

A Better Front End for the Internet's Front Page: A Dream Interface for Reddit

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Abstract

This study proposes an ideal user interface design utilizing the Reddit API. The design is meant to address the issue of navigation confusion by new users and enhance the presentation of information. Borrowing ideas from other popular websites, conforming to popular interface guidelines, and implementing voice based features, the design will provide the best possible experience for redditors.

1 Introuction

When reddit.com launched back in June of 2005, it was a small social network site based on users submitting and voting on text posts and posted links. Over time, as Reddit implemented more features, such as giving users the ability to comment and create their own subreddits, the number of redditors and subreddits grew exponentially. As of October 2015, Reddit has 202 million unique visitors and over 800,000 subreddits, making reddit in the top 50 most popular web sites in the world. With the growing popularity of Reddit, the analysis of the site's current layout and the development of an improved user interface is a significant research topic.

2 System Description

The design will utilize the Reddit API to allow users to post links and text submissions, make new subreddits, comment, and vote like the original site. However, the interface will present the content and allow users to interact with the content in a more natural and accessible manner. This investigation presents an ideal user interface design for the Reddit API that focuses on improving site navigation and adding voice functionality. The improved site navigation is designed in a manner that is meant to maintain navigation efficiency while making it easier to learn how to interact with the site, such as creating a subreddit and exploring subreddits. The proposed interface is also designed with voice command functionality implemented for nonphysical site navigation and interaction, which is especially accomodating to physically impaired users.

The interface will implement voice recognition technology, similar to Siri for iOS or Cortana for Windows 10, in order for users to directly manipulate content. On the original site, each post has an index, a net score of upvotes, comments with each one also having a net score of upvotes, and a subreddit which it was posted to. With voice recognition technology, navigating and interacting would be possible through voice commands, such as "upvote post 1", "downvote comment by user Unidan", "go to the movies subreddit", and "post this text message...". Integrating such technology into the reddit interface would allow users to control their reddit experience without requiring a mouse and keyboard.

While voice functionality is available, the proposed interface would still have an overall smooth sense of flow for users utilizing the traditional mouse and keyboard setup. The interface will coordinate with the Reddit API to ensure users remain capable of standard user abilities, like voting and posting. However, the interface will improve upon the current layout of Reddit's site by adopting aspects of other popular websites and popularly accepted interface guidelines, such as the OSX Human Guidelines and Google Material Design Principles.

3 Top Level Design

While voice recognition is available, the proposed interface still accomodates keyboard and mouse or even touch on mobile devices by providing an elegant model. The main features of the interface are an overhead multipurpose navbar, fully interactive media objects, and toggle sidebar for navigating to subscribed subreddits.

3.1 Overhead Navbar

The design incorporates an overhead navbar at the top of the site with multiple related features. The navbar includes the search bar, a link to post a submission, as well as account related tabs, such as log in, sign up, and settings. The navbar would also include the reddit logo, which would return the user to the site's front page when clicked, along with tabs for categories of posts, such as hot, new, rising, and top. Certain navbar tabs, like posting a submission and account settings would not be visible while the user is not logged in. Similarly, the sign up and login tabs would disappear while the user is currently logged into an account.

3.2 Interactive Media Objects

The interface maintains Reddit's traditional usage of media objects while expanding their overall interactivity. Like in the original site, media objects would include text which, when clicked, link the user to the text post and comments or linked article depending on the nature of the post. The media objects would also retain their quality of allowing the user to vote on the post, read the comments, share or save the post, and hide or report the post. The main difference in implementation would be that posts linked to pictures and gifs would produce a copy of the picture overlaying the window when either the text or the thumbnail is clicked.

3.3 Toggle Sidebar

The proposed interface design utilizes a sidebar that can be toggled between being hidden and being shown. The sidebar will include all of the user's subscribed subreddits which, when clicked, navigates the user to the selected subreddit. The sidebar will be able to be toggled by the click of a menu icon in the overhead navbar.

4 Usage Scenarios

Using the proposed user interface, there are multiple instances of usage scenarios. One such usage is when a redditior intends to post a submission. In the current site's format, the user is able to click on a button indicating the ability to post a submission to the site. However, the user is prompted with a login

form instead of a content submission form in the case that the user has not yet logged into an existing account. The proposed interface design seeks to streamline the content submission process for users. If the user is not logged into an account, the submission post is hidden, keeping the function exclusive to logged in users. Once the user is logged in, however, the submission post tab becomes available and prompts the typical form for posting a submission. While Reddit's current system prompts a user to login when trying to post without an account, the proposed interface design makes for a more fluid experience in only showing the ability to post once the user has made an account.

Another possible usage scenario for the proposed design is when a user tries to search for a specific subreddit. For the current site, the user enters a search term into a search bar near the top of the page. Closely related results are then presented to the user in the form of media objects, similar to posts. The proposed interface performs the task much in the same way. Except for placement of the search engine within the navbar, relevant posts and subreddits are presented in a similar manner. Since the current system follows the natural mental model for searching for things and is effective in the presentation of content, the ideal interface design maintains the overall performance of the search component.

5 Rationale

5.1 Overhead Navbar

The main purpose of the navbar is to keep the window uncluttered while maintaining functionality in a compact space. The navbar improves the overall experience by conforming to Apple's OSX and iOS Human Interface Guidelines for improving hierarchical navigation and reducing cluttering. The component also follows the Android Design Principles in that users are shown what actions they are capable of performing only once they have met the requirements.

5.2 Interactive Media Objects

The main purpose of this design choice is to preserve the current way in which content is projected by Reddit and maintain user familiarity with the site while at the same time removing the need for users to be redirected to a different website to view photos and gifs. This aspect of the interface design is meant to align with Google's Material Design principles in that the media objects no longer remove the user from the Reddit experience when interacted with.

5.3 Toggle Sidebar

The core concept of this interface implementation is similar to the navbar in removing clutter from the window while compacting and maintaining general

functionality. The intension of the component is to conform to Android Developer Principles and allow users to access their saved data at any point while navigating the interface.

6 Usability Forecast