers on more reliable websites.

Use Case

Normal Course

1. User clicks on the "sign-up in seconds" link located on the homepage
2. System prompts user to enter username, password, confirm password and email
3. User inputs username, password, and email to create new account
4. Sets up preference options
5. Searches for a subreddit
6. Clicks on subreddit to view posts contained within it
7. Clicks on a post that is interesting
8. Goes to the bottom of the page to comment on the post to further the discussion
9. Clicks on the subreddit's icon to return to its main page
10. Clicks on the subscribe button to subscribe and have the subreddit's posts appear on the user's frontpage
11. Goes to home page and look through the posts from the subreddits that are subscribed to

Alternative Courses

3. If user inputs invalid information:
 - A. Input a new username and try again
 - B. System repeats step 3 until valid information is provided
 - C. Once valid information is received system continues onto step 4
6. If subreddit is locked to subscribers only:
 - A. Wait to get accepted by the admin of the subreddit
 - B. System continues to step 7 and skip step 10
8. If post redirects to an external webpage:
 - A. Go back to the subreddit page
 - B. Find the post that redirected you to the other web page
 - C. Click on the text showing how many comments have been made on the post
 - D. Submit your own comment
 - E. Continue to step 9

Part 3

Interfaces

Menu Interface

The “My Subreddits” menu is a significant aspect of accessing and navigating Reddit for the average user. It is a drop-down menu that simplifies the process of accessing a user’s favorite subreddits. The menu is designed as a compact tool at the header of Reddit, regardless of what sub domain you are on. It allows for an expanding list of subreddits to be visible when needed, but still free up a lot of screen real estate when unused. The website’s preferences page uses flat menus with a standard list of options to enable/disable; it is on a separate page entirely. The user profile menu is at the top right every page on Reddit, allowing a simple interface to use profile features.

Graphical User Interface

Reddit, as with most modern websites, is highly reliant on a Graphical User Interface. It uses borders and a very basic color scheme of blue hyperlinks and black standard text to contrast links and text and to separate posts. Most of the website uses a button or icon interface. There are several links in most of the screen’s space which will direct a user to new site functions or pages. Notably, the buttons that allow for sorting at the top of the page between “popular, new, controversial, etc.” utilize a simple button interface that makes it clear to users that those sorting options are available and clickable. The “Submit a new link” and “Submit a new text post” buttons are simple and contain the text describing each action. A user would see this text and know exactly what the function of that button is on the interface; it eschews the aesthetic polish of iconography for a straightforward interface.



As for the actual icons, Reddit has a default set of icons to visualize the content of a post in lieu of a media thumbnail. The icons show the type of post in a clear and simple way. In the upper left-hand corner of the screen, the Reddit logo can be seen on every page. As with most interfaces, the logo of the domain often leads back to the main page. Clicking this logo will take the user back to reddit.com. In the upper right-hand corner of the page, the user profile bar consists of a small, standard mail icon that, when clicked on, directs a user to their inbox. Advanced features like “Reddit Gold” include a gold medal icon attached to the username of a poster, which signifies an achievement for a past submission.

We feel that improving the interfaces would revolve around altering the extensive use of buttons throughout the GUI. While informative, the blandness of the design will

deter and confuse users. Many of the buttons are too alike and blend together, which reduces the significance and guidance from each individual button. In order to keep a simple interface for the functions and navigation of the site while improving its aesthetic, designing and implementing unique icons that symbolize the various functions of the site, such as a speech bubble for posting new comment or accessing the comment section, or a pen and paper for creating a new post, would revitalize the site for a modern and effective look.

Incorporating A New Interface

One interface that could be implemented within Reddit would be the question and answer interface. There could be pop up boxes asking if you liked what was on the subreddit/post and if you would like to see more like it or not. This information could be used to offer the user some recommended subreddits/posts to view. Implementing this could prove beneficial if done correctly. The best implementation of this would involve adding a new tab to the main screen with the "hot" "new" "rising" etc. tabs. It would be labeled "recommended" and would help the user find new and interesting topics that they may have never thought of before, or it could make it easier for the user by eliminating the need to go searching for new subreddits/posts on their own.

Voice Commands

One instance of implementing voice commands on Reddit would be having the user ask, "Show me subreddits about [blank]." After the command is spoken, a list of the most relevant subreddits would appear in the order of most subscribers to least subscribers. For example, if the user asked, "Show me subreddits about politics," they would be given a list of subreddits related to politics (/r/politics, /r/worldnews, /r/news, /r/worldevents, etc.) and they would be listed from most popular to least popular. A possible issue with this command would be if the user's topic is an obscure/uncommon word that isn't implemented into the voice-to-text program. The interface may misinterpret the command and accidentally show subreddits about the wrong topic. In order to clear up any confusion, the interface should show at the top of the list the command it "heard" from the user. This way the user knows whether the interface understood their command correctly.

Another command could be, "Show me posts related to [blank]." This would allow the user to find posts related to a topic but not be confined to subreddits related to the topic. They would be displayed and sorted based on popularity that day. For example, if the user said, "Show me posts about Disneyland," they could be given a recent post in the World News subreddit about Disneyland being the #1 grossing company in 2017. This allows the user to find all posts related to a topic without being confined to

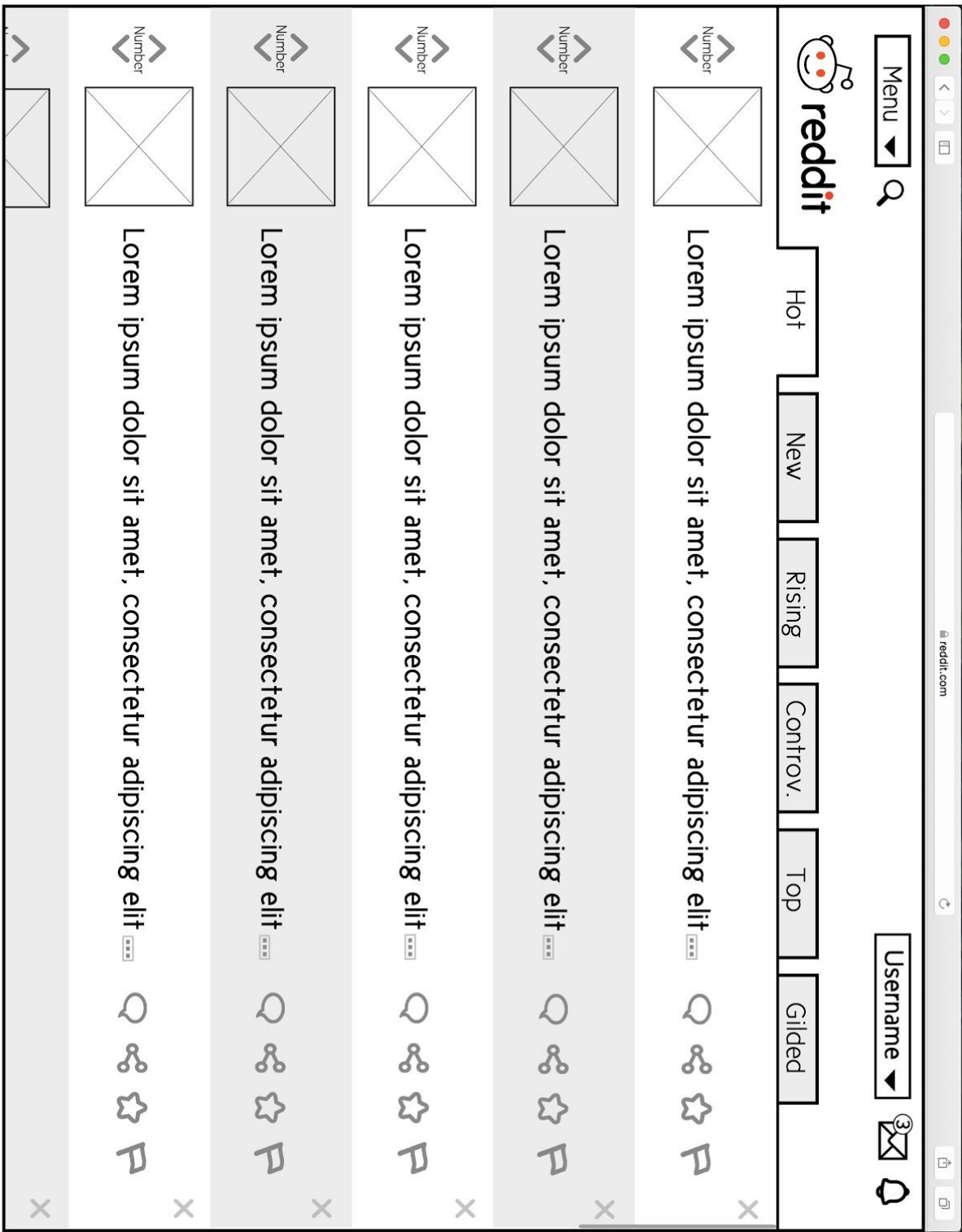
subreddits related to the topic. The user could also run into an issue, similar to the first command, where the interface does not understand the topic that the user is trying to search for. This could be corrected in a similar way by showing the user near the top of the page text saying, "Displaying popular posts about [topic heard in the command]." This way the user knows if Reddit is showing them posts they want to see and if not the user can try again.

User Connection

We do feel that it is possible for a user to become emotionally attached to the interface to the point of preferring to use this interface, above any other, with any free time they have. They could find great pleasure through Reddit with the wide array of topics that the content on the site covers as well as the assurance of a community with similar interests. It can be used for entertainment, information, inquiries, hobbies etc. Although Reddit can be used and loved by many kinds of users from professionals looking for inspiration to teenagers just wanting to be entertained, the design of the interface may not be as appreciated as the content of the site itself. The website is very cluttered with unnecessary information and is hard to navigate for first time users, which may be one reason for a user to not become invested in the Reddit community.

Prototype

The Reddit frontpage displayed to a logged-in user.



Prototype

The top right-hand corner of the Reddit homepage. This replaces the username portion of the homepage when a user is not logged in.

username:	<input type="text"/>	password:	<input type="password"/>	<input type="button" value="Log In"/>
New to Reddit? Sign up!				
<div>Top</div> <div>Gilded</div>				

Appendix

Observation #1

Who: Mariam

Experience: Novice

Where: Laptop

Task: Open comments of a post on the world news

Observations:

- Trying to find on front page, wasn't successful
- Went to search bar and typed in "world news"
- Clicked top one that says "world news"
- Confused about what the arrows and numbers mean (upvotes/downvotes)
- Intuitively assumed it should be organized by most/least recent
- Didn't know links could take you to external site and got confused when taken to an outside website
- Expected to see comments below the article

Result: Successful

Difficulties:

- Wasn't immediately accessible on front page and had to search for it
- Difficulty finding search bar
- Tried to look for discussion/comments but couldn't find it because it took her to a new website
- Finding comments for individual posts was not obvious (took 1.5 minutes)

Observation #2

Who: Mariam

Experience: Novice

Where: Laptop

Task: Set up an account and configure preferences

Observations:

- Easily found "sign up" button because it is located in the top right like most websites
- Didn't want to put in email, didn't know that email was optional
- Easily found "preferences" but got overwhelmed at all the options (would have been easier better categorized with an "Advanced" option)
- Didn't recognize that there were more preferences on top tabs

Result: Successful

Difficulties: Didn't want to sign up with an email but it wasn't obvious that the email is optional

Observation #3

Who: Lauren

Experience: Expert

Where: Laptop

Task: Open comments of a post on the world news

Observations:

- Types /r/worldnews in url
- Goes to subreddit and clicked one of the comments

Result: Successful, no difficulties