



reddit

Reddit Redesign

Report

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1 EXECUTIVE SUMMARY

Reddit is a social media website where over 250 million unique users go to browse the latest, most popular content available on the internet. Here, users share images, articles, projects, videos, and other content, which are then ranked by other users using an “upvote-downvote” system to indicate the quality of the content. Users are able to reply to the content, creating a conversation surrounding the particular topics, which too are exposed to the content rating system.

As the home of the internet’s seventh most popular website, Reddit’s desktop experience is very unimpressive. Although simple in design, Reddit is under-designed—it is difficult to navigate, and is reminiscent of websites predating the year 2000. The visuals affect the user’s perception of the website, and thus their experience.

Moreover, its layout is cumbersome for the user, hampering their ability effectively use the application. Many of the title bars, and dropdown menus are unintuitive, and there are inconsistencies in the layout of the topic pages. Further, browsing through content is hampered by the user’s inability to preview a “post” before committing to reading it. In fact, this process is exceptionally cumbersome, as the user must either load the entire post in their current window, or open a new window for each new intriguing post. These, and many other issues make the in-browser Reddit experience disappointing, especially when compared to the experience offered from their mobile apps.

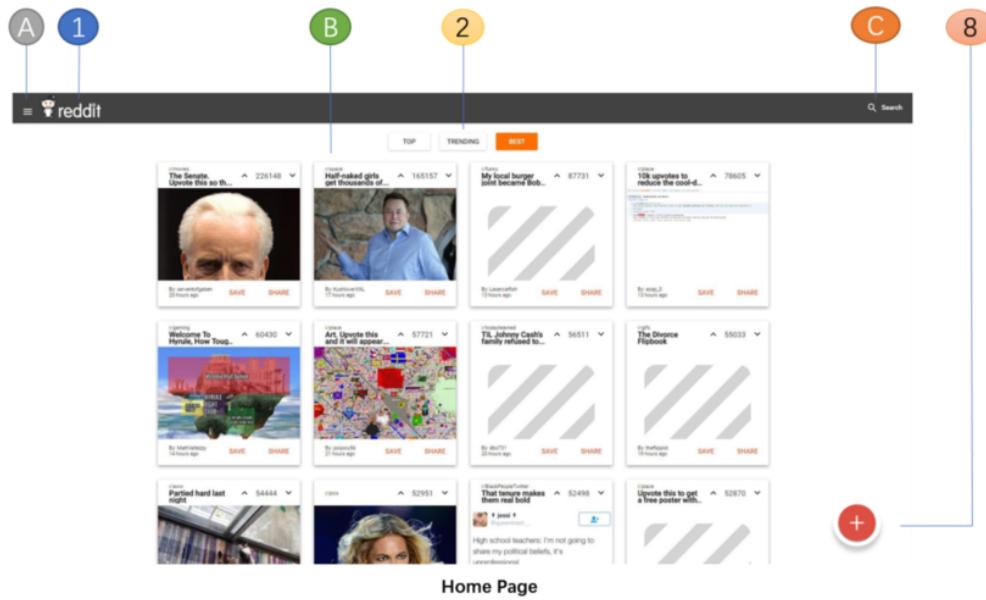
Our goal was to change this—to transform Reddit’s landing page into an experience worthwhile, that is easy to navigate and encouraging to new users. To accomplish this task, we have explored many design principles to guide us in redesigning the webpage.

Many of the title bars and drop-down menus are unintuitive, and there are inconsistencies in the layout of the topics in the front page of their website. We reorganized the topics on the front to be more interesting and more intuitive for users. Additionally, we noted the many redundant or duplicate features available on Reddit’s front page and removed or reorganized them to reduce clutter, simplifying the navigating process for users.

Although these changes have significant impact on the visual appearance of Reddit, we aimed to minimize their effect on its functionality. We reorganized the functional components to be co-located with the relevant components—that is, the components which the effect. To this end, we redesigned what a post looks like, focusing on the content (typically an image or video), rather than the title, and providing their respective controls in an encapsulated content-tile. Taking this further, we split Reddit’s one-page, monolithic approach into three main views: the content view, the navigation view, and the search view—each with the respective components and functionality encapsulated in their views. This was done to emphasize the relationships between components and functions, reinforcing their mappings for users.

It seems that Reddit forgot its primary purpose in designing their front page. As a content viewing website, their front page fails to emphasize the viewing of content. Moreover, it fails to act as a functional entry-point, as its illogical layout makes navigation a nightmare. Our redesign aims to refocus the Reddit experience on content viewing, by emphasizing the content, and providing ancillary content and navigation functionality in appropriate locations, reflective of a content-first experience.

2 NAVIGATION MAP



Home Page

A Navigation bar

1 Click will redirect to Home Page

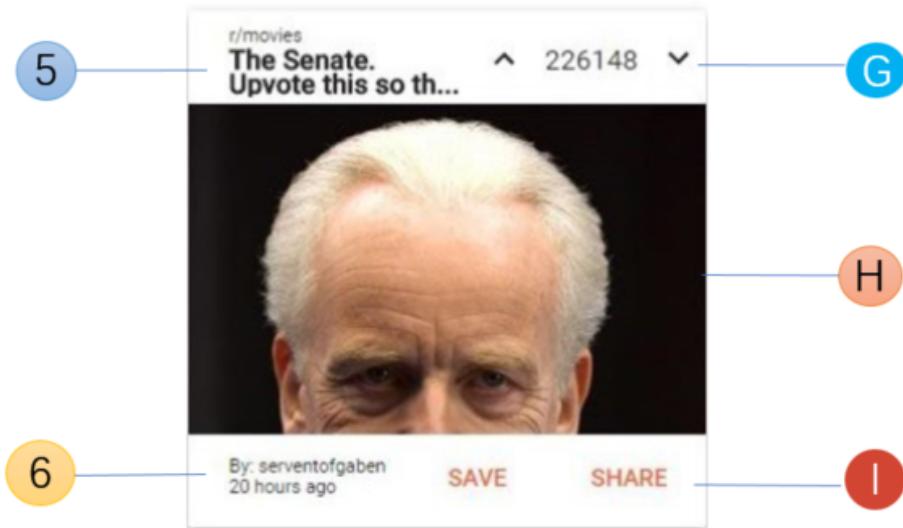
B Content box

2 Click will redirect to reddit.com

C Search bar

8 Post Butten, click will redirect to reddit post

B Content box



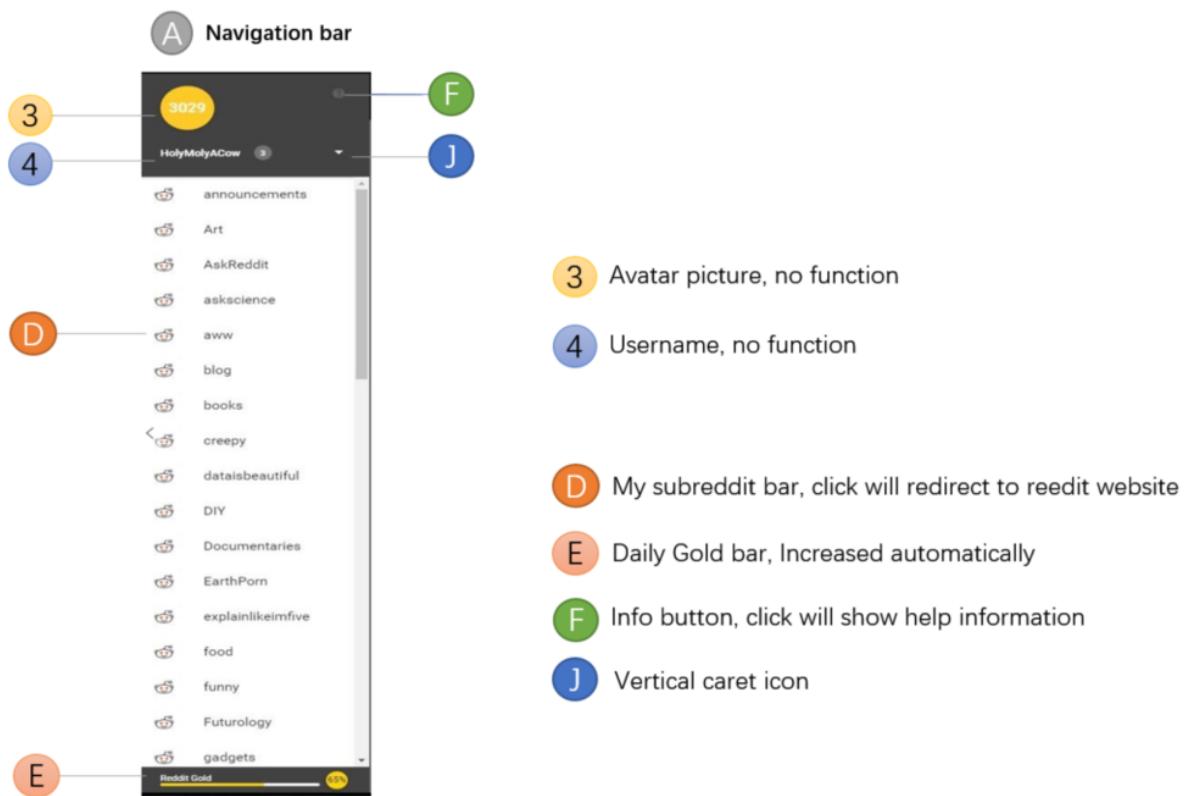
G Voting box

5 Content Title, no function

H Picture viewer

6 Author and post date

I Save and share button



3 DESIGN PRINCIPALS IMPLEMENTED IN THE DESIGN

3.1 AESTHETIC-USABILITY EFFECT

The redesign was designed to improve the aesthetics of Reddit's front page. Unlike the existing client, we have incorporated many principles like layouts, contrast, colors, and images to improve the aesthetic of the application. In doing so, our solution appears to be more usable.

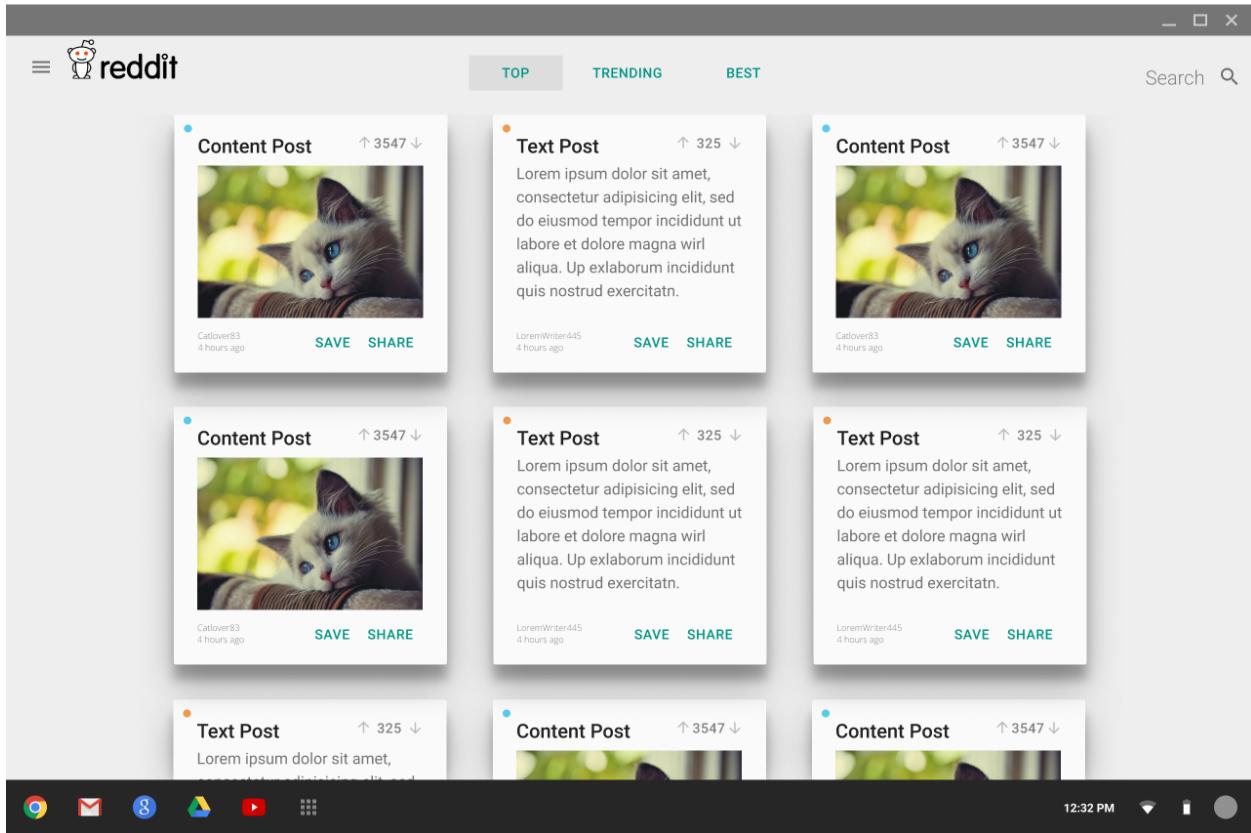


Figure 1: We have improved on the layout and styles of the existing page.

3.2 ACCESSIBILITY

Our redesign was done with accessibility in mind. Understanding that many users are colour-blind, we made sure to keep the number of colors on the page down to a minimum (excluding the post content colours). Although this may have impacted the aesthetic of the design, we believe this trade-off to be minimal. Further, by incorporating clearly differentiated headings, content, images, and menus, we improve the website's accessibility for those who are visually impaired, or require larger fonts and content. Altogether, these features improve the operability component of accessibility.

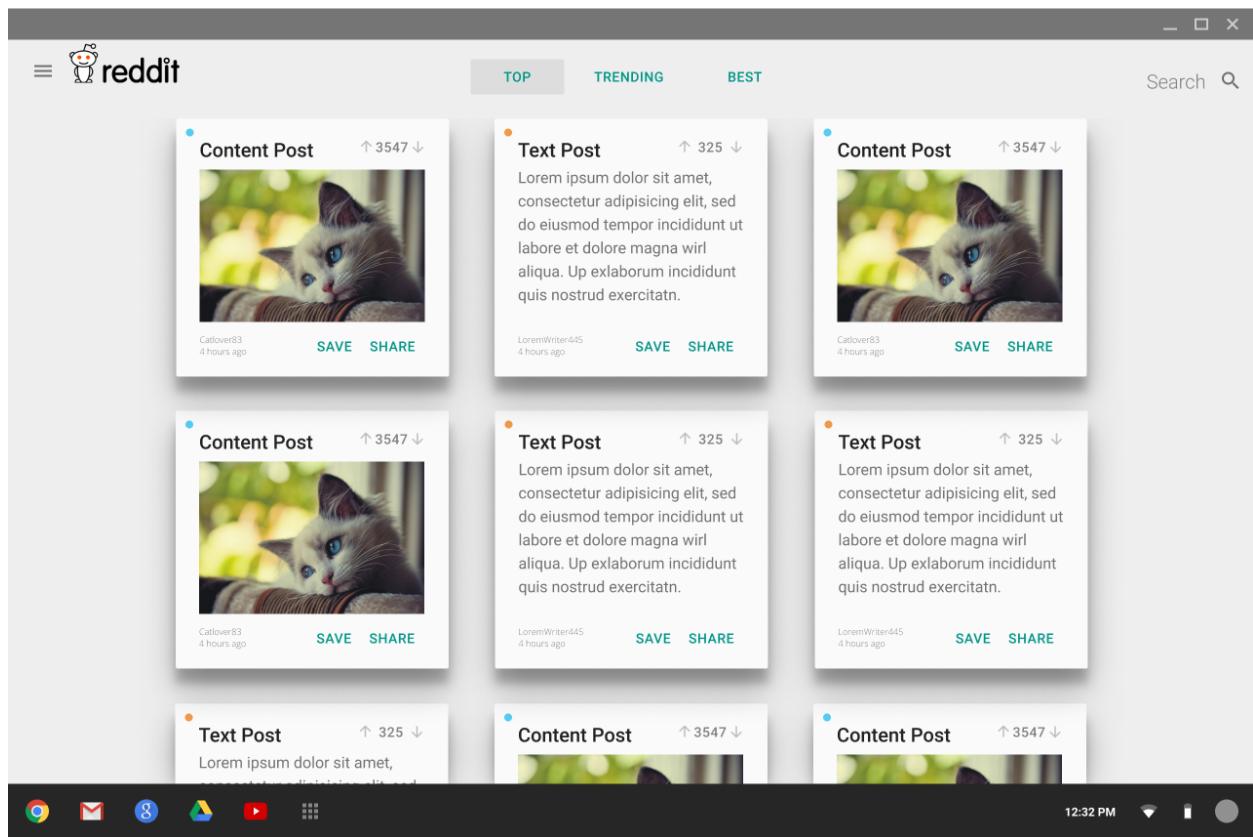


Figure 2: Emphasizes fewer, more simple colors, and a graphical design improves the accessibility of the webpage.

3.3 AFFORDANCE

In our design, we selected iconic representations that afford their use. Whenever possible we make use of pre-existing symbols used by Reddit. When a function of our design—like the dropdown menu—required the use of a symbol not in use on Reddit, we would select a conventional symbolic representation that was already in common usage elsewhere on the internet that clearly affords its intended function.

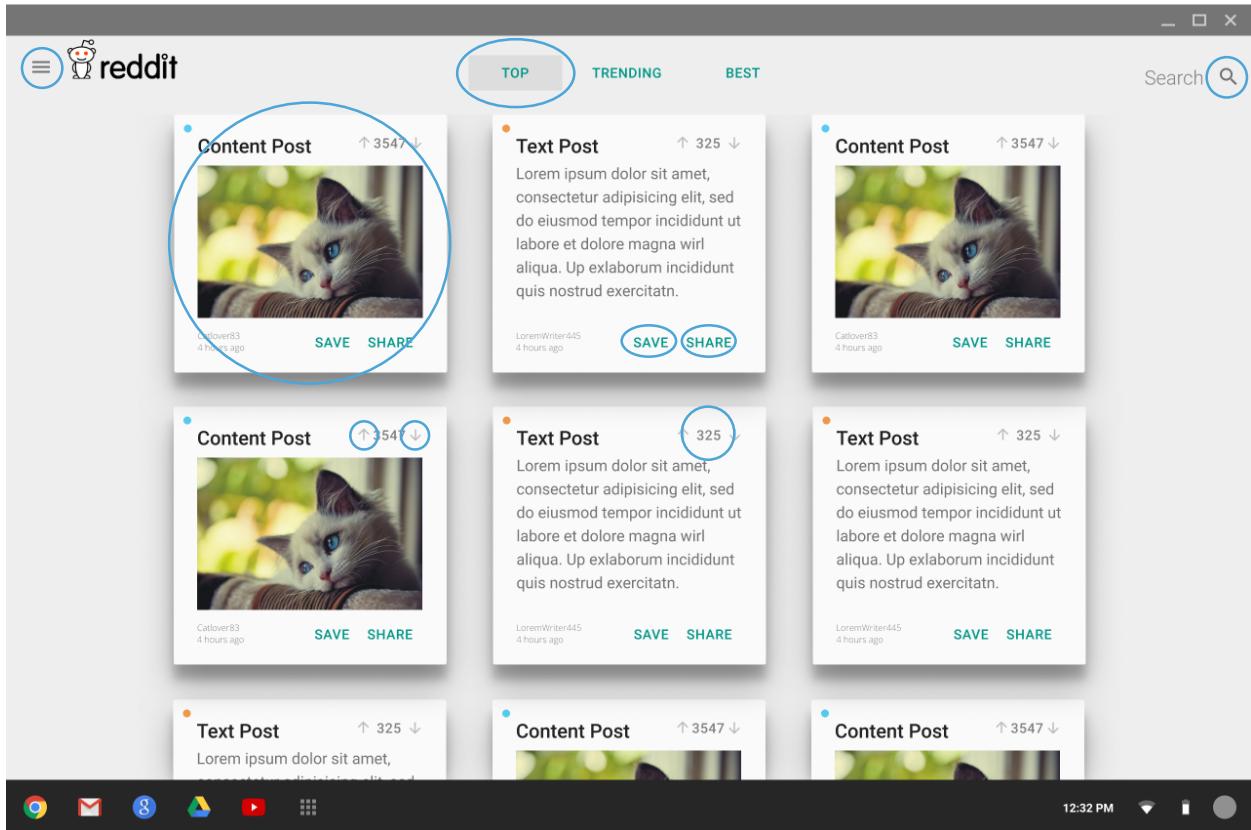


Figure 3: Above are many examples of the explicit affordances of our redesign.

3.4 ALIGNMENT

Alignment was a key principle in determining the layout of our design. Much of the content on the page aligns to a grid in some fashion. This was done to intentionally express the relationships and non-relationships between objects, and their functional capabilities. Specifically, this principle can be seen from the content view, where the content tiles are aligned on a horizontal and vertical axis, the filters above them, which are aligned on the same horizontal axis. The content view is intentionally centered to convey its importance, in an effort to guide the user's attention directly to it. Likewise, ancillary functionality, such as the search, and navigation features are located on the edges of the screen, as they are a secondary to the primary purpose of Reddit, which is viewing the content. This way, the user is immediately oriented when they first visit the page, reducing the cognitive requirement of this generally experiential task.

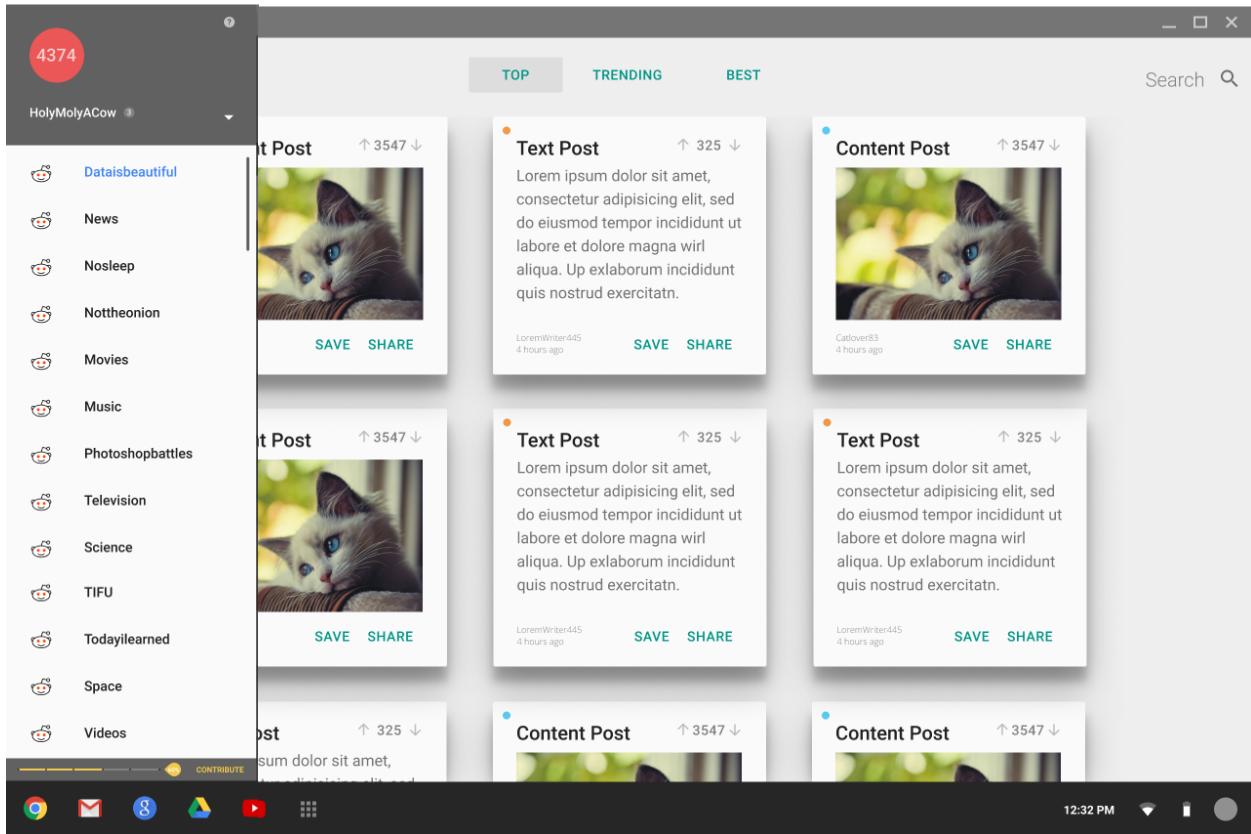


Figure 4: The user's attention is centered on the content, only requiring that they look to the edges to find additional functionality.

3.5 CHUNKING

The original Reddit website presents far too many options for filtering and posting content to the user. In fact, many are redundant, and offer similar, if not the exact same functionality. As a result, users are bombarded with the entirety of the website's functionality in one view, making it difficult for them to make decisions, or use the application.

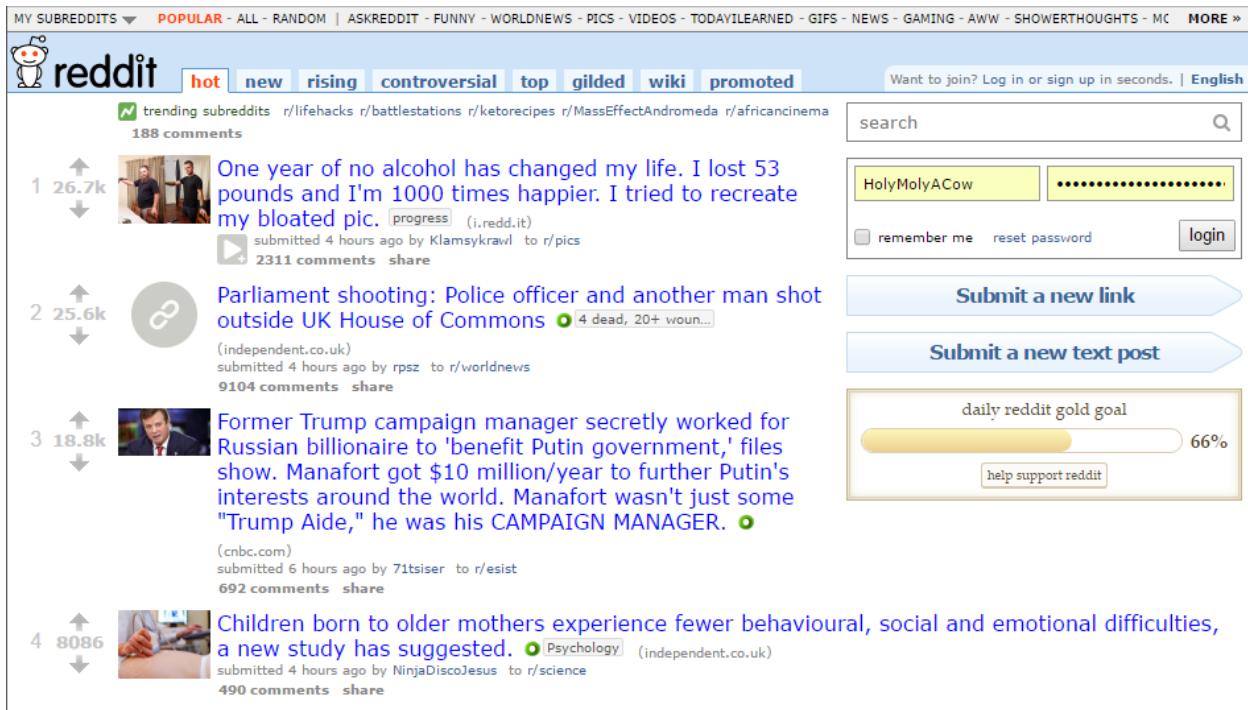


Figure 5: The original Reddit page is far too cluttered, in an attempt to display all of its functionality to the user in one view.

Our redesign acknowledged this shortcoming, and aimed to change it by grouping functionality where it belongs. We have split the application into three primary views: the content view, the search view, and the navigation view; wherein each, we present the user with only the functionality that applicable to that particular view.

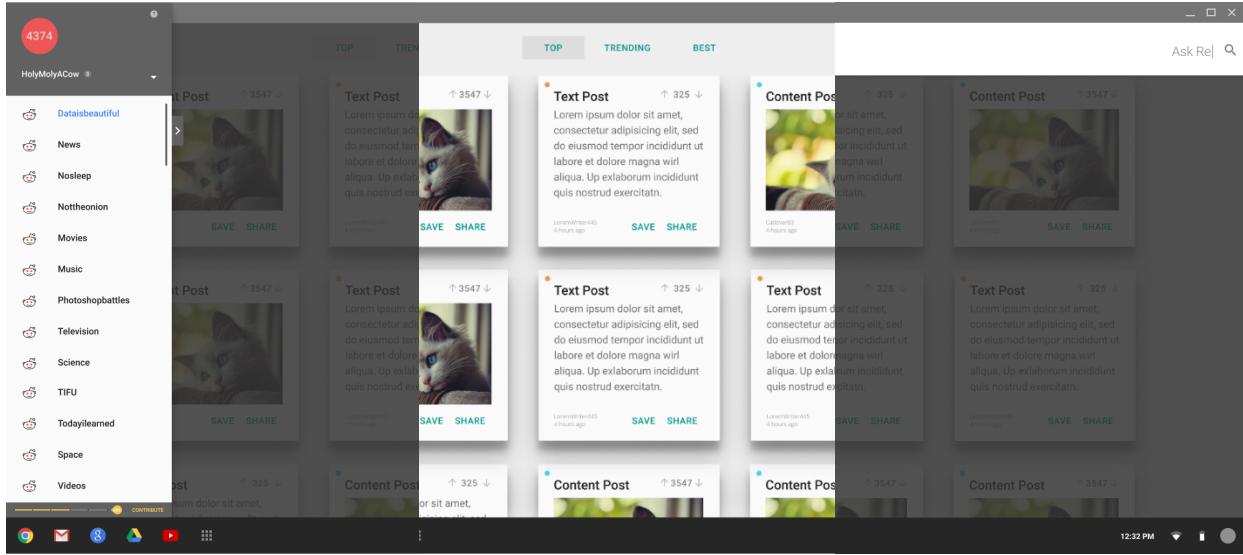


Figure 6: We have separated the functionality and components into three separate views: the navigation view, the content view, and the search view.

Taking this further, we have explicitly differentiated the content of each of the posts, as well as their respective functionality to streamline the user's ability to clearly understand the association between the controls and what they affect, as well as improve their ability to digest the content in general.

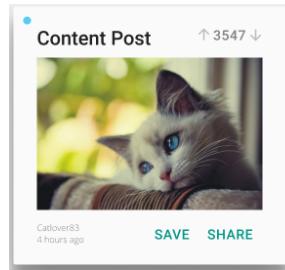


Figure 7: Our redesign encapsulates the functionality of the content explicitly.

3.6 COMPARISON

To best communicate the content on the page, our design used *Apples to Apples* comparison to illustrate the difference between the content. To accomplish this, we represent the variables using the same graphical and numerical standards, where each post has the same displayed properties, such as the date, author, and number of *upvotes* (as a measure of popularity).

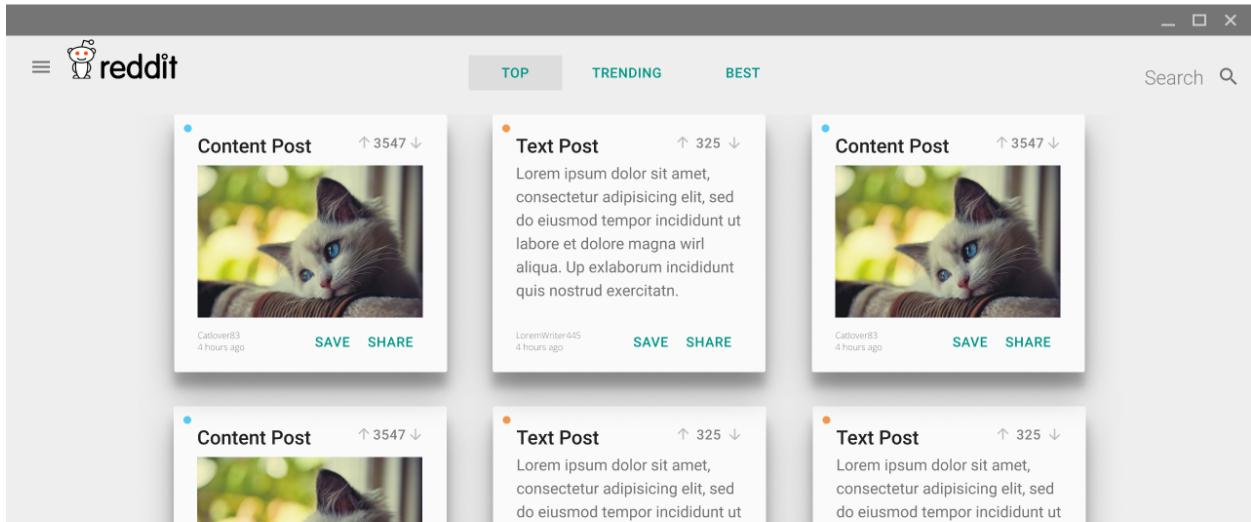


Figure 8: Posts are compared using the same basis, emphasizing the similarity and comparability.

3.7 CONSISTENCY

Understanding that the Gestalt Principles are generally fundamental to how humans perceive a design, it is important that Reddit leverage them. Unfortunately, the current design for overuses the principle of consistency as *everything* looks and feels the same.

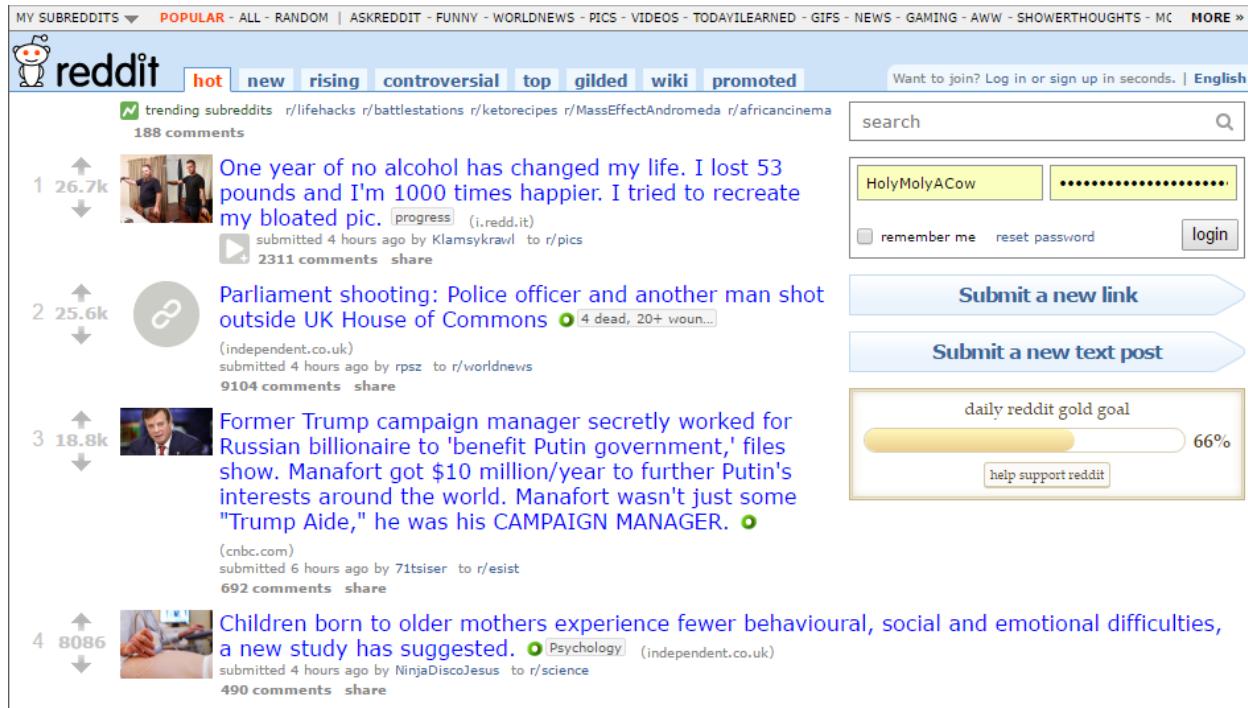


Figure 9: The original Reddit design is over-consistent

The In order to enhance the learnability and the usability of Reddit's front page, we have renamed several buttons, minimized redundant functionality, and applied differentiated styles. Here, we reduced the consistency found between objects on Reddit's page, which hindered the user's ability to differentiate relationships between components.

Nevertheless, we made sure to emphasize the similarities in functionality by being consistent with our styles (all main buttons are in turquoise, similarly styled text, content tiles are all similarly styled, etc.). This communicates to the user that similar-looking components act similarly, and those which look dissimilar do not, lowering the learning curve.

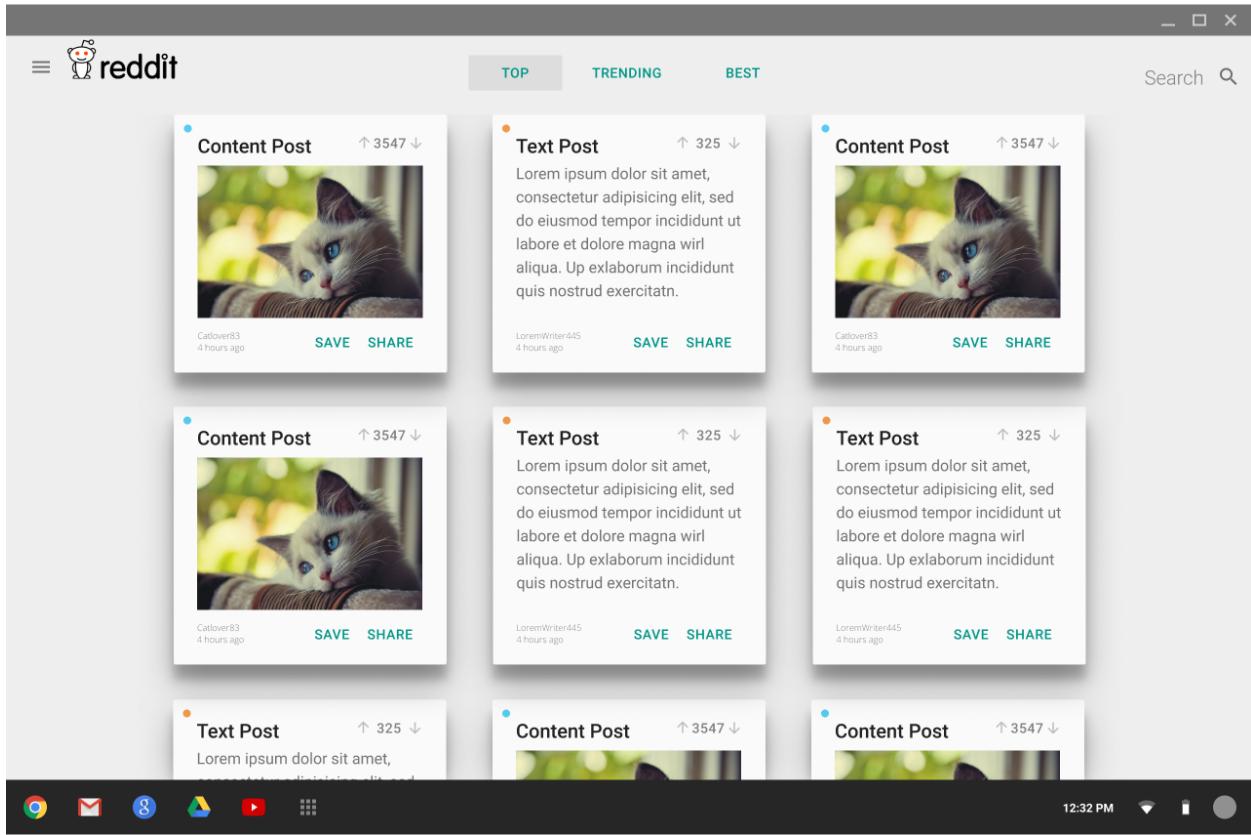


Figure 10: Switching from consistent styling to a differentiated styling allows our redesign to better communicate the object's relationships.

3.8 ENTRY-POINT

3.8.1 Minimal Barriers

Reddit's front page presents the user with their first impression of the site. In doing so, it is the entry point for the user. With that in mind, users, especially new ones, are easily overwhelmed by the old, cluttered, design, which acts as a barrier for the user and hinders adoption of the platform.

In an effort to reduce the barriers for the user, the view space is minimalist, offering only what is relevant to the user at any given view. This provides them with sufficient time to explore their options and easily navigate through this entry point.

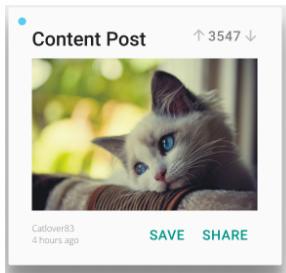


Figure 11: Content only contains content-related functions

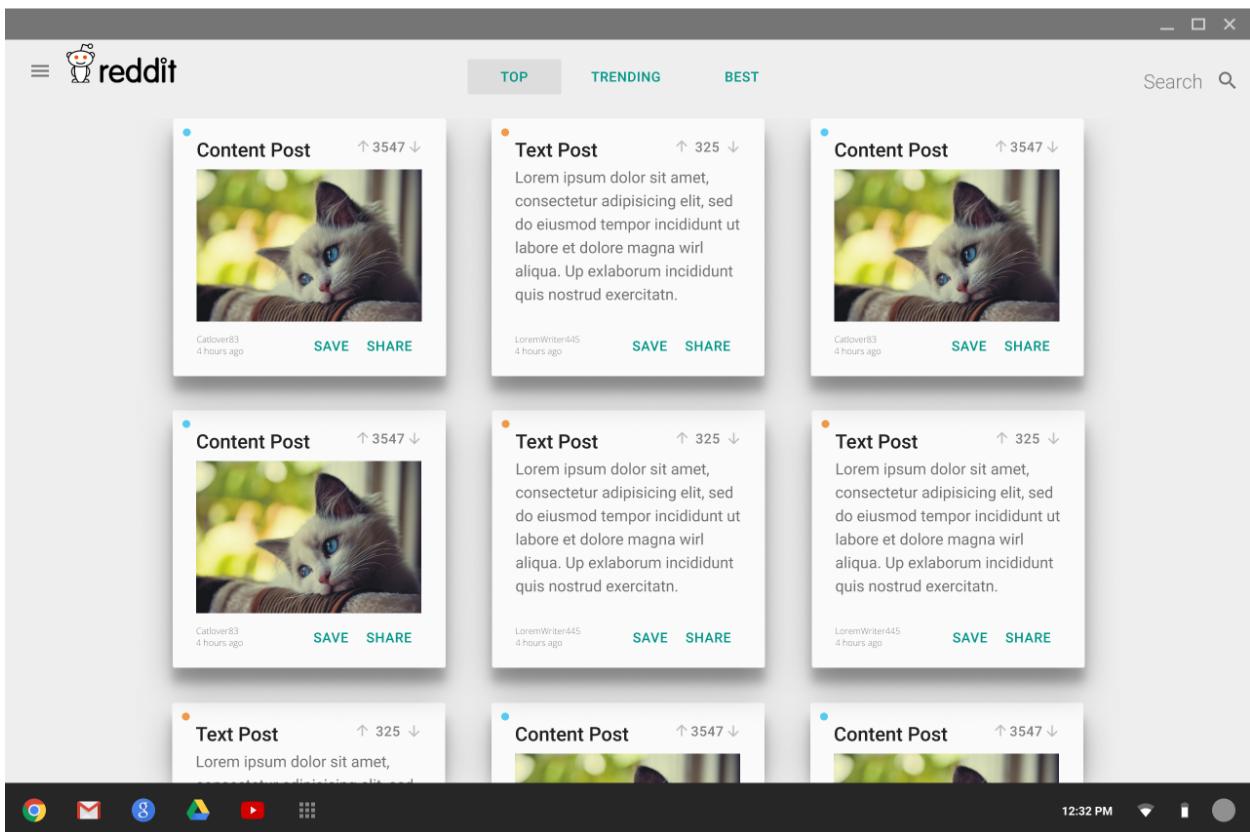


Figure 12: Main page only contains content-viewing controls.

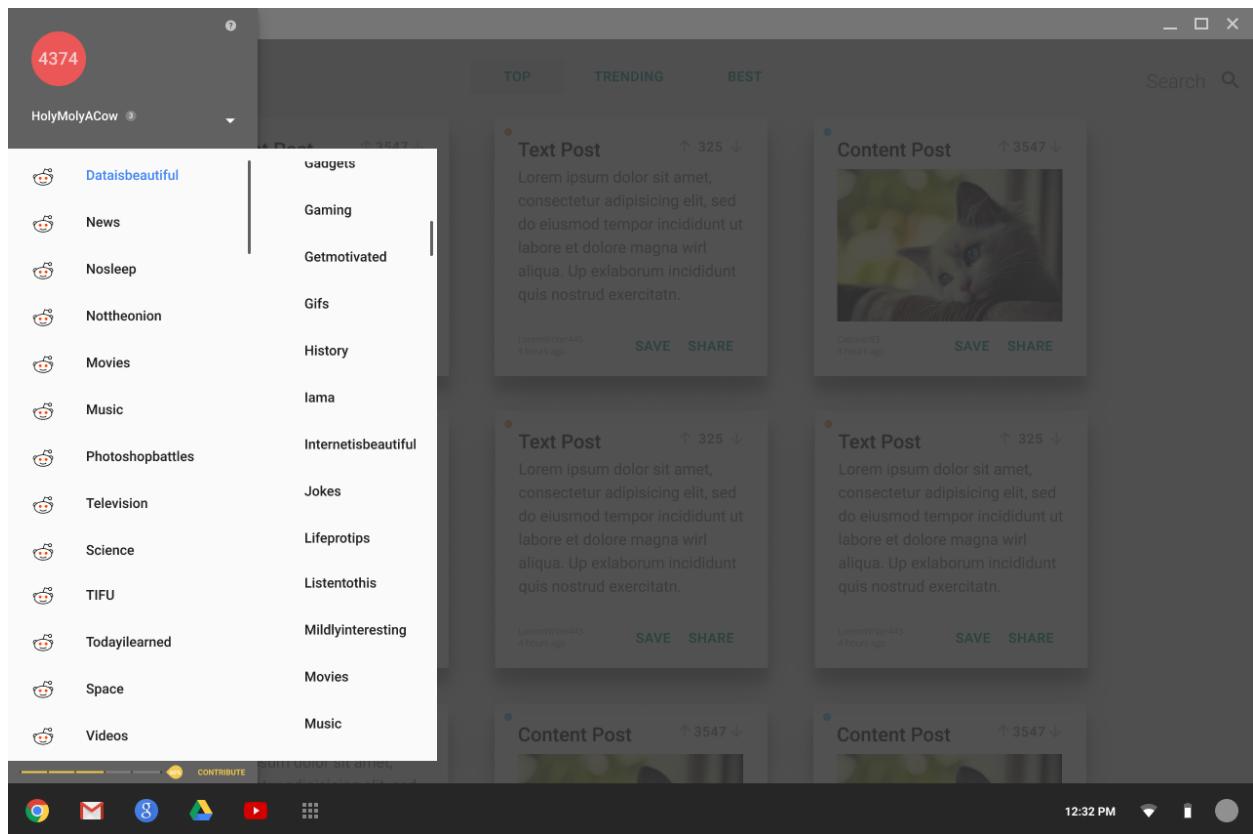


Figure 13: Navigation menu contains navigation controls, with space reserved for account related controls.

3.8.2 Points of Prospect

The old design features several condensed navigation menus, bars, and tabs, many with duplicate functionality, disorienting the user, and preventing them from finding their end location. These menus compete for the attention for the user. Thus, the user is confronted with confusing menus, which are distracting.

Our design features two clear navigation menus—one for navigating the front-page content—and another for navigating through the subreddits, clearly mapping navigation options with the content being navigated. Further, by using large buttons, the options are well spaced, providing the user with enough time to make directional decisions.

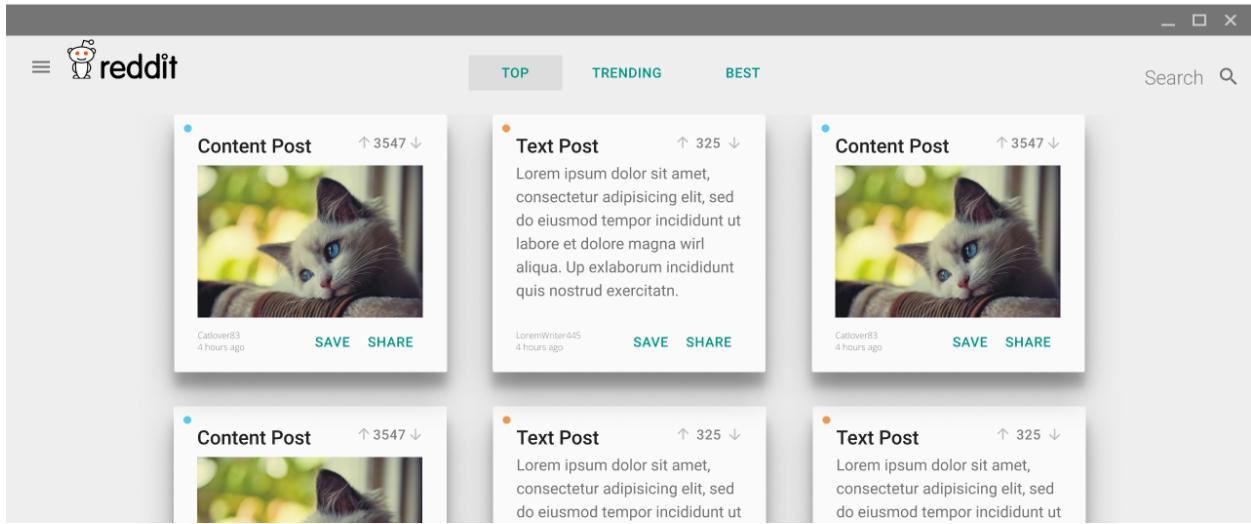


Figure 14: The subreddit navigation menu is tucked away (top-right). The content navigation bar is present above the content (top-center).

3.8.3 Progressive Lures

Reddit's conceptual model is built with posts at its center, organized into groups called subreddits. This is hardly clear when observing the original design, which overwhelms the user with far too many options, ineffectively guiding the user to any location.

Finally, referring to the conceptual model of Reddit, our design separates content-viewing from subreddit browsing by separating both views, and emphasizing this separation using a *masking* effect when viewing the navigation menu. This allows the user to know where they can go to view content, and where they can go to travel to other subreddits.

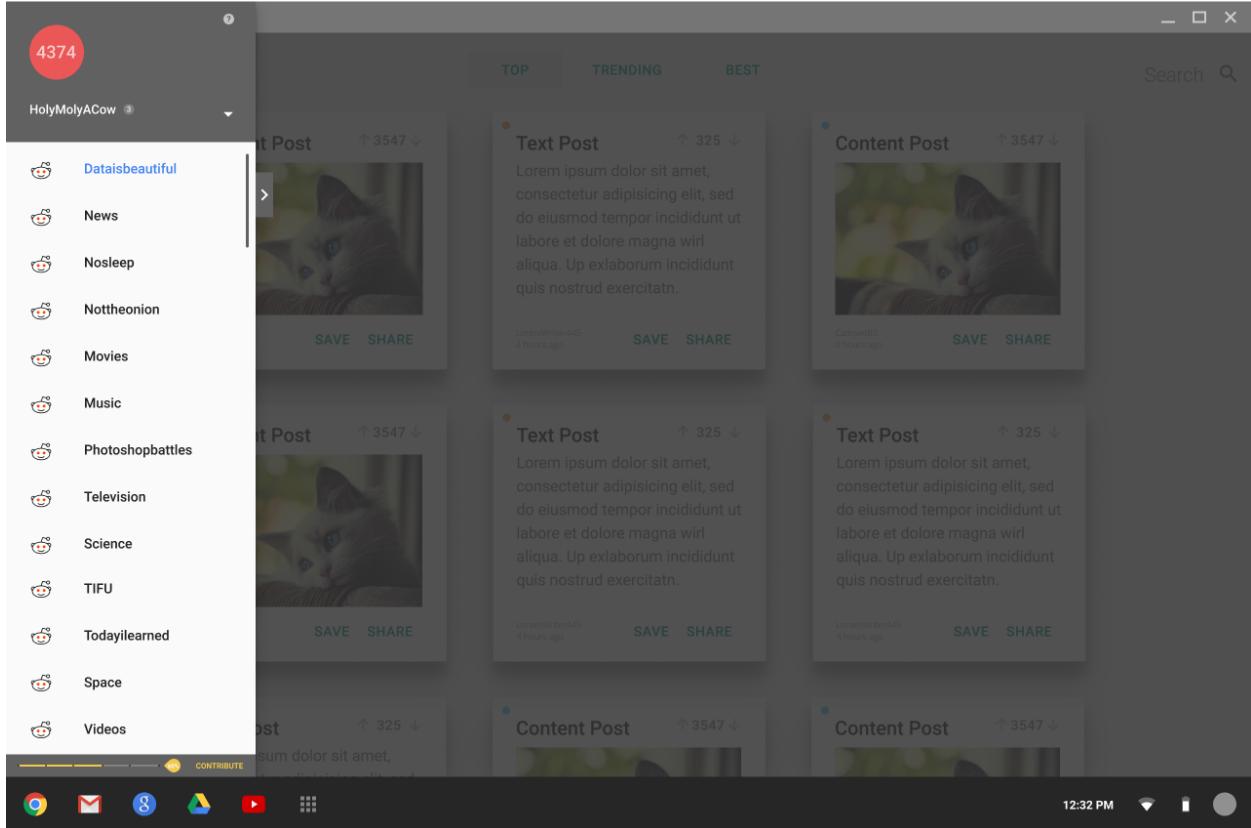


Figure 15: The main view is darkened to emphasize the separation between navigation and content.

3.9 ERRORS

Given the clutter in Reddit's existing design, it is increasingly likely that users will make mistakes—either slips or mistakes.

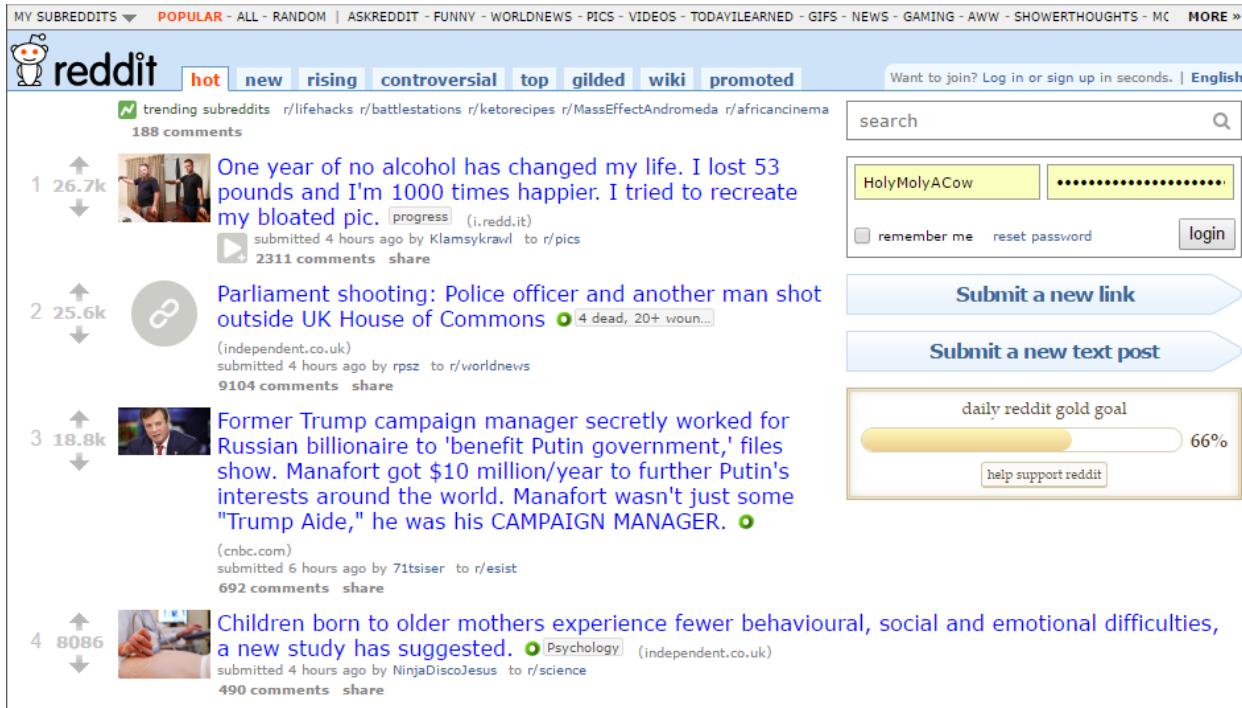


Figure 16: Reddit's cluttered design is promotes both slips and mistakes.

3.9.1 Slips

Given the clutter that exists on Reddit's font page, it is inevitable that slips will arise. Here, our design aims to reduce the possibility of slips by: first, spacing out components—especially unrelated ones; second, using large buttons to perform actions; and third remove redundant functionality and repositioning useful functions to where they are most relevant. This provides the user with a greater error margin when it comes to activating specific functions through clicking. Further, when a user shifts between views, the active view is emphasized to communicate the current focus to the user.

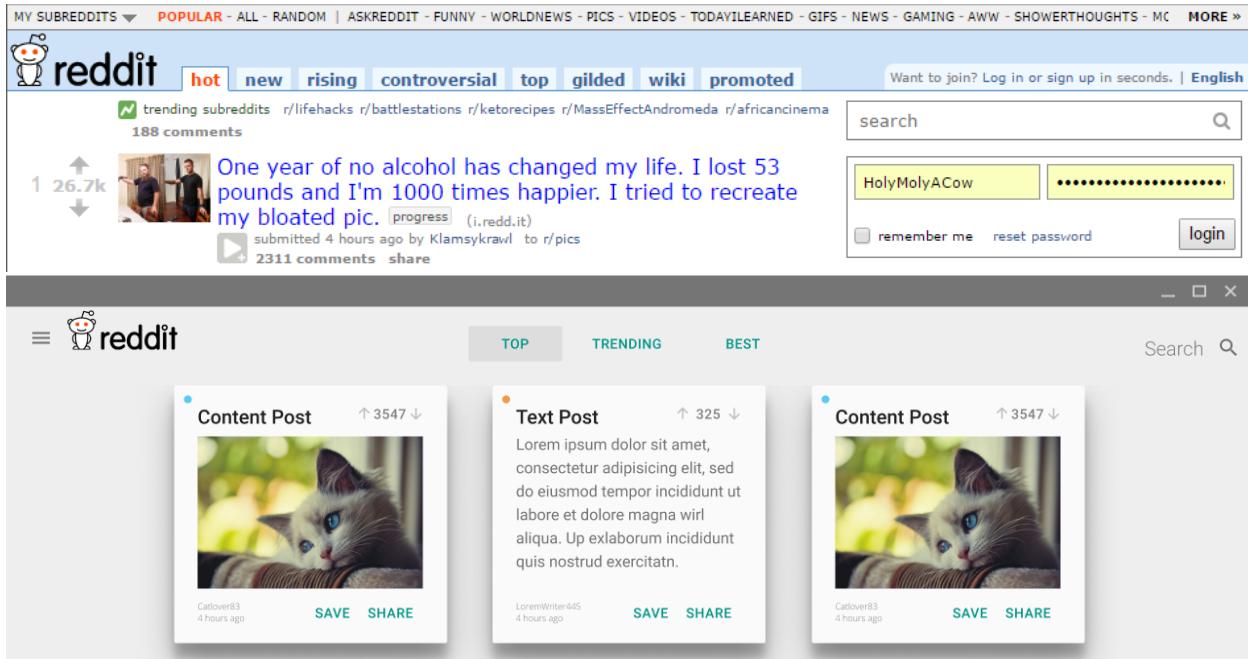


Figure 17: Reddit's design (top) features small buttons for navigation and content functions. Larger buttons in the redesign offer the user greater awareness, as well as increased forgiveness.

3.9.2 Mistakes

The original Reddit front page is littered with links, buttons, and menus—and their interrelationships are not always clearly communicated. Here, our design aims to reduce slips by compartmentalizing functionality with their respective uses. This allows our design to better communicate the relationship between function and result, allowing the user to correctly expect an outcome when they activate a function.

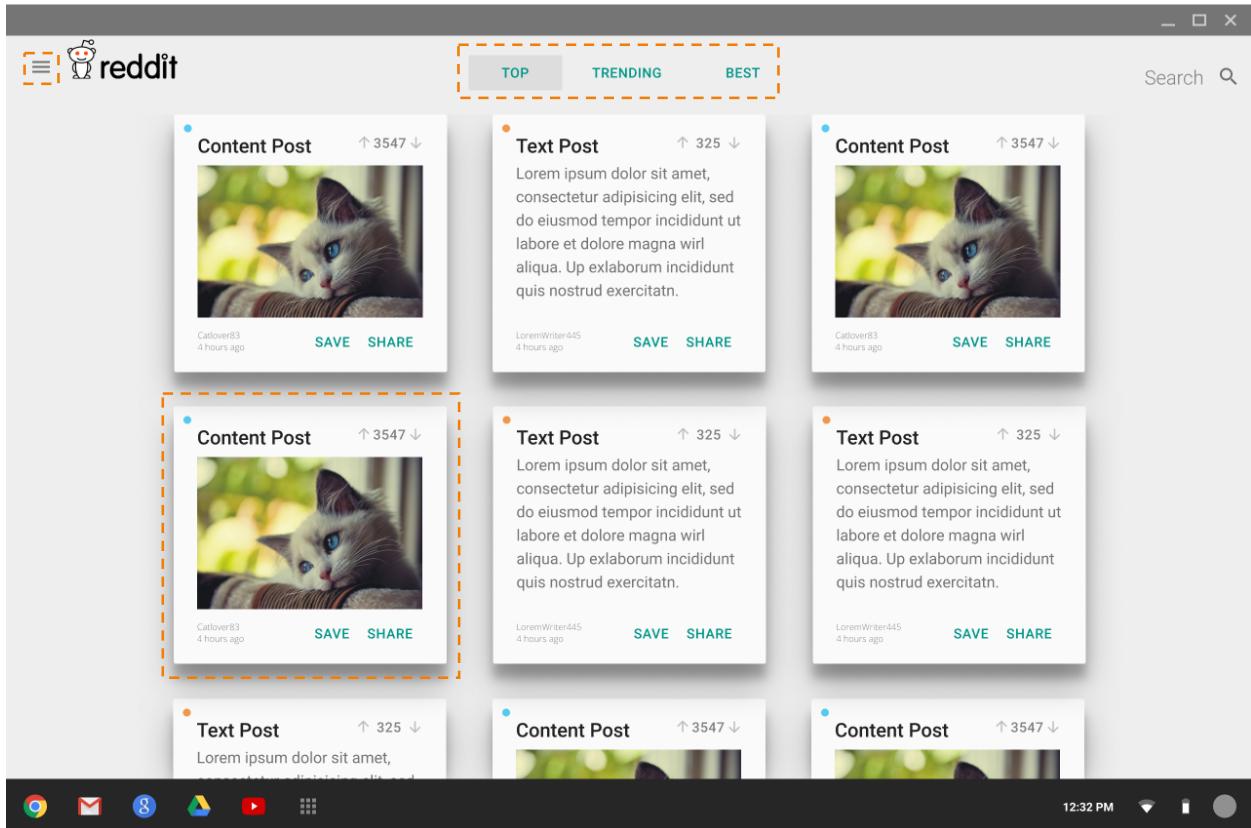


Figure 18: Content and their respective functions are grouped together to communicate their relationships, allowing the user to understand the outcome of an action.

3.10 FAMILIARITY

Reddit's original design seems to mimic an early 2000s message board or forum, which presents a gulf of understanding that needs to be bridged with unfamiliar users as they attempt to understand the conceptual model.

Our redesign uses components from Google's material design library—components with which the user has likely been exposed to and is familiar with. Similarly, our layout takes inspiration from news websites and popular modern content sites such as Instagram, Tumblr, and imgur. Ideally, a user would have had exposure to any of these mediums, which would enable them to more easily understand the conceptual model. In any case, their designs are rooted in properties of traditional newspapers, allowing even those with minimal exposure to such content, to be familiar with our design and understand the conceptual model.

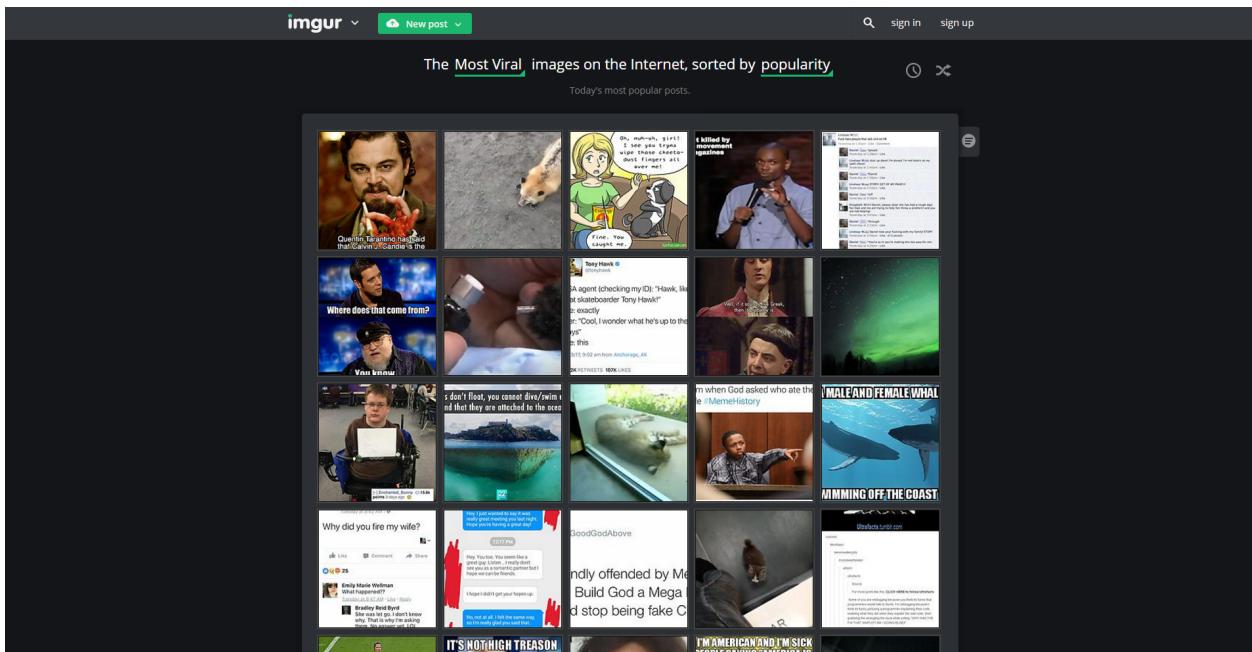


Figure 19: imgur and other content websites inspire the fundamentals of our design.

3.11 FIVE HAT RACKS

In attempting to reduce the clutter and add some sense of structure to Reddit's front page, we decided to group objects. In doing so, we implemented tenants from the Five Hat Racks principal. Here, we organized the subreddit pullout menu in the navigation view in alphabetical order, as this acts as an extended index of the user's favorite subreddits. The user would use this feature to browse their extended list of saved subreddits, and so it needs to have a structure that supports quick scanning.

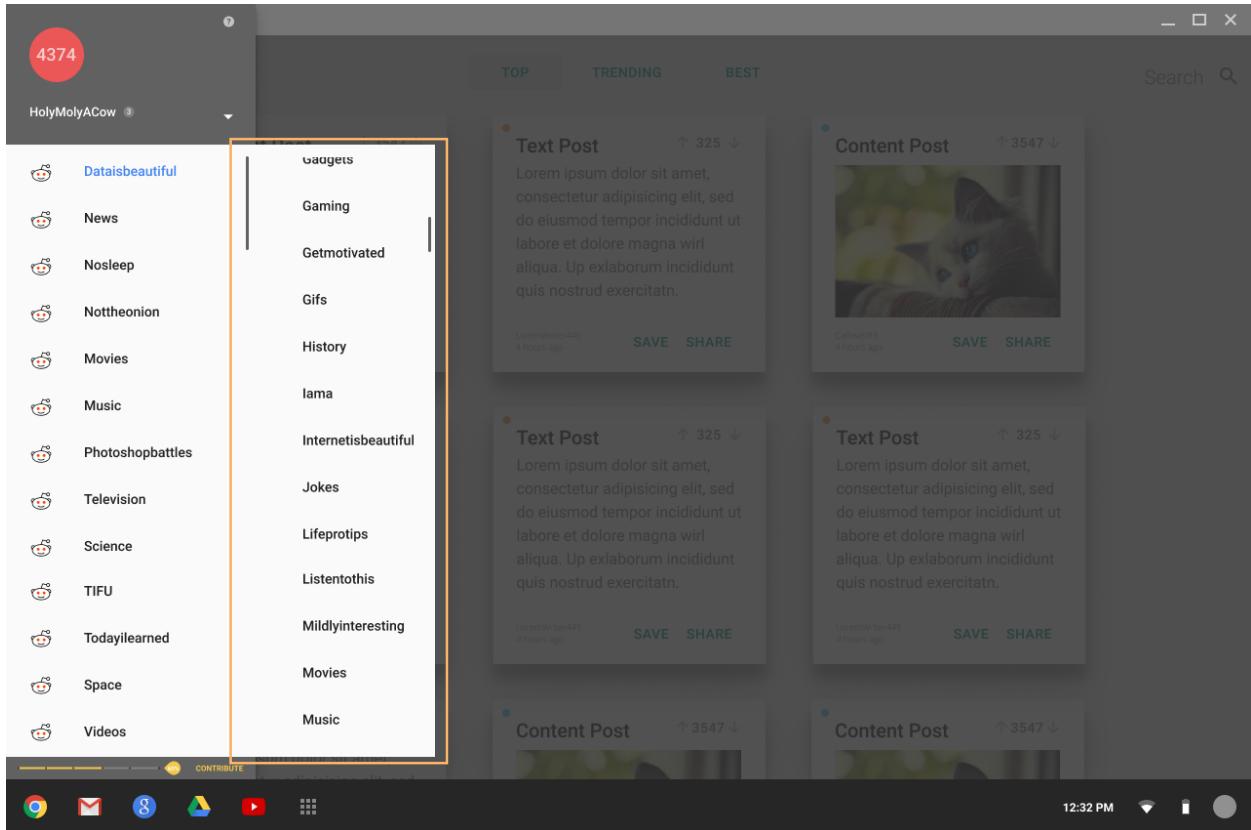


Figure 20: The Five Hat Racks principal was used in ordering much of the content in our redesign.

Similarly, Reddit already implements the Five Hat Racks principal when indexing content posts, as they each have category (subreddit), time (date and time), and continuum (votes) features. This is a feature we decided to keep in our redesign.

3.12 FLEXIBILITY USABILITY TRADE-OFF

We removed a lot of the functionality from the front page, which reduces its flexibility. This trade-off was one that is inherent in our design choice. We believed that Reddit had too great an emphasis on the flexibility of its front page, that the resultant trade-off in usability was unbalanced. As such, we aimed to rebalance this, by reducing the features visible on the front page—and thus the flexibility—but improve its usability.

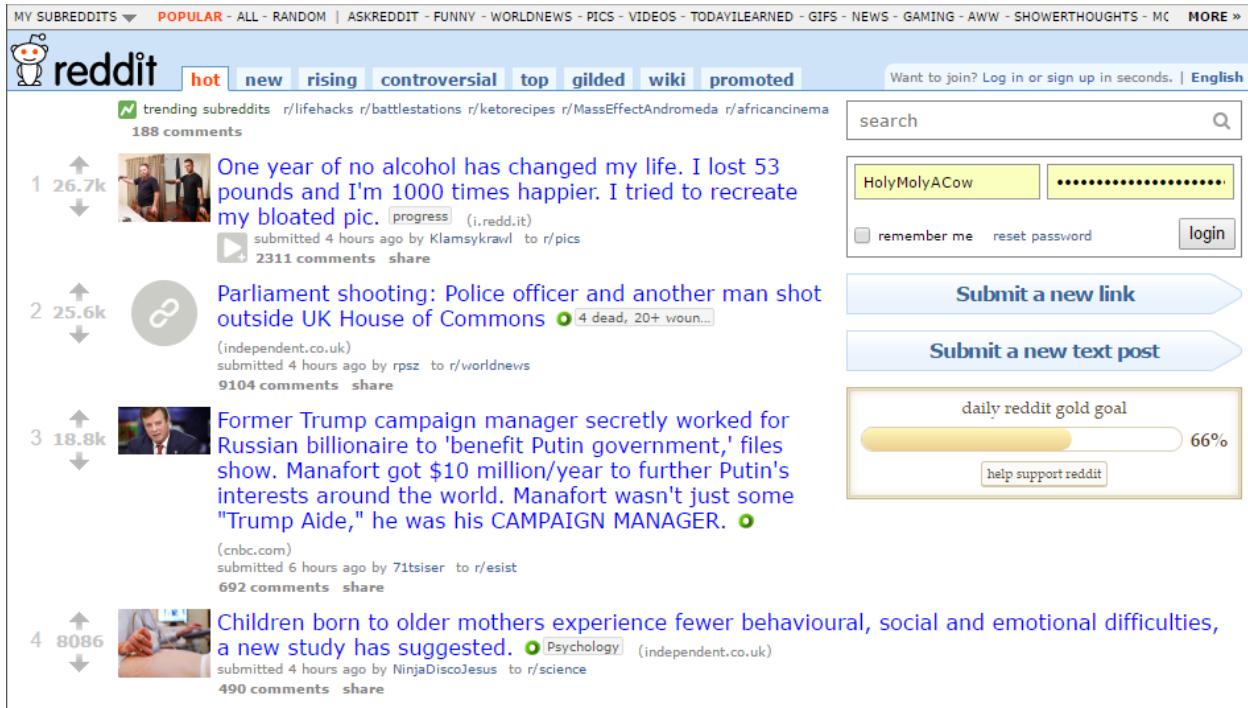


Figure 21: The original Reddit front page provides significantly more flexibility, but at a significant cost to its functionality.

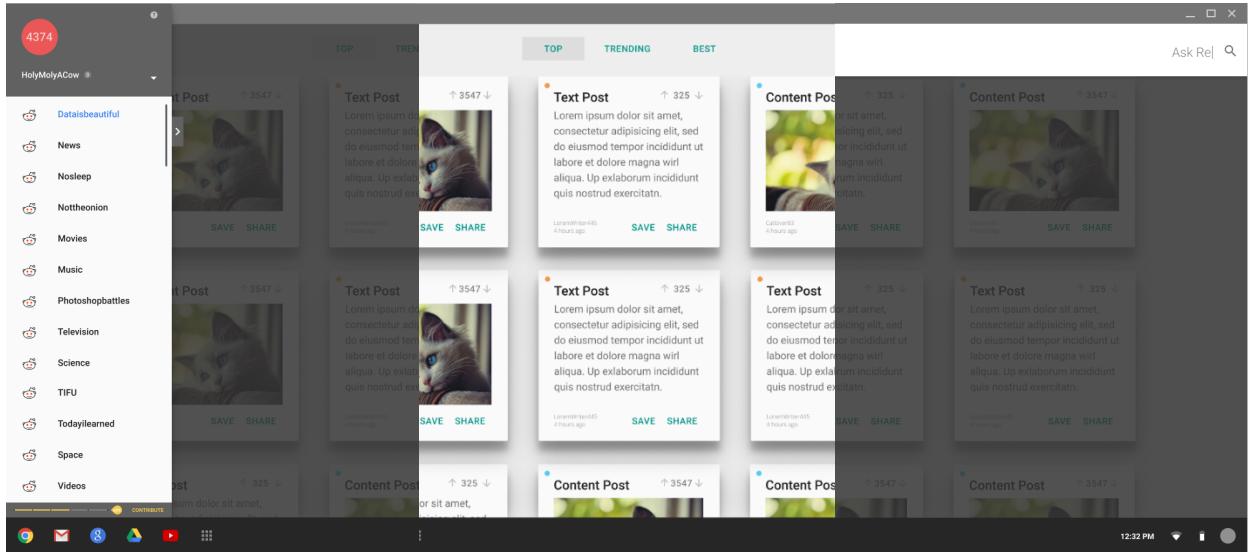


Figure 22: Our redesign removes some of this flexibility, making the website easier to use. This increases the overall functionality of the website, as users can effectively use the application.

3.13 GOOD CONTINUATION

In using the principle of *Good Continuation*, our design emphasized relational similarities by positioning objects along similar, continuous, lines. For example, in the content view, each content tile is placed along a row-column axis. Moreover, the filter options above the content tiles may follow the same horizontal axes as the content tiles, they do not follow along the same vertical axis. This was done intentionally to communicate their semi-relationship with the content tiles below, as they are responsible for filtering the content, but are not directly related to the content.

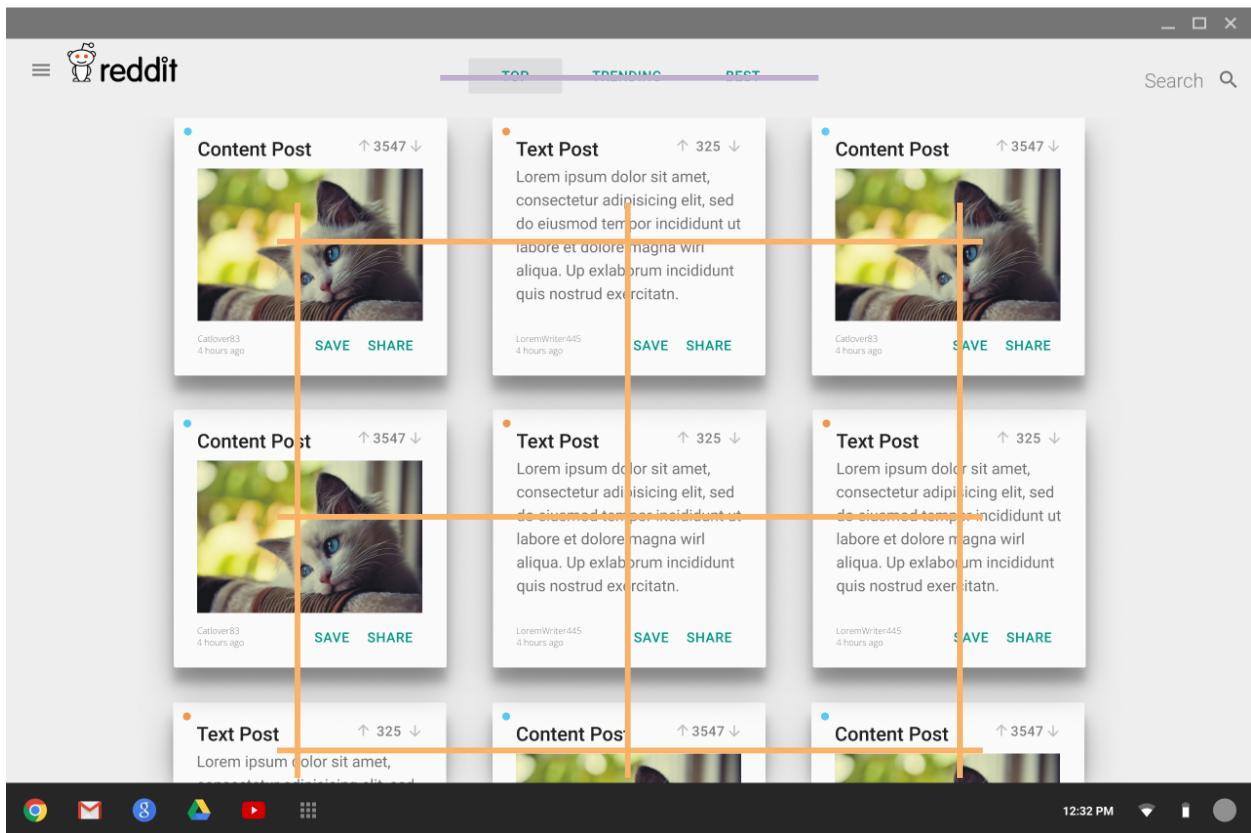


Figure 23: The redesign links components using good continuation.

Likewise, when viewing the navigation view, the subreddits are listed along the same axis to emphasize their similar nature.

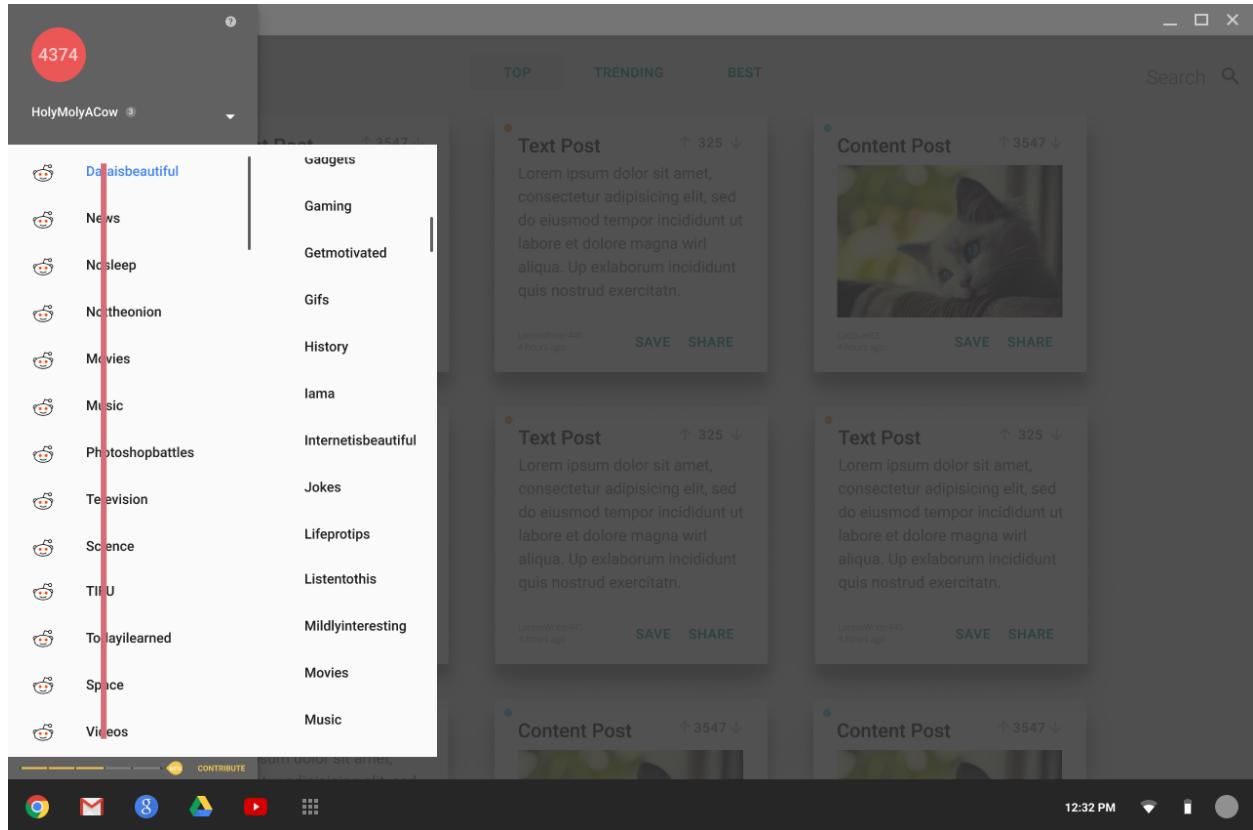


Figure 24: The navigation view also uses good continuation to emphasize similarity among components.

3.14 GUTENBERG DIAGRAM

Understanding that the majority of Reddit users are from the United States (54.4%), and the vast majority of users are from Western countries, the Gutenberg Diagram was an important principle in communicating how the content is to be laid out and viewed by the user. Here, the content tiles are displayed with the most relevant (often most recent) tile in the top left corner, with relevance decreasing as you move to the bottom left, in a row-wise fashion—as if you were reading a book. Our design changes the way content is laid out, as the existing design displayed each individual content object on its own row. As this design decision impacts a critical component of the website, it is critical that we communicate this change to users, which is greatly facilitated through the Gutenberg Principal.

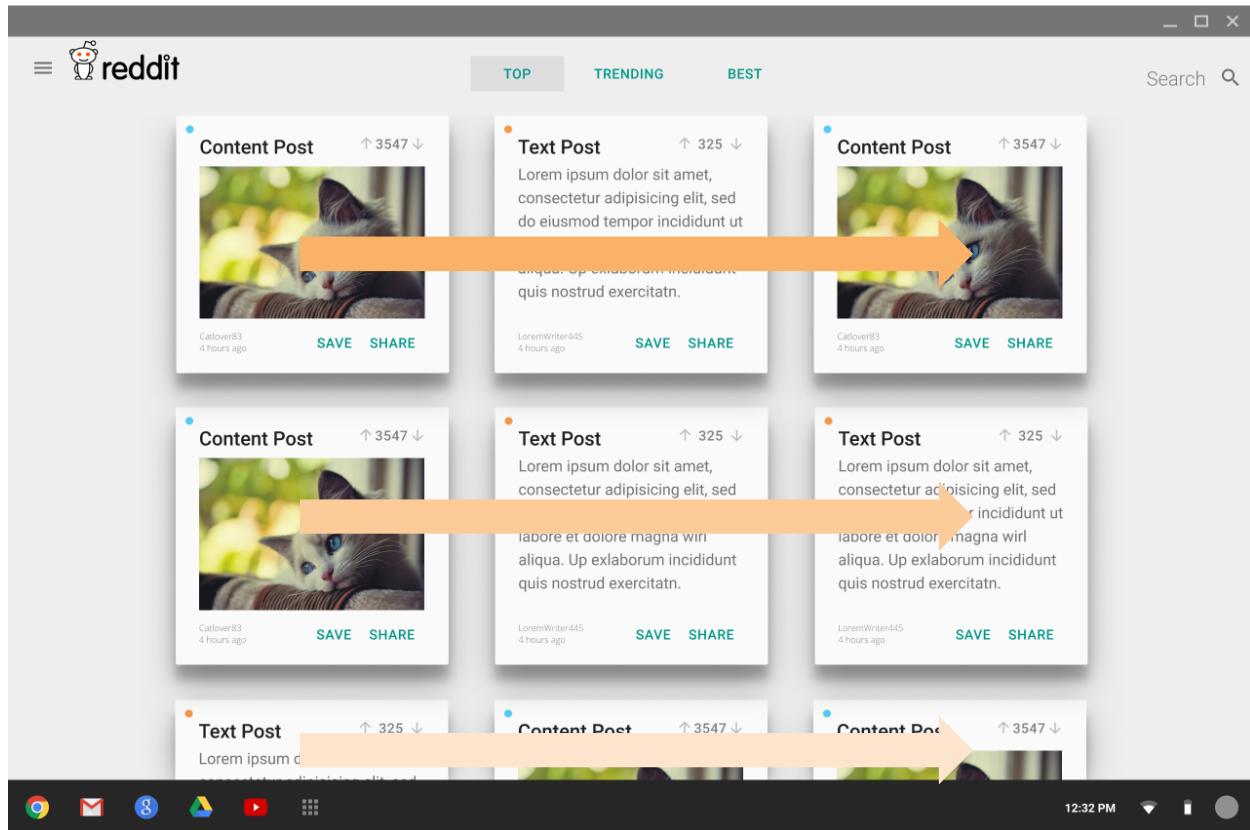


Figure 25: The content is served to the user using a familiar layout, with the most relevant content in the top left, and the least relevant in the bottom right.

3.15 Hick's Law

Hick's Law is one of the underlying principals which inspired our redesign. The original Reddit page was overly cluttered, saturating the user's view-space, forcing them to make spend an excessive amount of time attempting to navigate the front page. This often caused other problems, as the cognition required to filter out the noise was often so significant that we got frustrated and decided to arbitrarily click on things hoping that it would provide the desired result. We knew we needed to fix this, and so we significantly reduced the clutter, and streamlined the functionality, in an effort to reduce the decision making load for the user. Further, we incorporated many other principles, such as mimicry and layering to emphasize the functionality and relationships of the objects on the page, further reducing the cognitive load for the user, allowing them to navigate the website with greater ease.

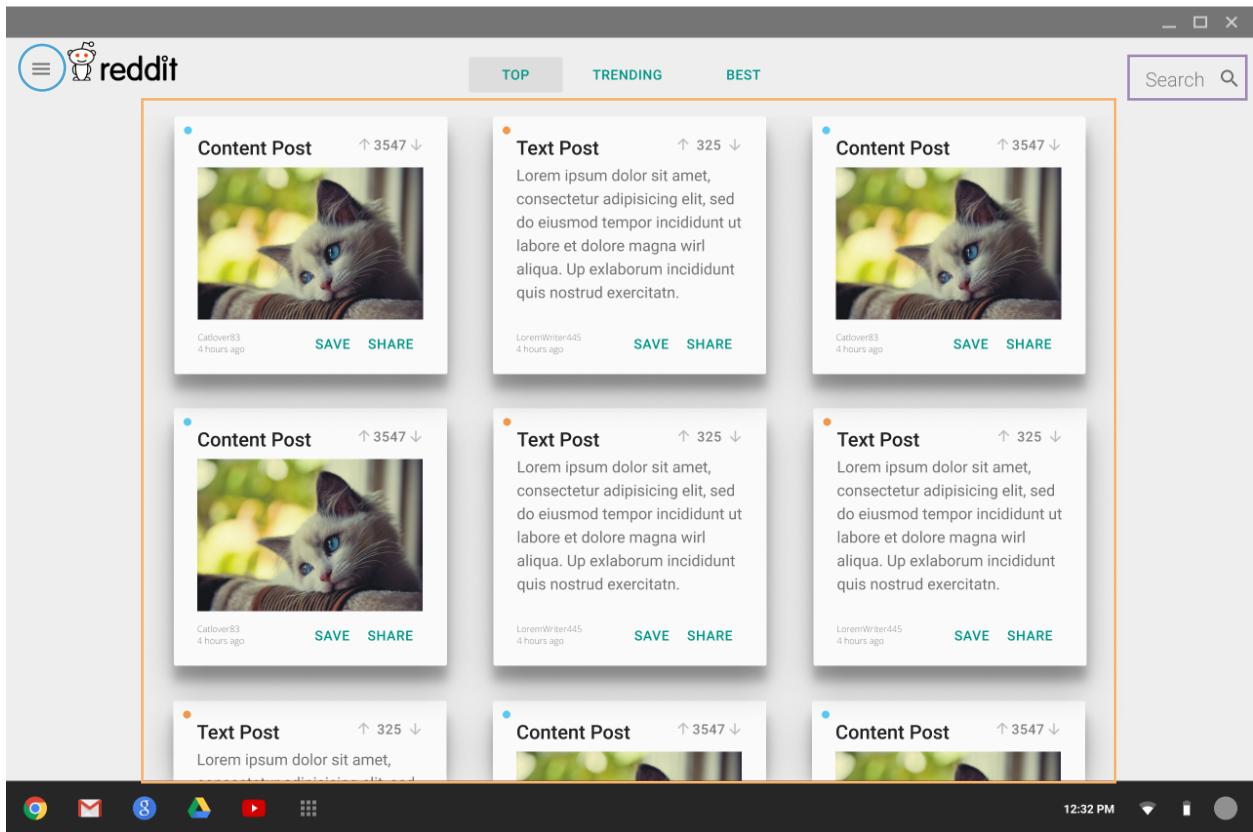


Figure 26: From the front page, we have simplified the user's decision making process into three buckets: view content (orange), navigate the page (blue), or search for specific content or subreddits (purple).

3.16 HIERARCHY

Our redesign emphasizes the hierarchical structure of the content already existing in the original Reddit's conceptual model. We believed that one of their greatest shortcomings in their design was that it failed to communicate the true hierarchical nature of the views, which made navigating their website, and viewing their content difficult. Here, our design uses contextual clues, such as headers and position to emphasize the hierarchical relationship of components.

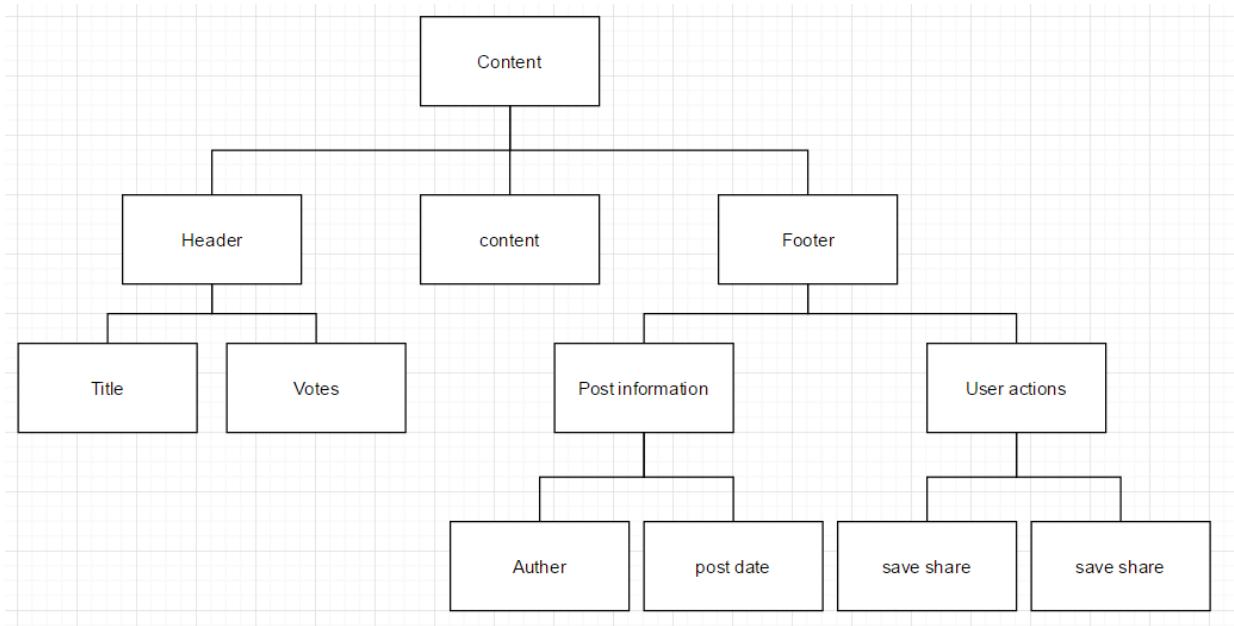


Figure 27: A simple conceptual model of the hierarchical structure of a Reddit post.

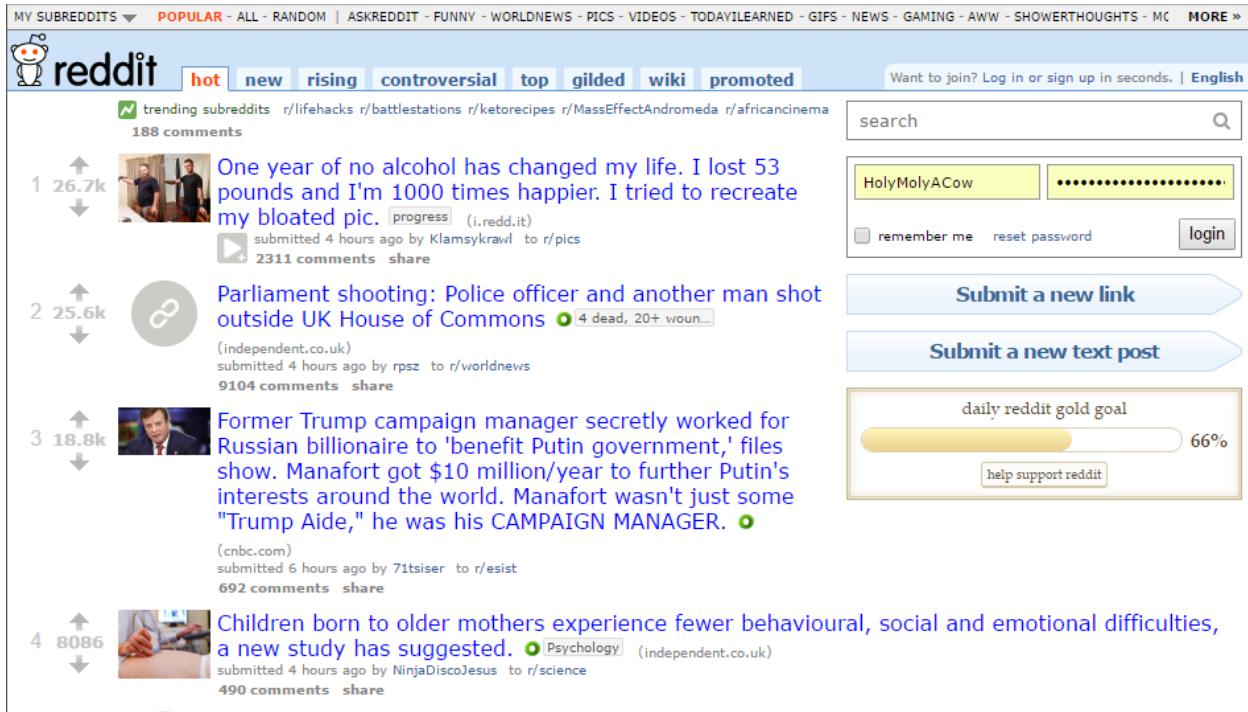


Figure 28: There is minimal, if any clearly defined hierarchical relationships between objects, functionality, or the views.

This effect can be seen as we emphasize these relationships in the viewing the content tiles, where the headers, content, and footer functionality are clearly delineated through their styles and positioning. However, this is even more relevant in viewing the actual page views, such as the navigation view, or the content view. Here, the context of the menus are connected, being synchronized to emphasize their relationships.

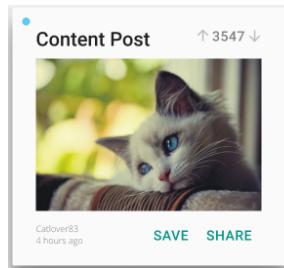


Figure 29: Here the content clearly communicates its hierarchical nature.

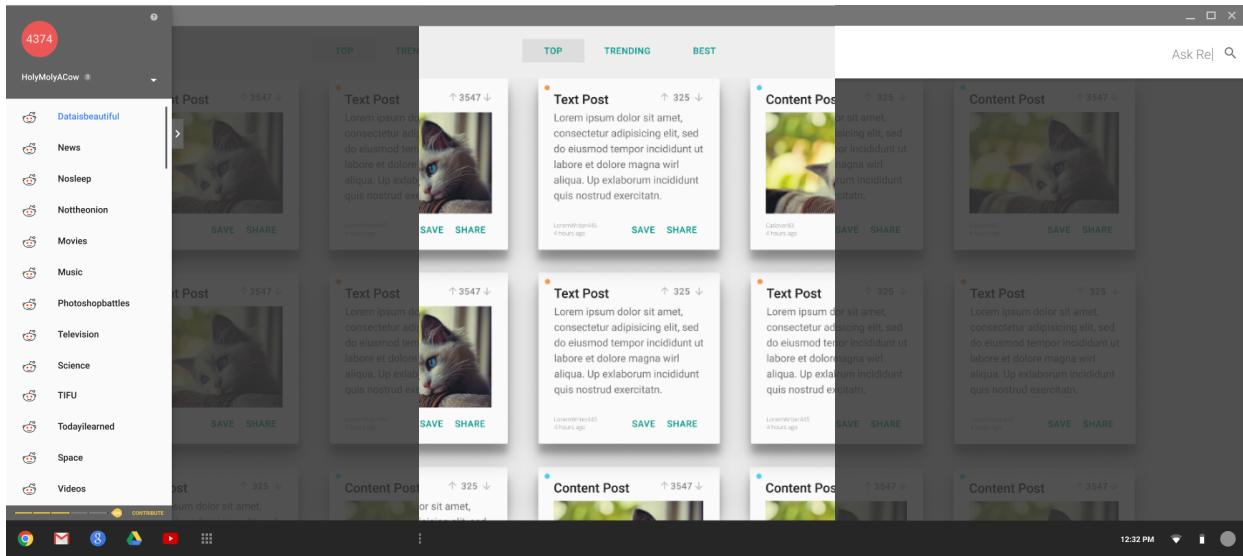


Figure 30: The conceptual model of Reddit incorporates hierarchies, and this design emphasizes this relationship by only displaying components (descendants) when their views (parents) are active.

3.17 ICONIC REPRESENTATION

Iconic representation was used in this design to convey simple meaning through simple graphics, in an attempt to reduce word-clutter. Here, we symbolic representation in the upvote and downvote functionality in the content views. Likewise, example iconic representation was used in communicating the search feature, where it is represented by a magnifying glass. Likewise, a question marked was nested in the top right corner of the navigation pullout to represent a “help” feature, which is very difficult to find on the original Reddit page. Arbitrary iconic representation was used in the pullout button, which expands the navigation menu, and within the navigation menu to expand the user’s details.

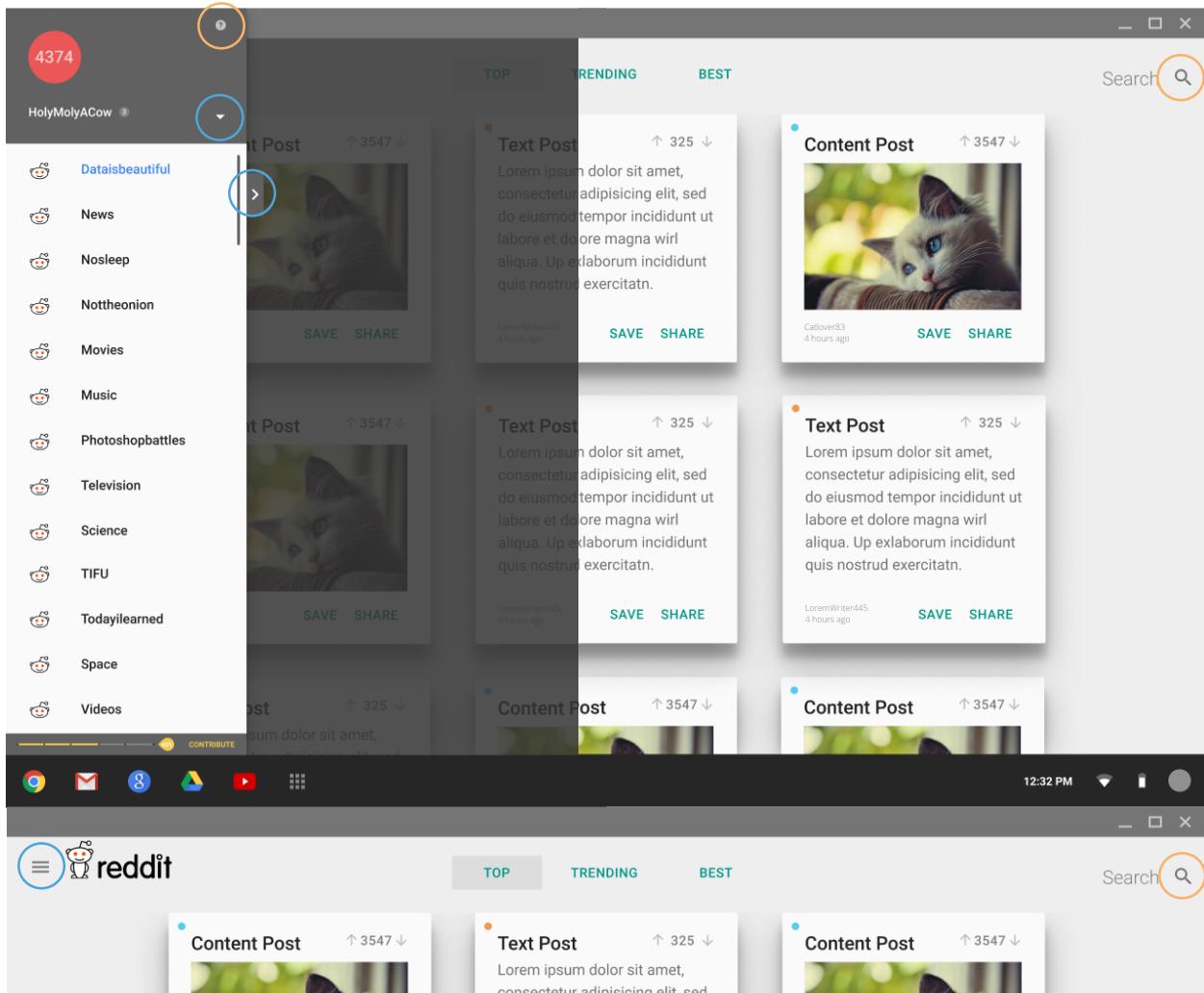


Figure 31: Iconic representation was used to communicate functionality throughout our redesign.

3.18 LAYERING

Layering was a key principle used to dramatically redesign the website. Here, we have isolated the information and functionality into different views, only showing the relevant information to the user, incorporating 2D layering. This effect can be seen on a macro level, where each of the individual views are separated, where the sub views—navigation view and search view—are clearly *layered* over the content view when they are active, to emphasize their differences. Likewise, on a micro-level, the content of the posts themselves are clearly separated.

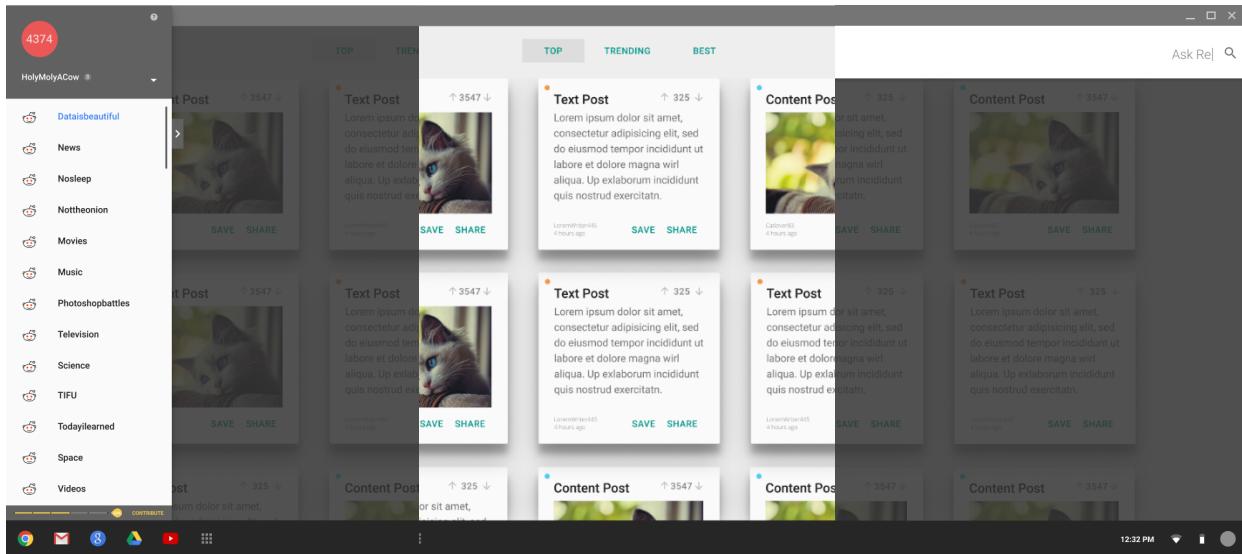


Figure 32: Each view is clearly separated, with their respective components reserved only for their respective views. This layering is done literally, as the navigation view (left) and search view (right) are layered over the content view (center) when active.

3.19 LEGIBILITY

The redesign emphasizes legibility by using contrasting fonts against a light background. Additionally, by clearly delineating the formatting of headers, titles, and content, we are able to provide the user with a more legible application in contrast to the existing client's illegibility.

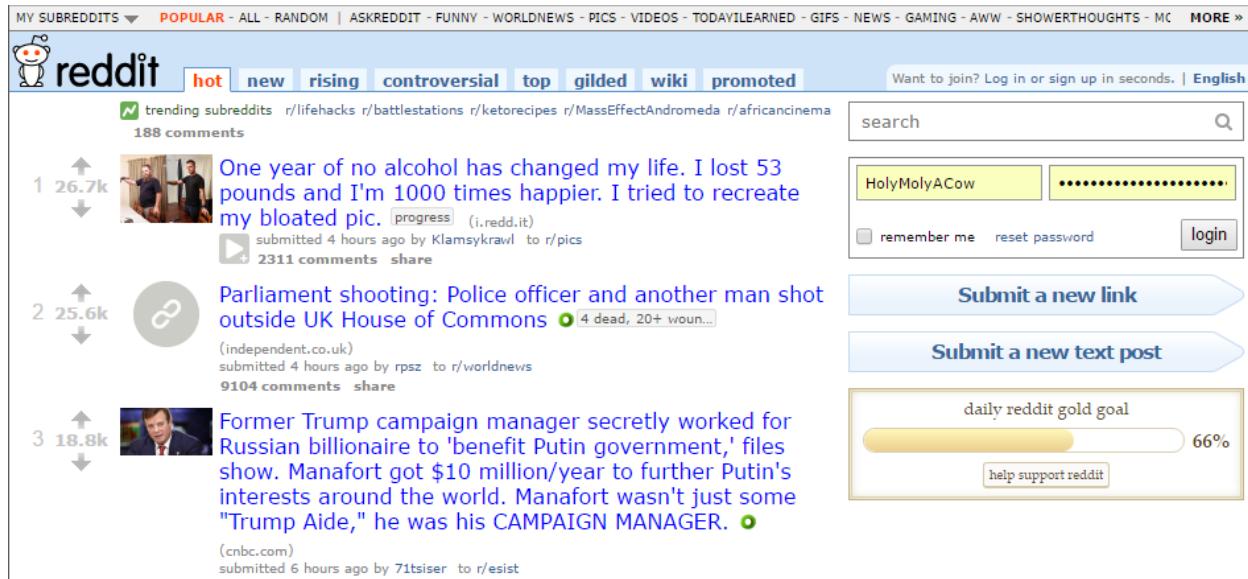


Figure 33: Reddit overuses the same styles and uses a condensed layout, negatively impacting the legibility of their website.

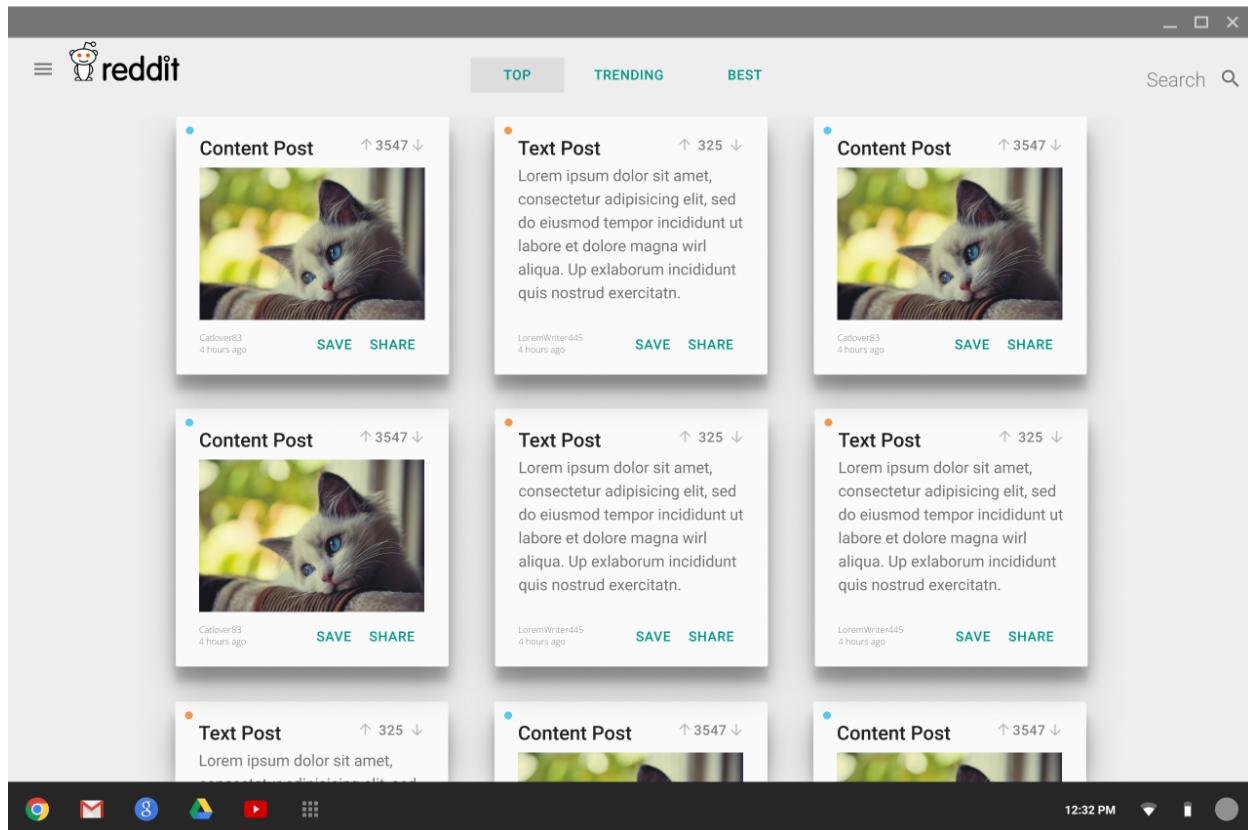


Figure 34: By being consistent and appropriate styles, we are able to improve the legibility of the website.

3.20 MAPPING

At a high level, Reddit uses standard browser controls which behave in ways familiar to users: clicking on buttons and links, text input field, navigation menus, etc. The problem here lies in the layout of those controls. Here, Reddit has designed their webpage with an alignment bias to the top-left corner of the page, even though there is no necessary reason to do this. In fact we believe it *harmed* the functionality of the website, where buttons are not laid out to match behavior, instead favoring this left-top alignment.

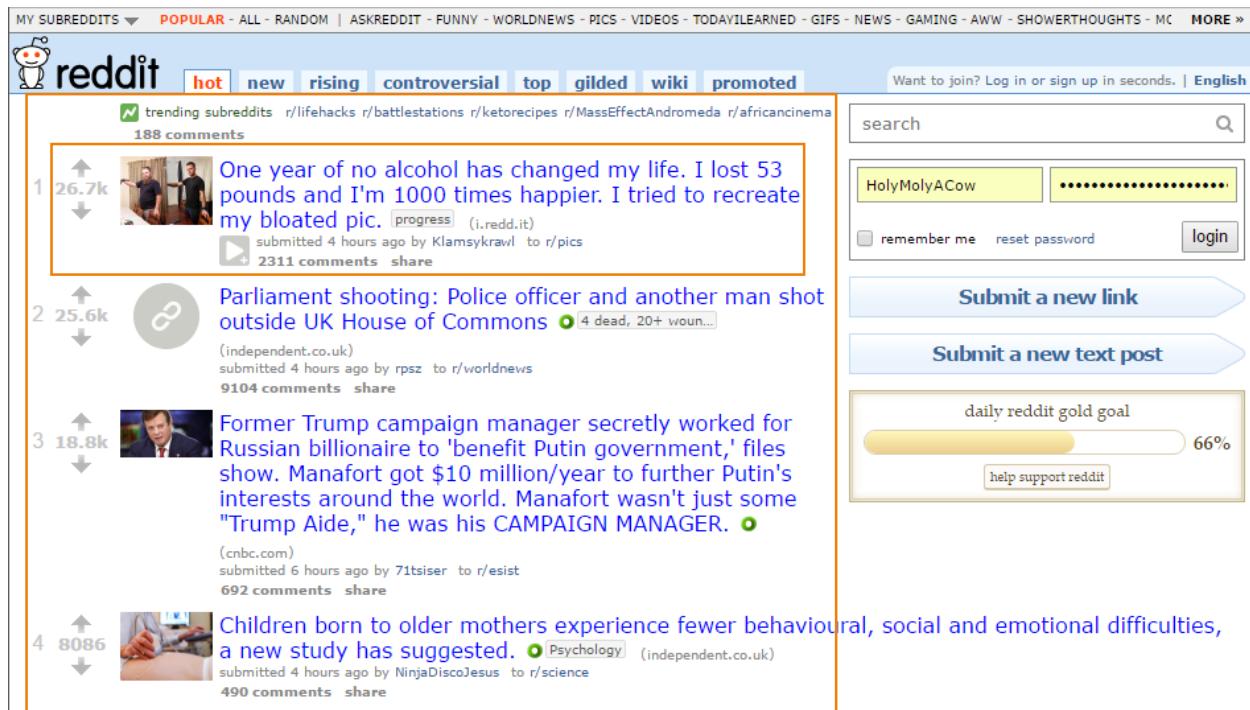


Figure 35: In each of these boxes, as well as the whole window, there is a top-left alignment bias.

Our design aimed to change this by focusing the view of the user on the content. In doing so, we aligned the appropriate controls to what they are expected to control: post buttons such as the “share” and “save” buttons are located clearly within a specific post; the post view’s controls were displayed just above the content; and site navigation is tucked away in its own view, dedicated to navigating the website. Here, we encapsulated the controls with their corresponding behaviour.

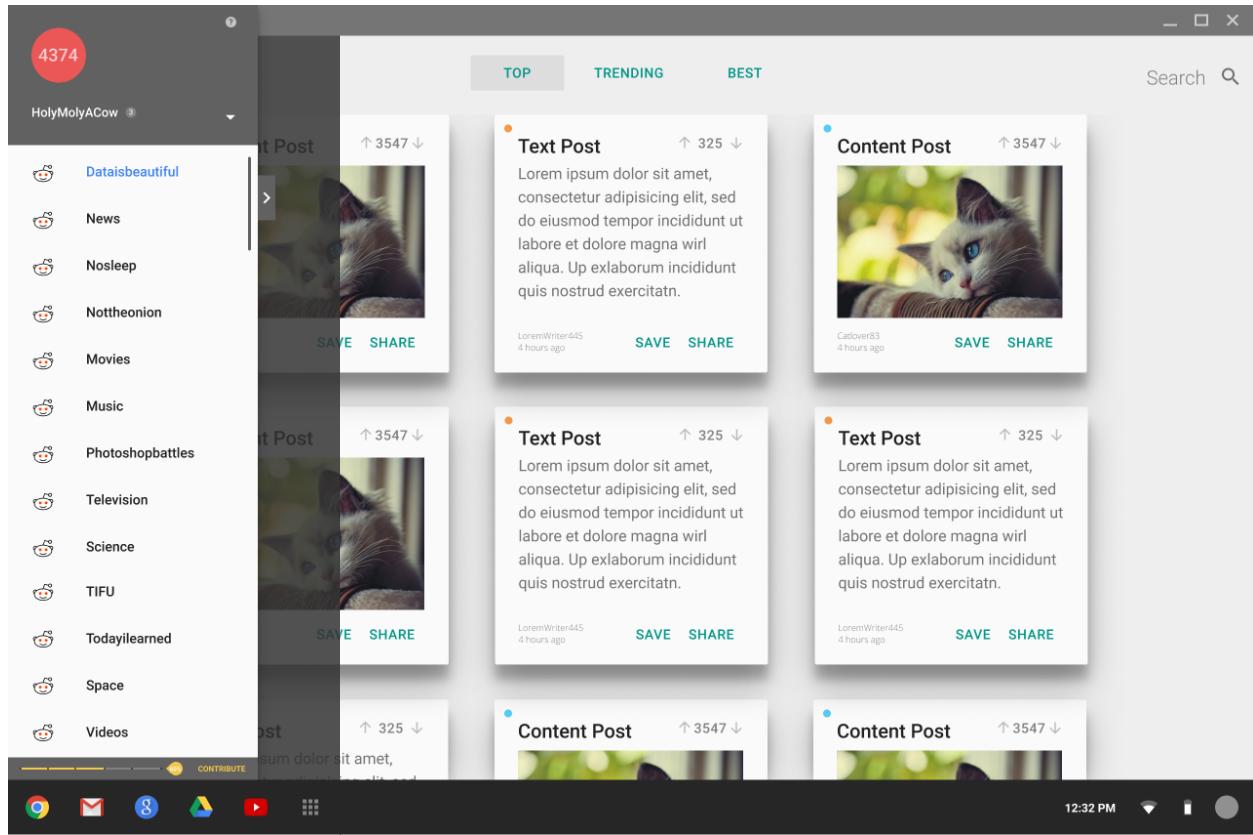


Figure 36: Navigation controls are compartmentalized (left). Content controls are laid out by the content, and post controls and buttons are encapsulated by the post they control.

3.21 MENTAL MODEL

People understand and interact with Reddit based on mental representations developed from their experience. For our design we wanted to maintain a consistent mental model with respect to how the system works but sought to improve the clarity of the mental model with respect to user interaction. This being the case, the changes we made were significant, but only visually—conceptually, we left the exiting mental model of Reddit intact, with minimal changes. For example, in changing the layout of the content on the page, we made a significant visual and experiential change to the page. Nevertheless, we balanced this out by using principals like the Gutenberg Diagram to ease users into understanding this change. Furthermore, we made sure to leave the structure of the content posts (author, date, subreddit, upvotes), as well as the vocabulary of Reddit untouched to minimize the impact on users.

3.22 MIMICRY

As inspiration for our design, we sought out content sharing websites and news websites as inspiration. Those selected understood that their content was the focal point of their website's experience—which is something we believe Reddit was lacking. Here, we borrowed concepts, such as organizing the posts into graphical tiles—a feature borrowed from Imgur, Instagram, and the Reddit phone application.

Additionally sites like Imgur are frequently linked on Reddit, meaning that concepts borrowed from the site would be instantly recognizable and thus familiar to the users of Reddit. Thus, our design uses *surface mimicry* by making a design of posts look like several popular social media services.

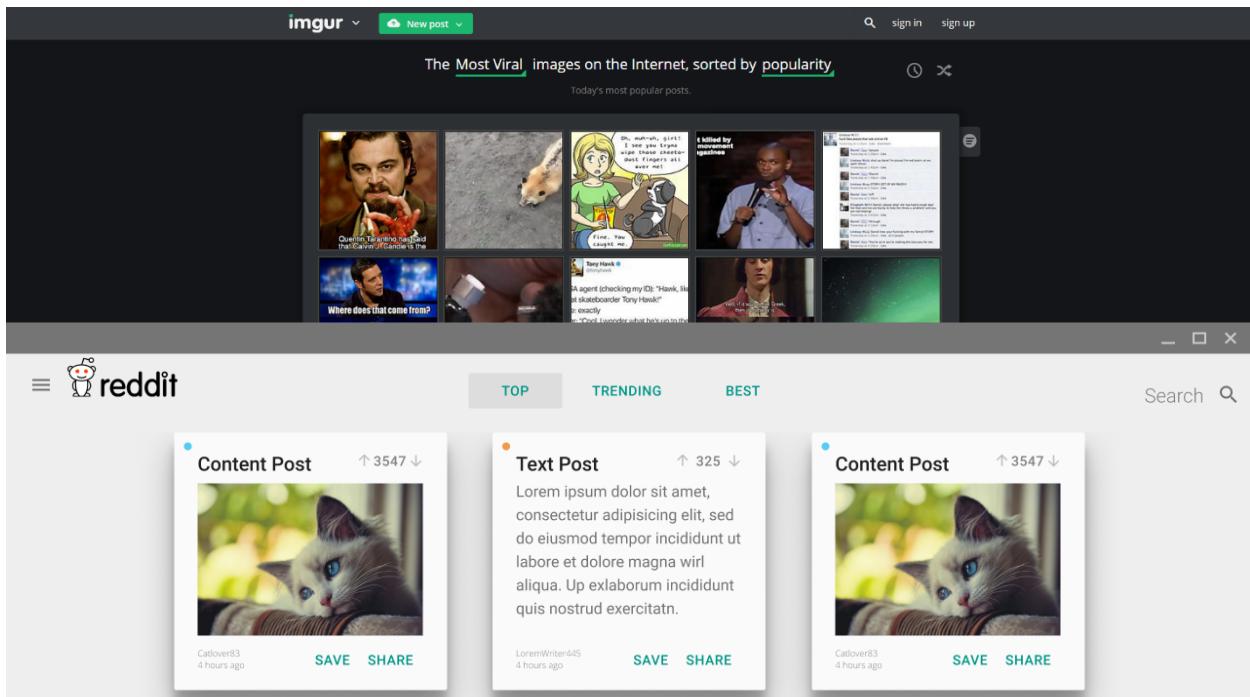


Figure 37: Our design shares many similarities with content sharing websites, like Imgur.

3.23 PICTURE SUPERIORITY EFFECT

Our design takes into consideration the picture superiority effect. We chose to employ the use of pictures over text whenever possible. Anything that could be better expressed in the form of an image was changed to an image. Posts on Reddit have images and text but they don't work together. In our design, we use grouping to organize post content into a complementary form. The post's picture is backed up by the post's text for an optimal effect.

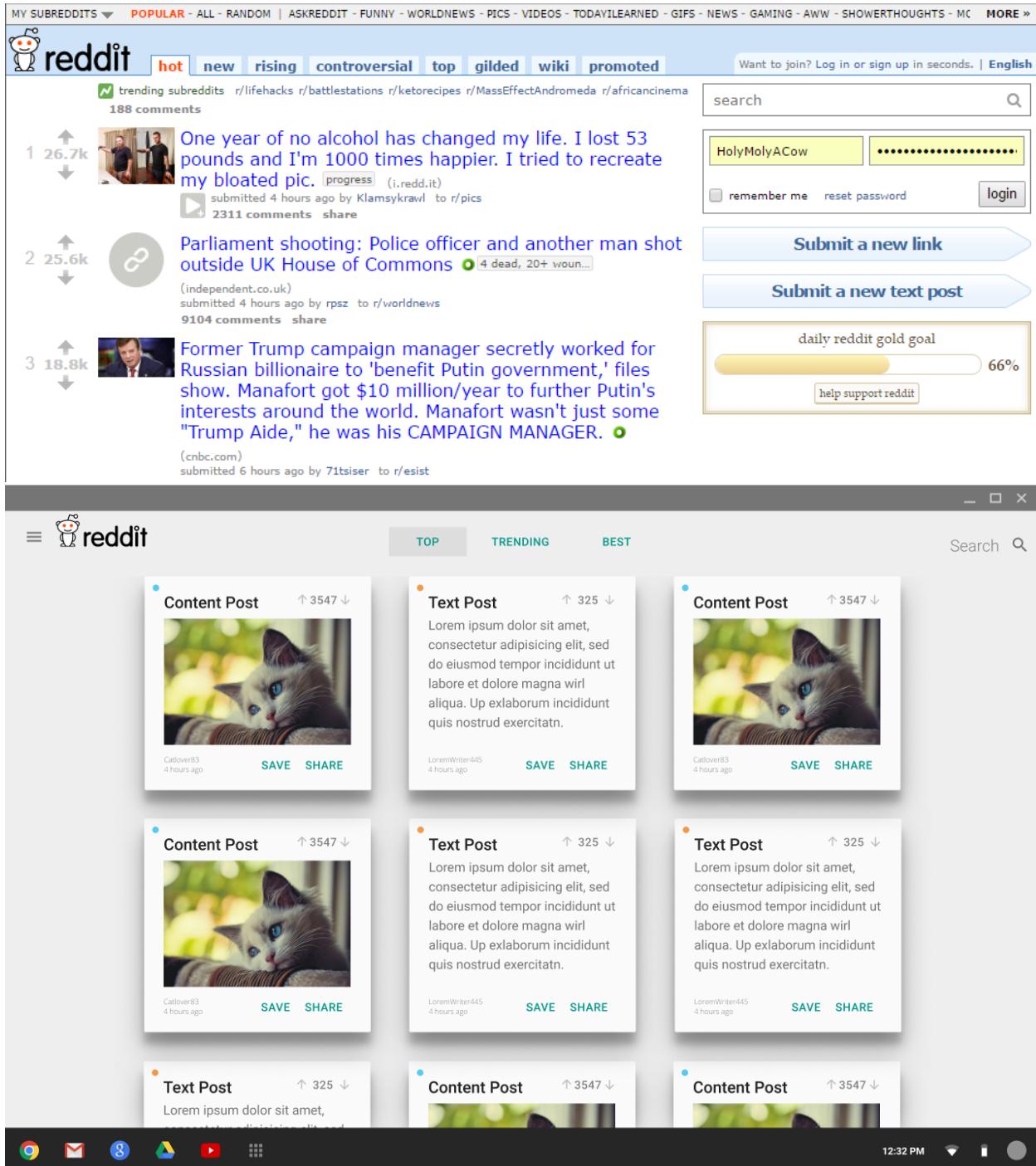


Figure 38: Our design is predicated on the picture superiority effect, emphasizing pictorial representation where available.

3.24 PROGRESSIVE DISCLOSURE

Our design applies progressive disclosure by reducing the number of topics that are unrelated or unimportant to the users. For instance, we removed the repetitive of my subreddits list and we made it more concise by giving a chance to the users to choose the topics that they are really preferred.

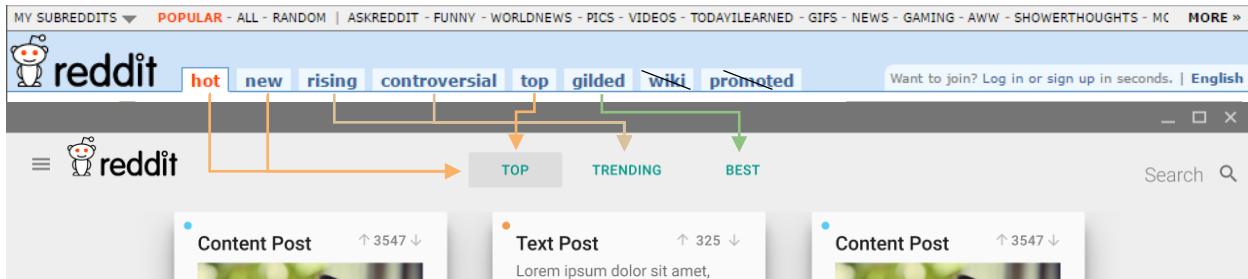


Figure 39: Our design cuts back on the redundancy, and reduces the cluttering of the menus.

In doing so, we made sure only to reveal the necessary functionality to the user as the progressed through the webpage, giving the user control of the information and functionality they encounter, rather than providing all of it upfront, as the original design accomplishes.

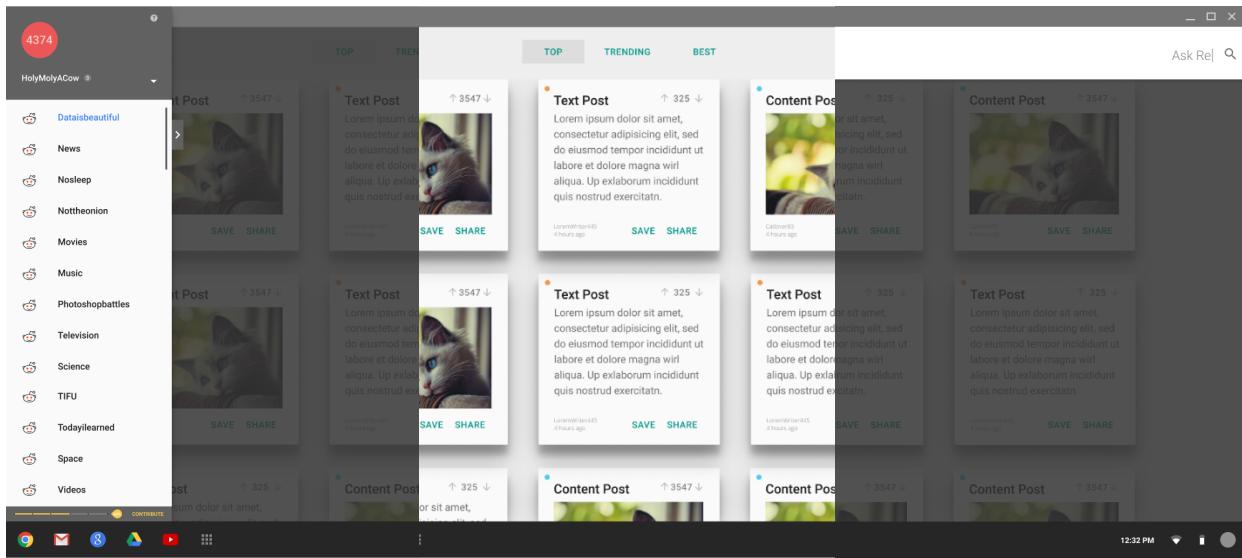


Figure 40: Progressive disclosure is used to only show the relevant functionality of the application whenever the user requests it.

3.25 PROXIMITY

Understanding that the Gestalt Principles are generally fundamental to how humans perceive a design, it is important that Reddit leverage them. Unfortunately, the current design for Reddit lacks the appropriate use of proximity, as *everything* is close to one another.

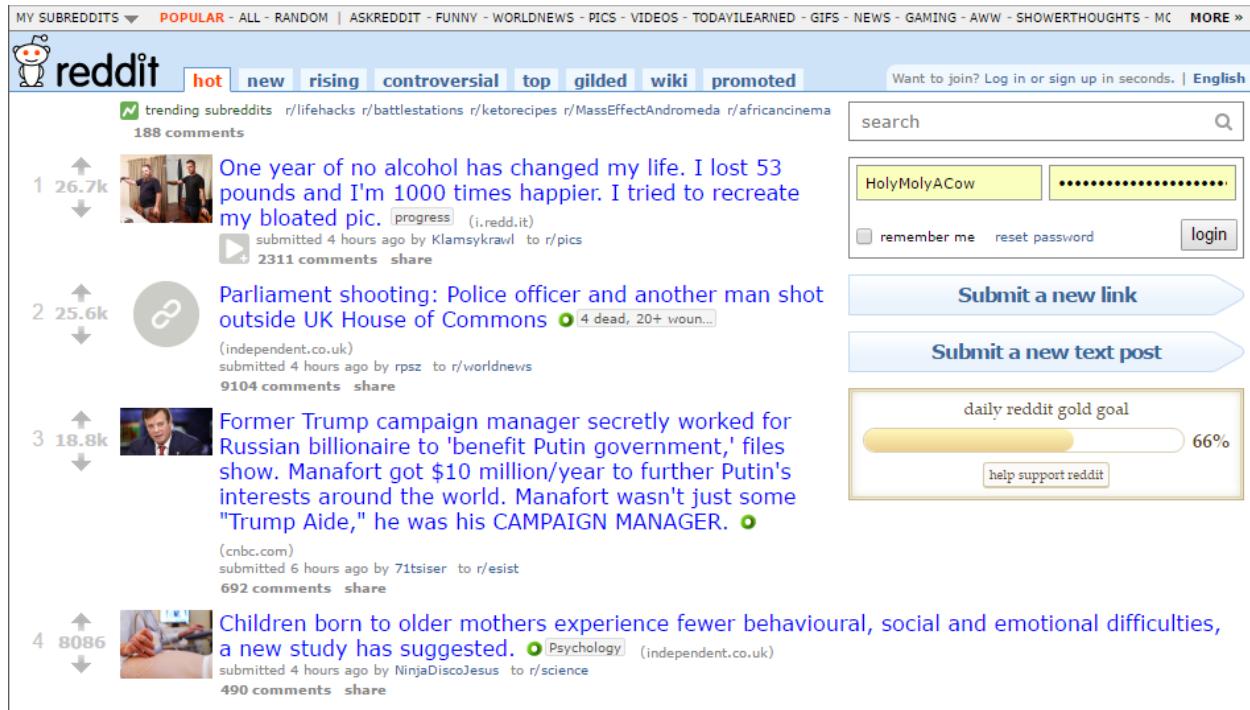


Figure 41: The original Reddit design over-uses proximity.

Our design takes advantage of the proximity principle by *separating* content to emphasize their relationship differences.

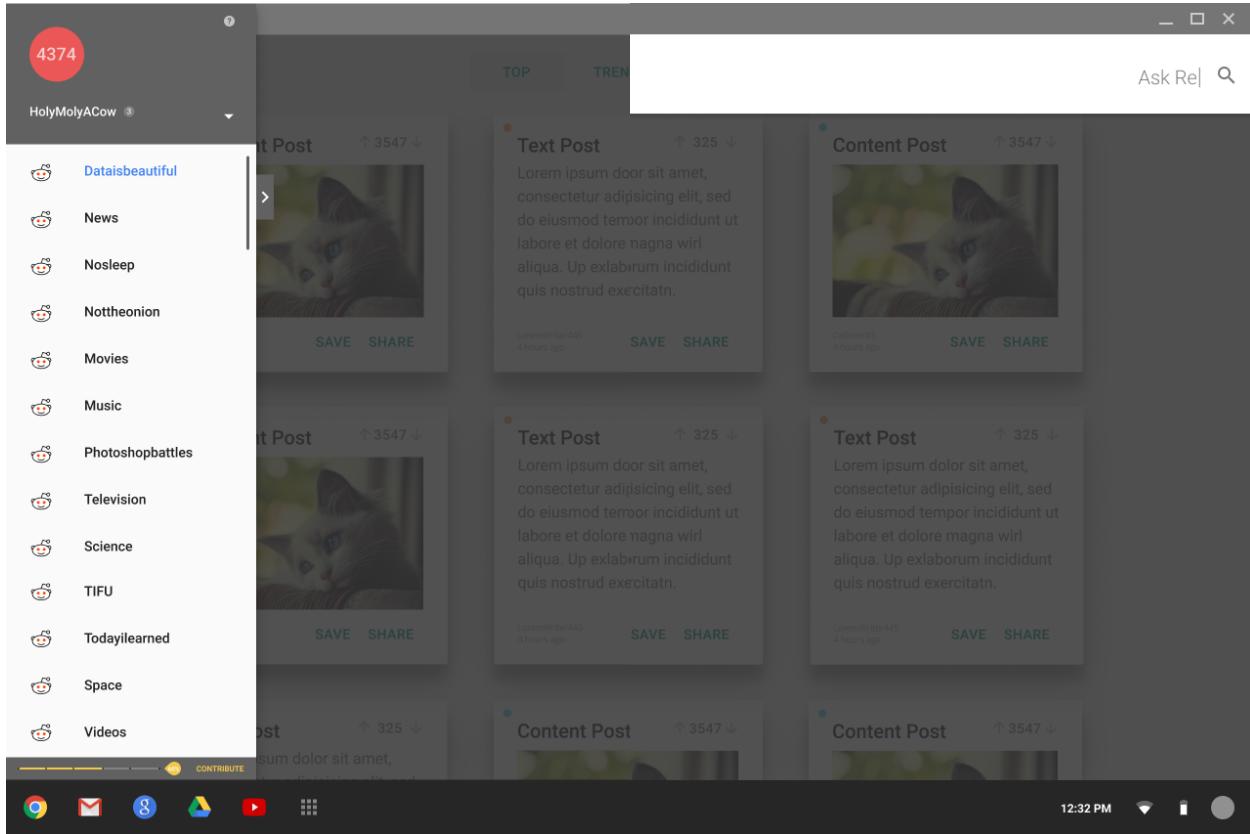


Figure 42: Here the user's account details, subreddits, Reddit Gold meter, search and content are all separated from each other, unlike in the original design.

3.26 RECOGNITION OVER RECALL

When a user lands on the Reddit site, they are bombarded with information. In our design we wanted to reduce the volume of information being thrown at the user. We wanted to improve the signal to noise ratio, so we used layering and progressive disclosure to accomplish that goal. However, we need the user to still be able to easily find features and subreddits so we use easily recognizable iconic representations to provide access to these features. The menu icon, the settings icon, the search bar, the upvote and downvote buttons, and the post button are all widely used on the web and familiar to the majority of users. These buttons afford the user the same functionality as they would find elsewhere and so the user can recognize the icon and know what it does rather than having to explicitly remember where functionality is located.

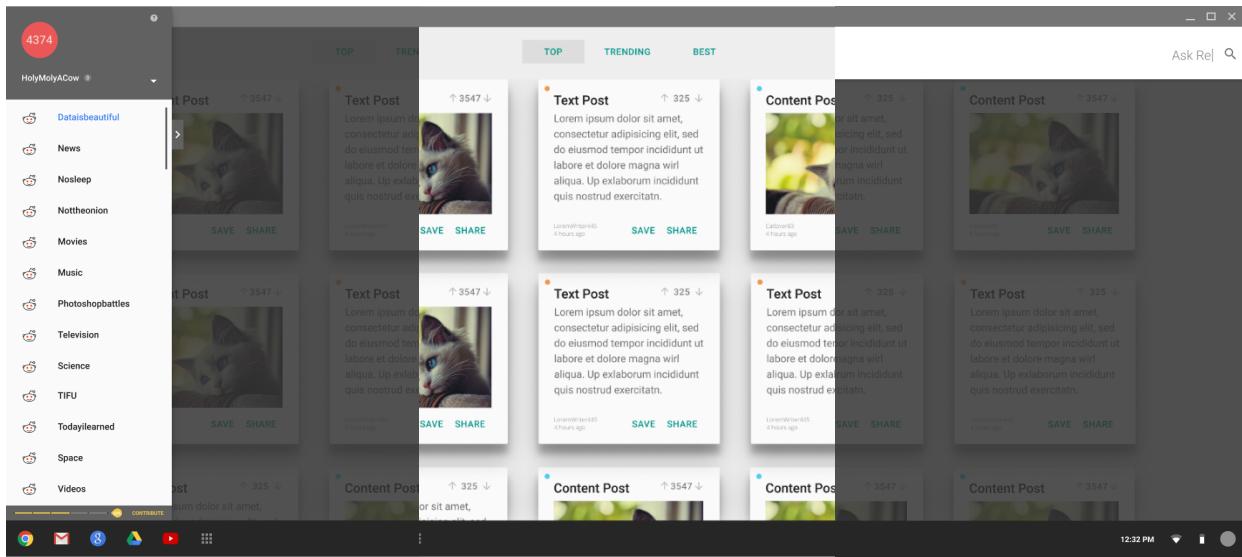


Figure 43: Our design uses consistency, familiarity, and mimicry to encourage recognition over recall.

3.27 RULE OF THIRDS

Our design takes into consideration the rule of thirds. We have divided our medium into thirds, both horizontally and vertically, in an effort to create an aesthetically pleasing user interface. Our main element is strong so we chose to center it to avoid creating an imbalance. Once centered, we chose to divide the main content section into thirds which creates the sought after grid. The three horizontal sections, from left to right, are the toolbar section, the main content section, and the search area. The three vertical sections are the navigation bar, the main content section, and the footer section (contains the post and contributions tool).

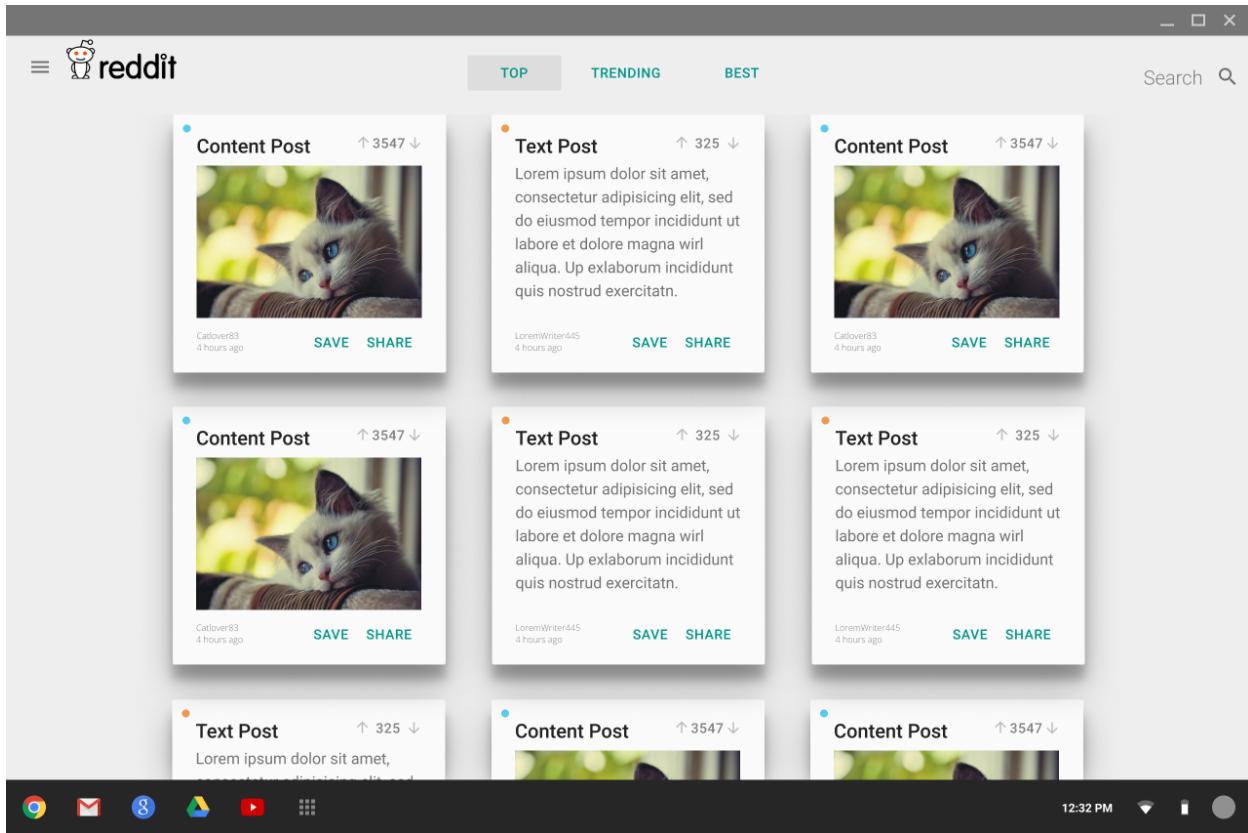


Figure 44: Our design is predicated on the rule of thirds.

3.28 SERIAL POSITION EFFECT

We understand that items presented at the beginning and end of a list are more likely to be recalled than items in the middle of a list. As a stretch goal, we would like to capitalize on primacy and recency. We want to organize subreddits in our list interface based on frequency of use with the most frequently visited user subreddits at the top. Elsewhere, we use a serial position effect in our top, trending, and best bar—as these represent popular groupings of Reddit’s original filters. In our main content pane posts are ordered, emphasizing upvotes and recency.

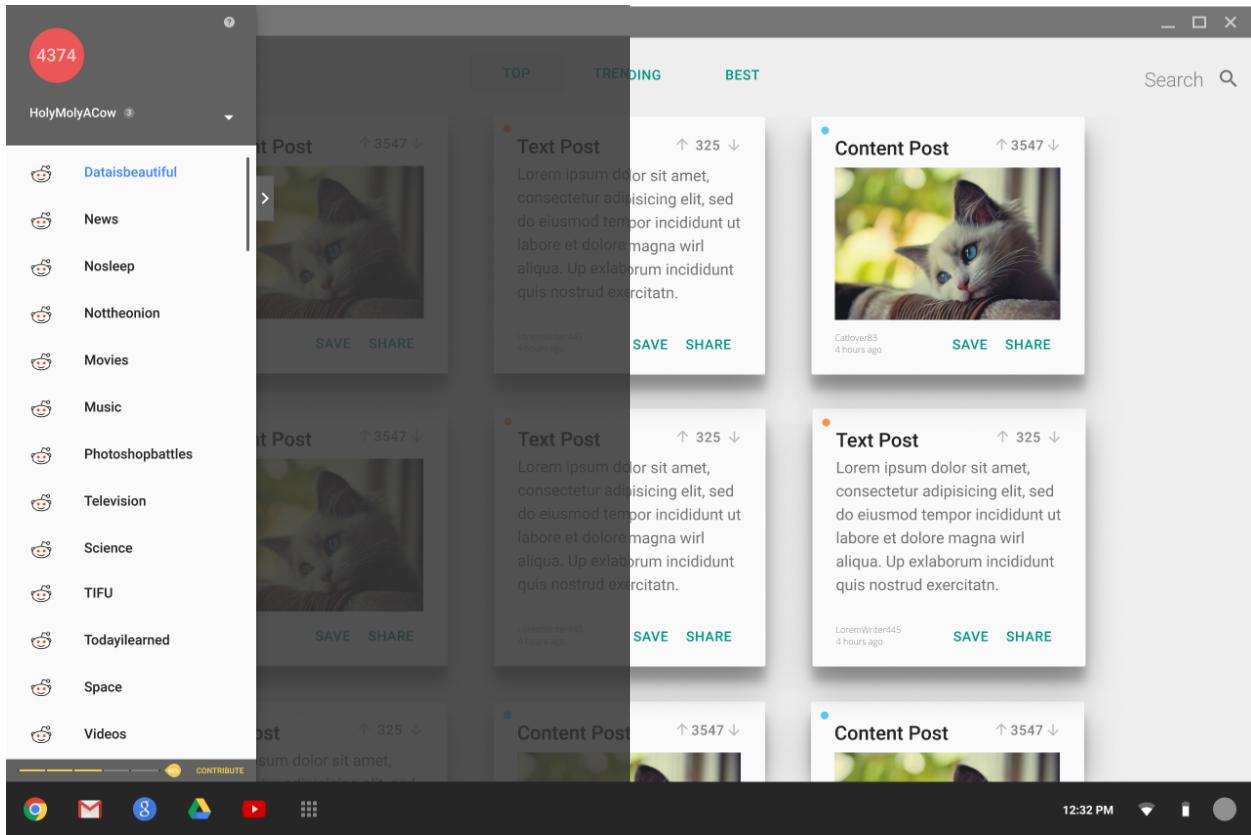


Figure 45: The serial position effect was used to emphasize navigation and browsing content.

3.29 SIGNAL-TO-NOISE RATIO

The signal-to-noise principle is predicated on the idea that a design should emphasize displaying as much of the relevant content as possible, while minimizing irrelevant content. Reddit's original design seems to have misunderstood this concept, opting to provide as much content as possible, irrespective of its relevance. For most use-cases, this provides more *noise* than *signal*. Our design changes this by understanding that users come to the front page to view content, and so, only those relevant features should be readily accessible. Users who seek to perform other tasks are encouraged to use the search feature or the navigation menu in either of the top corners of the screen.

The screenshot shows the Reddit front page with the following layout:

- Header:** MY SUBREDDITS ▾ POPULAR - ALL - RANDOM | ASKREDDIT - FUNNY - WORLDNEWS - PICS - VIDEOS - TODAVILEARNED - GIFS - NEWS - GAMING - AWW - SHOWERTHOUGHTS - MC MORE »
- Reddit Logo:** reddit
- Navigation:** hot (highlighted), new, rising, controversial, top, gilded, wiki, promoted
- User Options:** Want to join? Log in or sign up in seconds. | English
- Trending Subreddits:** trending subreddits r/lifehacks r/battlestations r/ketorecipes r/MassEffectAndromeda r/africancinema 188 comments
- Post 1:** One year of no alcohol has changed my life. I lost 53 pounds and I'm 1000 times happier. I tried to recreate my bloated pic. (progress) (i.redd.it) submitted 4 hours ago by Klamsykrawl to r/pics 2311 comments share
- Post 2:** Parliament shooting: Police officer and another man shot outside UK House of Commons (4 dead, 20+ wounded) (independent.co.uk) submitted 4 hours ago by rpsz to r/worldnews 9104 comments share
- Post 3:** Former Trump campaign manager secretly worked for Russian billionaire to 'benefit Putin government,' files show. Manafort got \$10 million/year to further Putin's interests around the world. Manafort wasn't just some "Trump Aide," he was his CAMPAIGN MANAGER. (cnbc.com) submitted 6 hours ago by 7itsiser to r/resist 692 comments share
- Post 4:** Children born to older mothers experience fewer behavioural, social and emotional difficulties, a new study has suggested. (Psychology) (independent.co.uk) submitted 4 hours ago by NinjaDiscoJesus to r/science 490 comments share

Right Side:

- search
- HolyMolyACow
- remember me, reset password, login
- Submit a new link
- Submit a new text post
- daily reddit gold goal (66%) help support reddit

Figure 46: Reddit provides far too many features on their front page, allowing the user to navigate, submit posts, links, view content, browse subreddits, and many other tasks.

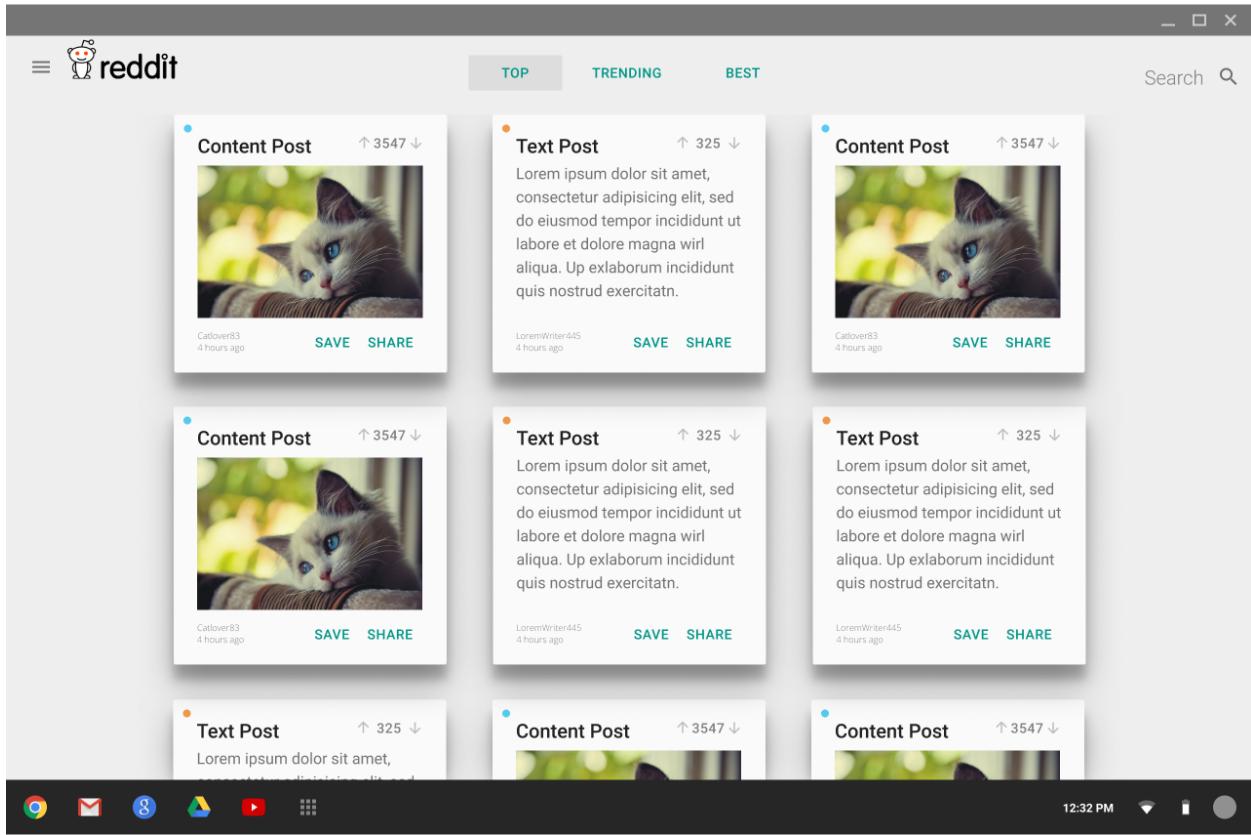


Figure 47: Our design sees Reddit as a content viewing page, and so such functionality is prioritized on the front page. Other functionality is tucked away in convenient locations, allowing the user the same features while offering them greater functionality.

3.30 TOP-DOWN LIGHTING BIAS

Understanding the confusion that arose from attempting to navigate the original Reddit page was crucial to developing our designs. Here, the top-down lighting bias was exploited to explicitly emphasize the separation of features and communicate the current focus. Here, content is separated from the foreground to emphasize their dynamism and fluidity, and to focus the user's attention where it is needed.



Figure 48: Content floats from the background to direct the user's view.

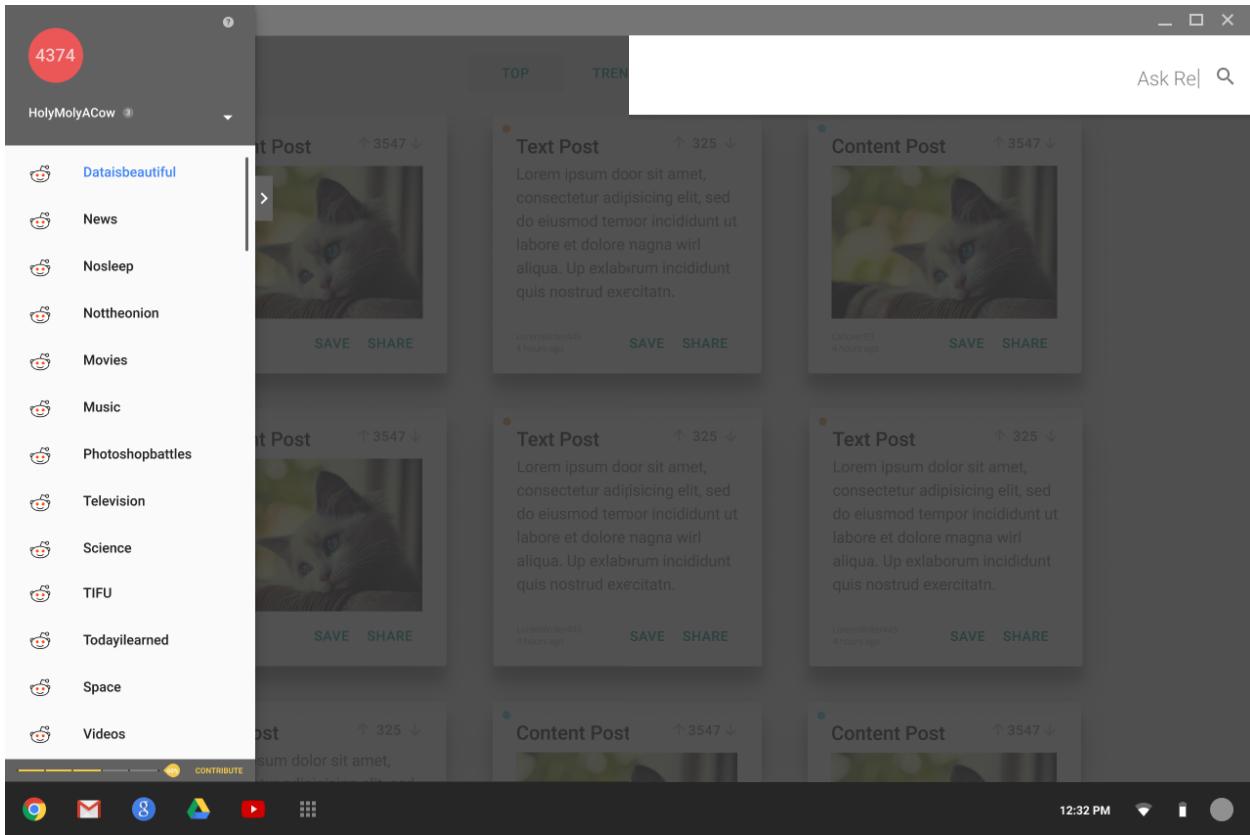


Figure 49: When the navigation bar or the search feature is active, the remainder of the page is dimmed, as if a shadow is obscuring the irrelevant content.

3.31 UNIFORM CONNECTEDNESS

Reddit, in designing their front page, chose to use very similar styling for links, seemingly implying a relationship between all links on the page. This is further emphasized by the close proximity and otherwise similar formatting. Conversely, they failed to use similar styles to emphasize the relationships between buttons and navigation tools. Altogether, this results in a confusing layout for the user, where subreddit links are similar to author links and navigation links, and navigation menus are dissimilar.



Figure 50: Reddit's original design misuses the principle of uniform connectedness, by having related content use dissimilar styles, and unrelated content use similar styles.

The redesign changes this significantly. Here principal buttons are emphasized through a similar color (cyan), shape, and size. Likewise, all posts are given the same basic template which compartmentalizes the relevant functions. This allows our design to balance using uniform connectedness in encouraging a relationship between similarly functioning objects, while emphasizing their behavioural relationships to avoid confusion.

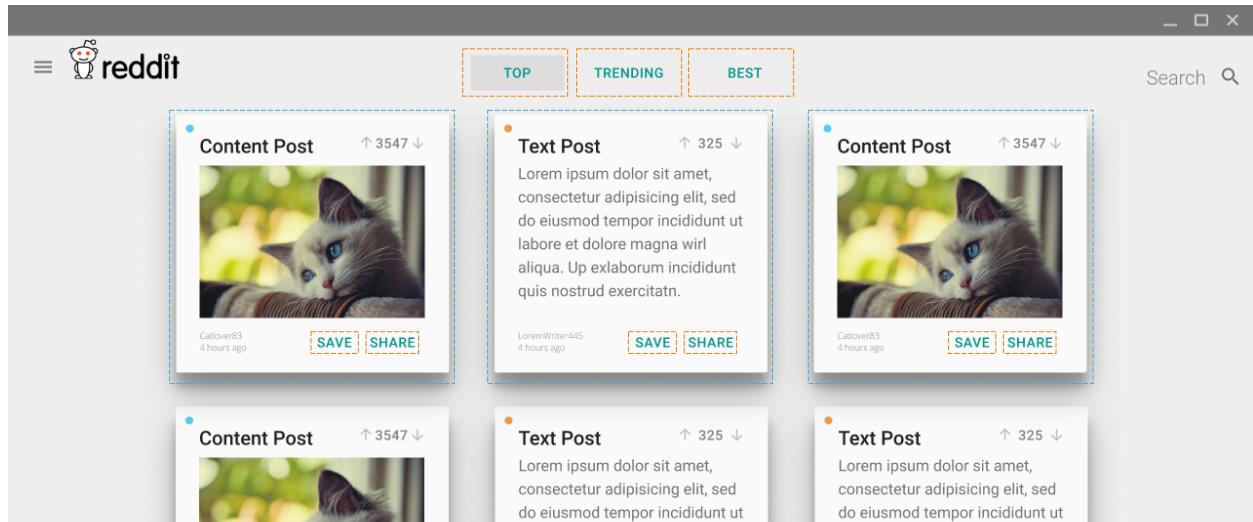


Figure 51: The redesign uses uniform connectedness to emphasize functional relationships, as well as behavioural relationships.

3.32 WAYFINDING

In the existing Reddit front page, there is minimal, if any sense of direction presented for the user. Navigation menus, which are meant to aid in navigating the page, are scattered and run both horizontally and vertically. Account controls, and other functionality is scattered throughout the page. Moreover, viewing content—the primary purpose of Reddit—takes the user to another page—oftentimes, another website—disorienting the user without any indication as to where the user came from.



Figure 52: Two navigation bars that have nearly identical content (left and top), as well as a cluttered layout make it difficult for the user to find their way through the application.

The redesign organizes the navigation controls into a familiarly located menu accessible from a top left button. Further, by being able to fully preview content before committing to it, the user is given the option to visit the page only *if* they are willing to explore it further. This keeps the user oriented, and allows them to rapidly filter through content instead having to travel to other webpages only to find out that they have no interest in the content—an idea borrowed from imgur. This solution gives the user control over their *route decision*, by allowing them to choose their destination, and *route monitoring* and *destination recognition*, by allowing the user to preview the next location before exploring it.

Additionally, the search feature is emphasized, by focusing it whenever it is active, to encourage the user to use the search feature rather than attempt to navigate through the tens of thousands of subreddits.

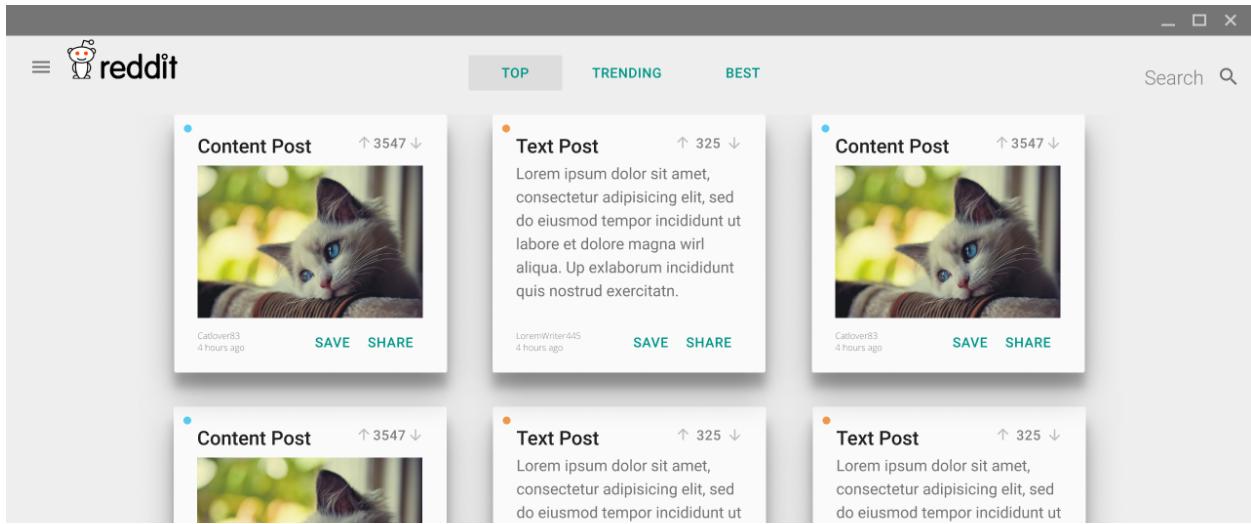


Figure 53: The redesign shows posts where the content is the focal point, emphasizing the preview. The navigation menu is accessible via a button on the top-left.

4 HEURISTIC EVALUATION

Interaction, interactivity and user activity

Semiotics, metaphor, representation

4.1 HIERARCHY

Our application uses a hierarchical tree structure to represent different elements of the application; it divides the app into three main categories: the header, contents and the navigation bar. In the header section, we have a navigation bar icon, the Reddit logo, a search bar and a filter method.

We divided the navigation bar into three parts: the user information box, my subreddits list, and daily gold section. In the user information box, we have the username and the karma icon.

The final part is the content box, which was divided into three parts: the content header, the content list and the content footer. In the content header, we have content title and voting box—where we have the upvote icon, number of voting and the downvote icon. In the content footer, we divided it into post information section and the user activity section. Author information and post date is shown in post information section, and save and share is in the user activity section. Our redesign uses a hierarchical model to represent a complex structure, to allow users to better understand our application, improving usability.

4.2 LAYERING

Our design reorganizes information into related groups. The old Reddit design fails to group information effectively, leaving a great amount of content on the screen in a disorganized fashion. Thus, it is hard for the user to find their desired information

To remedy this, we reorganized the information emphasizing the most important part for the main page—the content—and its relevant functions—the filter buttons. The filter buttons and search bar are layered together to emphasize their ability to perform actions on the same objects: the content tiles.

Information like the subreddit list, user controls, and daily golden goal are not directly conducive to viewing content, and so they have been tucked away in the navigation bar, accessible from the front page using the top left “expand” button.

4.3 COMPARISON

Our design followed the principle of comparison, specifically using the *apples to apples* comparison method. Here, we presented the information in a structured manner to allow users to easily understand their relationships. Using common measurement (posted time, voting and user interest level) and common unit (top, trends and best), we represented content with same graphical and numerical standards to minimize confusion and facilitate comparisons. As the result, users can compare information quickly and effectively.

4.4 AESTHETIC-USABILITY EFFECT

Our redesign boasts its aesthetic appeal, especially when compared to Reddit's. Understanding that beautiful designs give off the perception that the application is easier to use, we used simple UI design, high contrast text and clear content to present a pleasant, yet effective solution. Each dialogue is simplified to only contain information which is relevant to the user—which is presented in an appealing fashion with this principle in mind. Conclusively, the principle of aesthetic-usability effect applies.

4.5 ACCESSIBILITY

We have developed our design with the understanding that accessibility is comprised of four characteristics: perceptibility, operability, simplicity, and forgiveness.

To emphasize our application's perceptibility and operability, we have used large buttons, few, yet contrasting colors, and spacing to clearly delineate boundaries and the separation of objects such, facilitating the identification process of the user. We are using assistive sensory technologies like "alternative" tags to increase the accessibility of the application.

To emphasize our application's simplicity, we have kept clutter to a minimum, only providing relevant information to the user at any particular view. Visually, we have used margins and padding liberally to emphasize the design's lack of clutter.

To emphasize our application's forgiveness, we used minimal UI design methods and the principle of progressive disclosure to prevent unnecessary controls from being activated and unrelated information from being displayed.

Consequently, our application follows the principle of accessibility.

4.6 LEGIBILITY

Our application has high visual clarity. We using 12-point type for printed text, with dark text on a light background to increase contrast. For text blocks, we understand that users prefer short text lines, so we divided text lines into 35 characters per line in the content field. We also justified text into "aligned left, ragged right text" based on the typical user's reading habits and aesthetic preference. In general, users can view content easily without having to adapt.

4.7 VISIBILITY

We have applied visibility in our design of Reddit front page by making all the content clear and obvious to the users. For example, when the user clicks on the control buttons in the content box, a confirmation animation will alert the user that they have saved the page. Likewise, the same thing would happen if the user clicks on any other control buttons in our design. Moreover, the feedback of the messages provides the user with useful and transparent information which facilitates the interaction between the user and the content on the front page of Reddit. In addition, we focused on making the elements which are important to the users visible to them. In short, our redesign for Reddit has incorporated the principle of visibility.

4.8 MATCHING BETWEEN SYSTEM AND THE REAL WORLD

In order to follow real-world conventions, we have organized the information in Reddit front page by using the principle of five hat racks. We used different types of organization such as categories, time, and continuum to make sure that the information would have appeared in a logical order. Also, we used several types of iconic representation in order to create a match between our design for Reddit and the real world. For instance, example representation was used in creating a small pictorial image which represents a search tool in the search bar. This type of pictorial image could be considered as a metaphor that makes the search bar more recognizable and more understandable for the users. Additionally, we have applied other different types of iconic representation such as symbolic and similar representation throughout the application to enhance the usability of the design for the users.

By borrowing queues from content sharing and news websites, which themselves use design queues from paper newspapers, we are able to draw a link between viewing content on the application and viewing content on those websites, or from a newspaper. This allows the user to better understand the conceptual model.

Thus, our design does map from the system to the real world.

4.9 USER CONTROL AND FREEDOM

As many more options often increase the decision making complexity and promote errors, our new design for Reddit has us reducing the choices of buttons for the users. Here, we have moved, replaced, or condensed functions to facilitate the user's control. However, in doing so, we did not remove the features—they have just been relocated to more intuitive locations. Thus, the control afforded to the user is not minimized.

4.10 LEARNABILITY

In order to enhance the learnability and the usability of Reddit's front page, we have renamed several buttons to avoid users confusing their meaning and function. Doing so makes allows the user to easily understand the relationships between components and their functionality, reducing the learning curve. This is further emphasized through the many design principals followed as we explicitly emphasized the relationships between functionality and objects.

Moreover, by simplifying the layout, we compartmentalized the functionality of the website. This use of chunking and progressive disclosure allows the user to clearly connect functionality within particular views, and enables them to easily understand the conceptual model as it is served to them in progressive, digestible chunks.

These to effects significantly reduce the learning curve of using Reddit, increasing the learnability of the website.

4.11 ERROR PREVENTION

Through the use of feedback, large buttons, and styles which communicate functionality, our redesign reduces the chances of slips and mistakes.

The use of feedback is apparent when interacting with the page, where the user is informed when a function is performed. This discourages mistakes, as the user is made aware of the mapping between the result and the performed action. Likewise, using clear labels and emphasizing the component's relationships help users better understand this mapping, further discouraging mistakes. This effect is complemented by our use of progressive disclosure, which allows the users to understand these relationships with greater ease.

Through the use of larger buttons, appropriate spacing, and through confirmation prompts, the user is less likely to *slip*, and miss-click, or miss-interact with our application. Nevertheless, in the event that they do, none of the interaction is final, and can be undone by simply switching clicking the original button to undo, restoring its disabled state.

As a result, our design not only mitigates against mistakes and slips, it also incorporates forgiveness, allowing the user to use our application worry-free.

4.12 ERROR DIAGNOSIS AND RECOVERY

In order to manage applied and cognitive errors that could be related to the user interface, we have improved several aspects of our design over Reddit's original front page.

To avoid any mistyping or miss-pointing, we have made the elements in more recognizable for the users. For example, the user can move their mouse pointer over any control button and receive feedback (change in colour), notifying them that this is an interactive component. This feature, inspired by the principle of highlighting, was used across all buttons and tools to make sure they are easily recognized by users.

Our design uses buttons which have minimum size to avoid *slips*. Moreover, every interactive component, when acted upon, notifies the user—either subtly or explicitly—that an action has been performed, reducing the likelihood of errors generated when a user thinks the system is unresponsive or has not completed their request.

Also, we have improved the readability of the Reddit front page by changing the names of several control buttons to simpler and more understandable labels. This helps users avoid making *mistakes* by clearly labelling and communicating the functionality of components.

Because all actions taken by the user illicit some form of visual feedback, the user is made aware of the mistake. We have extended this to always allow the user to undo an action. This feature can be found across the system, from navigating the website, to interacting with content—all actions can be undone. Specifically, if the user upvotes a post by accident, she can easily click on the upvote arrow a second time to undo the action. Likewise, if she navigated to content by accident, they can just go back to the front page or reopen the front page again and go to any other page they prefer. This feature incorporate forgiveness into our system.

Thus, our system incorporates features to mitigate slips and mistakes to minimize the likelihood of errors, and incorporates forgiveness as a contingency in the event of an error.

4.13 RECOGNITION OVER RECALL

In our design for the front page of Reddit, we focused on making all actions and their controls obvious to the user. The organization for all the information on the interface is very clear and easy to interact with. By using consistent and familiar components, users are able to recognize these components, and understand their functionality and how to interact with them. Our use of surface mimicry has us emulating properties from popular social media such as Instagram and Imgur, to make the conceptual model of our design easier to understand, ultimately making it understandable and effective. In using these principles, we have prioritized recognition over recall.

4.14 FLEXIBILITY AND EFFICIENCY OF USE

In our design for Reddit, users can perform frequent actions quickly and easily, benefited by larger buttons, better spacing, and a more logical layout of objects, content, and functional components. Light-users can do what is most important to them: browse content with ease. This group was largely disenfranchised in the original design, and can now perform more advanced actions based on good affordance. For example, we copied several prosperities from famous social media such as Instagram to improve the similarity or the familiarity that would help new users understand the different elements and functionality on the user interface.

Advanced users, however, benefit less from our design. Certain tasks, like sharing and posting content are available, but more advanced features, namely customization and saving posts are unavailable in our current build. This trade-off was intentional, as the Reddit API requires that users be logged-in, which would prevent the majority of light-users from using our application.

5 FUTURE FEATURES

5.1 IMPROVING ACCESSIBILITY

We understand that accessibility is a core part of system design and it is important to help users use the system without extra adaptations. Our system already followed the principle of accessibility and have many functions to support different user groups. But it is not enough. Therefore, in the future, we want to increase accessibility by perform voice input for people and perform font sizes management tool for people with eye disabilities and age disabilities.

5.2 EXTENDING THE SCOPE

To make the application more useful, and more robust, we would incorporate the rest of Reddit's subreddits into the redesign. The front page was emphasized in this redesign because it is the primary entry point for most users, and it is abysmally poorly designed when compared to many of the large subreddits—which allow their administrators and moderators to theme and redesign them.

5.3 ADDING FUNCTIONALITY

Full integration with the Reddit API to provide seamless interaction between the client and Reddit. Unfortunately, the Reddit API requires that users log into their Reddit account to make queries. As the majority of people who visit the Reddit page are unregistered, we have opted not to use the Reddit API in our implementation to allow them access to our application. In the future, the API should be integrated with the application to give users the option to experience the additional features and stability provided from the API.

5.4 IMPROVING THE CLIENT

In developing our prototype we were faced with the decision of making a client or making an extension. We chose the client as we were more familiar with its implementation, but understand the benefits of the extension. Thus, looking forward, adapting our redesign into a chrome and Firefox extension would lower the barriers to entry for new users, and would have a smaller impact on their Reddit browsing experience.

Recognizing this, we would also recommend that a full, stand-alone client be used in the client solution. Technology such as nw.js was explored for this purpose, but its implementation was beyond the scope of this project. This solution would allow our application to run as a self-installing application, available from the user's desktop across all operating systems supported by Chromium, and would be our go-to technology for preparing a consumer build.