

Zen of White Space in Web UI Design

Space, Ratios, Minimalism





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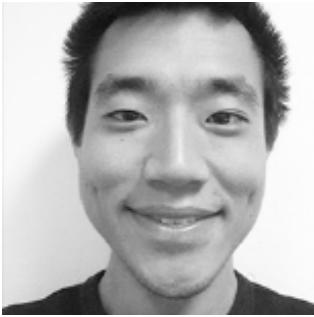
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Jake is a writer and designer with a focus on interface design for the web. He often writes about W3C specs and the newest trends in web design. You can find out more on [his portfolio](#) or view his latest design work on [Dribbble](#).



Co-founder and head of product, Kamil previously worked as a UX/UI Designer at Grupa Nokaut. He studied software engineering in university, but design and psychology have always been his greatest passions. [Follow me on Twitter @ziebak](#)



With a passion for writing and an interest in everything anything related to design or technology, Matt Ellis found freelance writing best suited his skills and allowed him to be paid for his curiosity. Having worked with various design and tech companies in the past, he feels quite at home at UXPin as the go-to writer, researcher, and editor. When he's not writing, Matt loves to travel, another byproduct of curiosity.

Introduction

Often confused for an ‘empty canvas’ to be filled for a fuller picture, white space – or negative space – is actually just another tool used to fill the real empty canvas, and all great designers know this important distinction.

White space offers a lot of benefits: it can guide the user’s visual flow by attracting or repelling attention, increases readability, gives elements some breathing room for better comprehension, and it makes the page overall just look better.

Great designers have been taking advantage of white space since Ancient Greeks were ‘designing’ painted vases. Don’t be afraid to leave parts of the screen empty – rather, consider removing some elements to create more emptiness.

In this book, we’ll explore topics like the different types of white space, the dangers of not enough or too much white space, the intersection

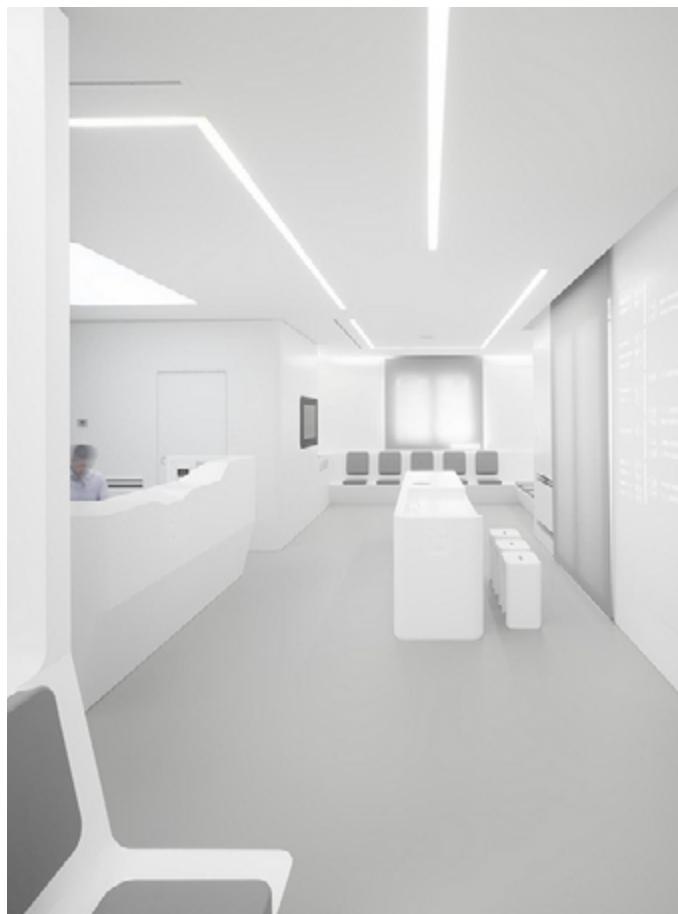
of white space and minimalism, and related design concepts that will help you achieve a more elegant and content-focused design. To help speed up the learning curve, we've also provided a list of some of our favorite tools for perfecting white space.

We've written the book with a focus on real-world application. After all, when it comes to design, nothing beats practice. We hope you enjoy the book and if you find it helpful, feel free to share with others.

For the love of web UI design,
Jerry Cao & Jake Rocheleau
co-written by Kamil Zieba & Matt Ellis

Designing With the Power of Nothing

Your design lives within a finite screen. There is only so much that can be said, done, and offered within that tiny box, and so every last pixel is valuable real estate.



Source: "bureauhub architecture..." [Forgemind ArchiMedia](#). Creative Commons.

Of course even amateur designers know not to overload a single page, but when it comes to exactly how much white space to include, sometimes even seasoned designers might draw a blank.

White space, or “[negative space](#)” as it’s also known – the two terms are used interchangeably – refers to any screen space between existing elements. It doesn’t need to be white, or even blank (if, for example, you’re using a patterned, colored, or textured background). Negative space creates a vacuum of content, which then draws more attention to the existing content.

In this article, we’ll discuss the how to apply one the most powerful tools in a designer’s toolbox: nothing at all.



One of your most powerful design tools is nothing at all.

Empty Causes

Negative space has been a part of aesthetic theory from the very beginning.

In digital design, though, this emptiness holds more weight, so to speak. Negative space isn't just visually appealing, it must fulfill the more practical roles of balancing the [visual hierarchy](#) and leading the users' eyes to strategic points of interaction. Moreover, if there is text present, white space must also create the most [legible and readable](#) environment on top of its other duties.



Source: "I'm alone/Explored." [Vinoth Chandar. Creative Commons](#).

In general, white space directly affects the following areas:

- **Eye-scanning** – The space between bigger elements (macro white space) affects how the user scans the page, and when used prop-

erly can guide the user's sight to notice whichever elements you want. This is helpful for creating a brand identity and increasing user interactions.

- **Legibility** – The space between smaller elements (micro) like letters, lines of texts, list items, and sometimes icons will affect how clearly and quickly each can be read and possibly selected.
- **Aesthetics** – When looking at the big picture, white space plays a big part in the visual organization (and therefore aesthetics) of the interface. For example, random clustering of content rarely looks good.
- **Luxury** – Generous white space infuses your page with an air of elegance and sophistication.

To better understand how to apply it, we can categorize the different types of white space (macro and micro), as well as the different ways to use them (passive and active).

Macro and Micro

Where and how white space is used on a page will affect its role. To simplify this, we can break these types up into macro and micro.

1. Macro White Space

Macro white space refers to the spacing between large elements.

This is the spacing used for:

- General composition
- Separating different elements
- Text columns
- Margins
- Padding
- Space within actual graphics/images

Macro white space heavily affects the user's visual flow, either gently nudging or forcefully push their attention where you want. The rule here is that **larger distances push harder**. You want to strike a balance, however, because too much white space violates [Gestalt Principles](#) and weakens the relationships between objects.

Let's look at art director [Tomasz Wysocki](#)'s site for an example of how white space entices user interaction.

[Tomasz Wysocki](#)[Work](#)[Profile](#)[Contact](#)

Digital Art & Experiments

[Recent projects](#)

01
Neanderthal
Art Direction & Retouching

02
Goverdose - Deck
Drawing & Retouching

03
Wolf Hybrid
Art Direction & Retouching

04
Goverdose - Void
Photography & Retouching

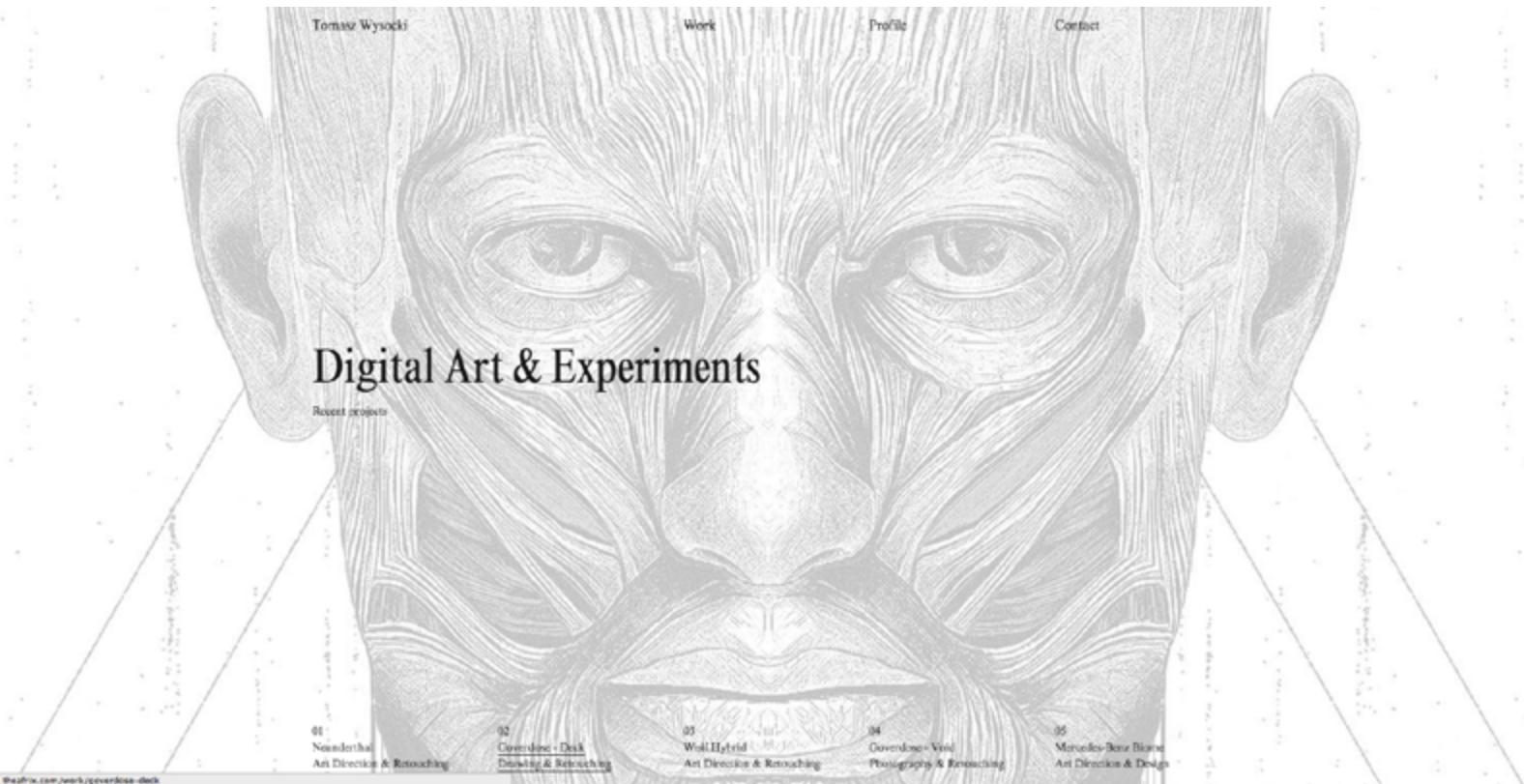
05
Mercedes-Benz Biome
Art Direction & Design

Source: [Tomasz Wysocki](#)

The first thing most users will notice is the page's title, "Digital Art & Experiments" in an atypical sans-serif typeface. In conjunction with the text's size, the white space surrounding the title funnels the users' attention there from both sides. The top and bottom menus, too, also attract attention, though not as much since they only have space on one side. Overall, the white space does its job of drawing attention, but the design is actually deceptively simple.

Wysocki actually uses the white space as a blank canvas for surprising us with the richness of his work. Upon hovering over any of the bottom navigation, we are treated to a full-page background image of the work. The effect creates an almost childlike joy of discovery: we stumble into a blank space, only to find that each drawer is filled with visual delight.

You can see below how dramatically the screen transforms upon hover:



Source: [Tomasz Wysocki](#)

By using white space as a tool for luring users into his work, Wysocki creates an experience that is strangely addictive. After the first work appears, we want to see what else he's hidden from us – it feels counterintuitive from a **discoverability standpoint** (since you'd want to reveal the most important content), but it works because it's executed with the perfect level of intrigue.

2. Micro White Space

On the other hand, when designers mention micro white space, they are referring to the space between smaller elements, or the elements within greater elements. These include:

- Letters
- Lines of Text
- Paragraphs
- List Items
- Buttons & Icons

Micro white space is used mostly for the overall clarity of the site, specifically legibility of typography (how clearly you can distinguish each letter). When adding space in and around text, you'll want to strike the balance between just enough to aid clarity, but not so much that it distracts from more important elements. It's usually a good idea to set the line height (vertical space between lines) to around 1.5x your type size.

As we mentioned when discussing the Gestalt principles in our [Web UI Design for the Human Eye](#), putting elements in close proximity also suggests they function similarly. Micro white space can help suggest a relationship between buttons or links, and mimicking this spacing elsewhere reinforces a pattern, which increases recognition (and [learnability](#)) with use.

While macro and micro are the types of white space, each can be used either passively or actively, which we'll explain now.

Passive and Active Space

The application of white space all depends upon context.

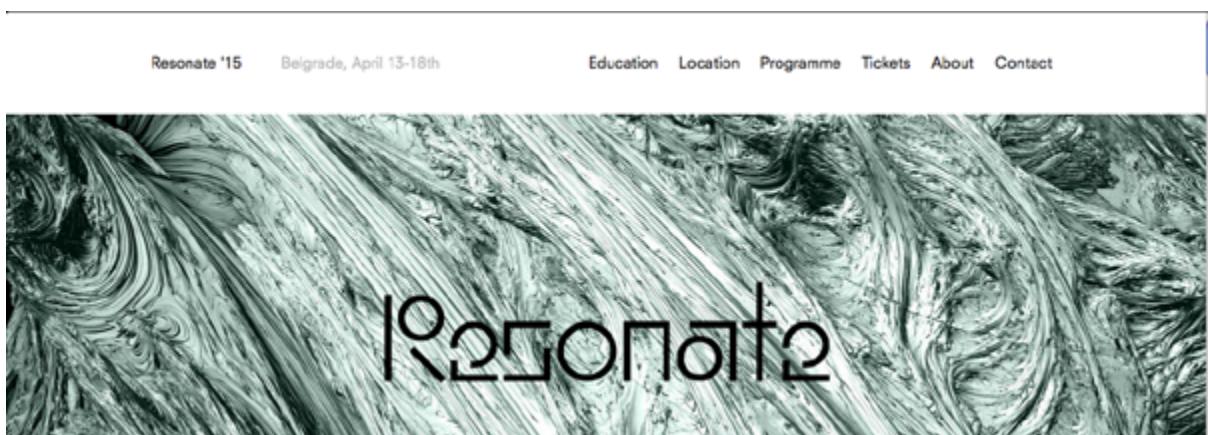
As we said above, the more space used, the stronger the pull. But you don't always want the strongest pull possible for every element on a page, not to mention how much screen real estate that would consume.

Let's look at how passive and active space help create balance in negative space.

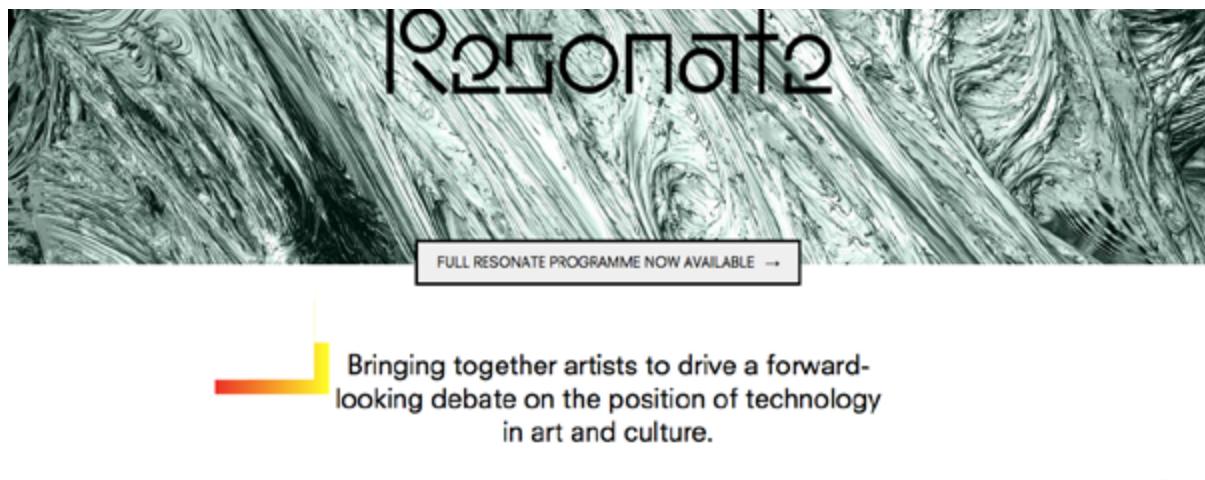
1. Passive Space

Think of **passive white space** as the bare minimum.

Without enough white space, a site becomes illegible and frustrating to navigate, as effort is required to make sense of the jumble. Passive white space is however much white space is required to make the site comprehensible.



Source: [Resonate '15](#)



Source: [Resonate '15](#)

In the above example, take a look at the spacing between the words/links at the top navigation bar. Also, look at the text at the bottom and the spacing between the letters, words, and lines. Do you notice anything out of the ordinary? You shouldn't, they're all spaced so as not to draw attention. That's passive spacing.

For macro white space, passive spacing means adding enough borders and margins to clarify the distinctions between elements and avoid confusion. For example, putting enough space between a login navigation bar and a site navigation bar at the top of the screen.

For micro white space, this means spacing out letters, lines of text, and paragraphs to maximize readability, and spacing items in a list or menu to make them individually easy to spot when scanning (in other words, removing clutter).

Passive applications should feel organic and natural. In fact, **the main purpose of passive white space is that it goes unnoticed.**

What makes it passive is that it doesn't draw attention to itself. It simply looks "normal."

The moment when enough space is used that it starts to stand out, then it becomes active.

2. Active Space

Active white space influences your user's visual flow. Surrounding an element with a large amount of white space is a great way to get it noticed.

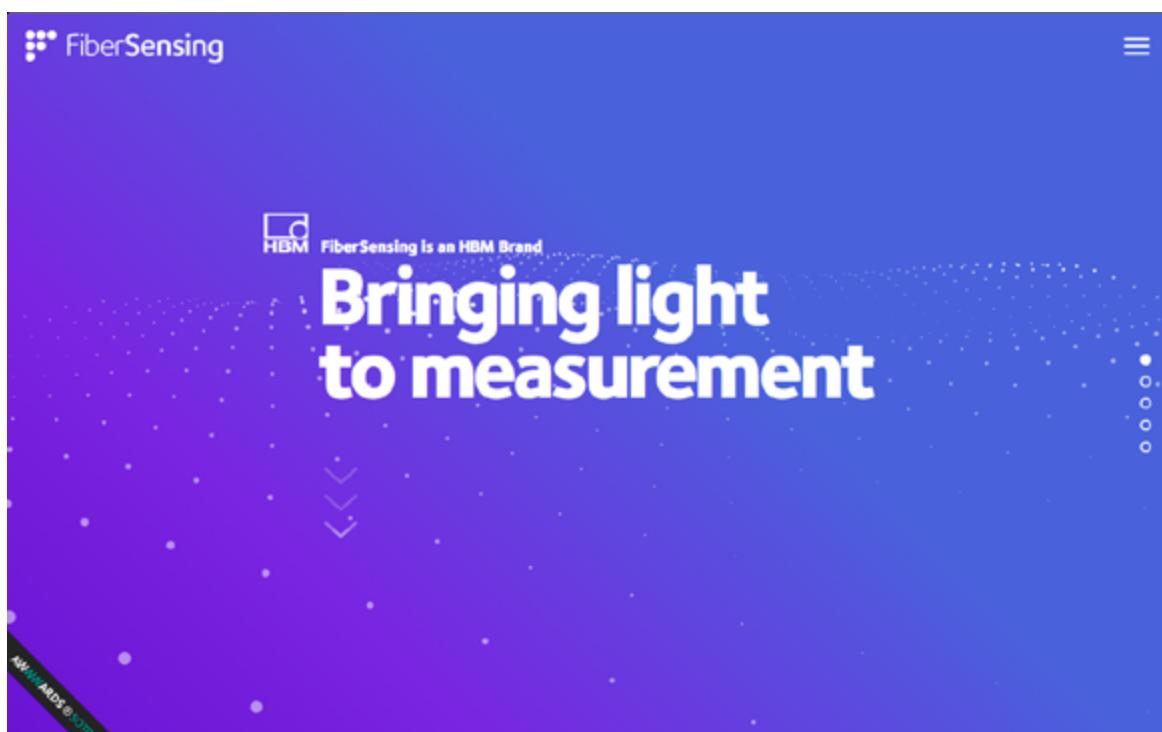


Source: [1000: Chrome Experiments](#)

There are actually a lot of elements on the above page: navigation tabs, social media links, even legal information. However, the most prominent is clearly the interactive "1000" graphic that's dead center. By shrinking and pushing the other elements to the corners,

the designers at [Chrome Experiments](#) actively maximize the space around the element they want the users to interact with most.

Likewise, minimizing the amount of space between a smaller line and the one proceeding may be a good way to “hide” it, as is often seen with legal requirements or copyright information. See how, below, the line “FiberSensing is an HBM Brand” is displayed without drawing too much attention.



Source: [HBM FiberSensing](#)

Macro white space is often used actively to draw attention to the page’s single main focus, or to separate more important elements from the pack.

However, it can also be used with micro white space. [Mark Boulton](#) explains in an [A List Apart](#) piece that he sometimes applies

active spacing around a particular quote or paragraph within a block of text in order to draw attention to it. This is great way to emphasize the most useful points of your content to users who are just scanning.

At this point, we're getting into the strategic use of varying amounts of white space. This could be thought of as different degrees of minimalism, which we'll explain below.

Minimalism

The more white space you use, the more minimalistic your page becomes since you'll need to remove elements to prevent clutter.

Minimalism is a design philosophy that's neither good nor bad – it simply states that you remove any noise so users can focus on the content. As you trim away the bells and whistles, the remaining content stands proud amidst the elegance of space.

Minimalism affects your site in a couple ways: the amount of elements present, and the perception of luxury.

1. Amount of Elements

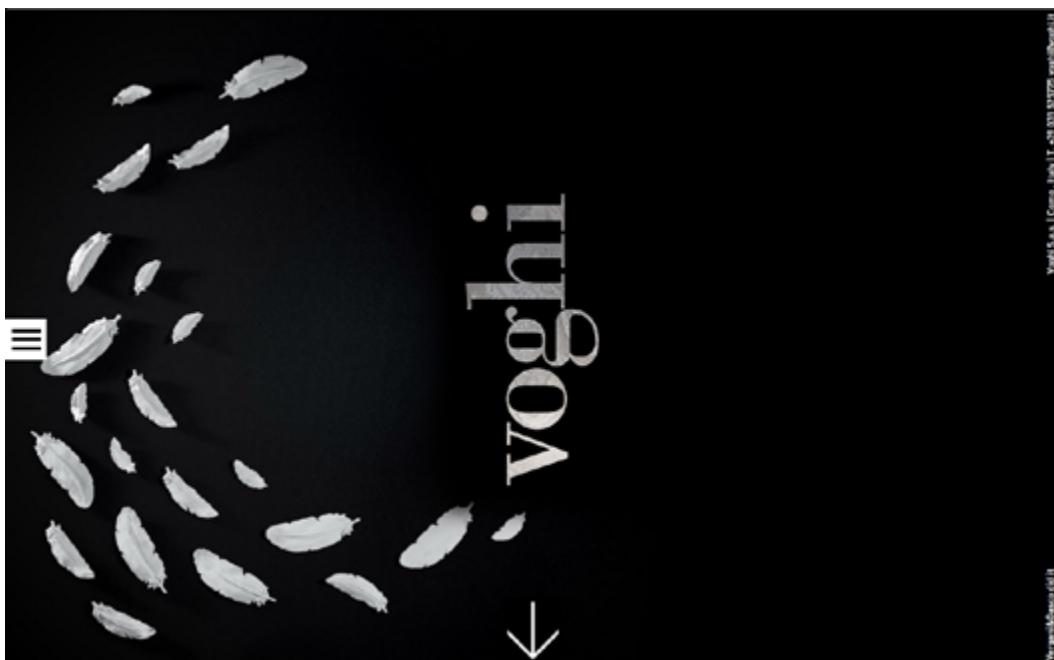
The less elements you have on your page, the more powerful each individual element becomes.

If you have only one thing on your page, even tucked away in the corner, it will become the sole focus of your user. If you have a hundred tiny things, your users will either begrudgingly sift through them for their point of interest, or more realistically, just give up from [choice paralysis](#).

This is relevant because the easiest way to increase the white space at your disposal is reducing the number of elements on the page. But we know that's much easier said than done. Minimalism as a philosophy applies to any site – you never want to fill the screen

with anything the user doesn't need. Minimalism as an *aesthetic*, however, is not appropriate for every site since content-heavy sites won't be able to support the bare look.

When it comes to minimalism, remember that the aesthetic is the byproduct and not the goal. The only way you'll achieve the right level of minimalism is to subtract just enough interface objects until the design almost fails, then test the design with users, stopping when you hit the tipping point.



Source: [voghi](#)

The site for the Italian fashion brand [voghi](#) keeps it simple and beautiful. There are only two clickable elements on the screen: the hamburger menu at the side and the arrow at the bottom. With the contact information minimized at the right, the lack of competing visuals focus the attention on the gorgeous graphic, which then leads attention to the arrow.

How you balance the significance of your items is up to you. Some pages have only one clickable link to ensure the user goes where the designer wants. Other sites have many menus of pulldown submenus to ensure that the user chooses exactly the option they want. As [Kayla Knight suggests](#), you could consider removing taglines, “Featured Content”, and simplifying your navigation. Of course, that all depends on your brand and product.

2. Perception of Luxury

Minimalism has become synonymous with luxury, and its use immediately conjures an atmosphere of sophistication, fashion, and elegance. Fashion websites are notorious users of minimalism in their digital designs – but it’s rare to find those same designs for bargain or mass-market firms.

The perception of luxury has a direct correlation to the amount of white space:

- **Heavy white space** is seen as luxurious, high-end, or sophisticated, and as such expensive.
- **Balanced white space** is seen as, well, balanced – affordable but still quality.
- **Little white space** is seen as cheap, low-quality, and the clutter is also displeasing to look at.



Source: Amazon

Compare the fashion website [voghi](#) we first examined to this screenshot from Amazon. Amazon is more cluttered and includes more navigation options and promotions. Both sites sell high-end fashion products, but which do you think a typical fashionable user would prefer? What about a reasonable, price-saver type of shopper?

This applies to macro and micro space, but also – and most importantly – to the images used within the site itself. Browsing the photography from fashion websites, you'll notice more artistry applied than the average photography from, say, an electronics website.

Ultimately, you'll always want to start first and foremost with the needs of your users. Research your users, create useful personas, then consider how white space can frame content so they can best accomplish their goals.

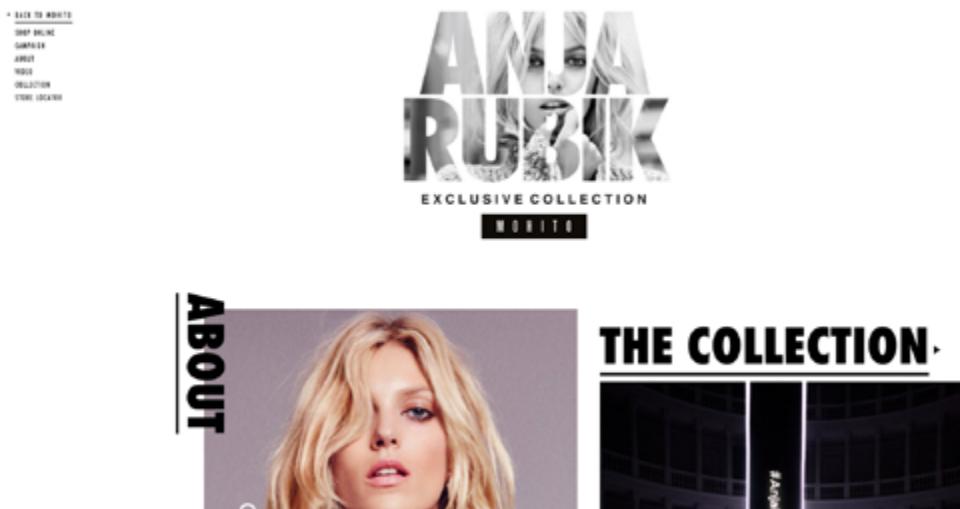
Conclusion

As a visual art, design can't neglect one of its most fundamental artistic principles. Nor should it – the power of white space goes far beyond aesthetics and can be used strategically to further the more business-related goals of interaction design.

At the bare minimum level, its use facilitates the basic functions of a site or app like readability and navigation. But in the hands of an expert, the smart use of white space transforms otherwise plain interfaces into designs that users *want* to interact with.

Determining the Perfect Values for White Space

Web UI design is built upon many common [repeatable patterns](#) and [best practices](#), but not many “carved in stone” rules. Design is an art form, and as such, “good” or “bad” design is often subjective to users. However, there are certainly guidelines derived from design fundamentals that can help designers train their eye to build layouts which are considered “good” by a majority of users.



Source: [Anja Rubik](#)

White space is one of the trickier concepts because it deals with larger ideas like content placement, balance, and overall composition. The

best value for white space depends heavily on the situation and the purpose of the webpage. This is why values for white space are typically subjective because they're based on the website layout itself. However, it's quite an exaggeration to throw our arms up and declare that "all white spaces values are okay". Proper white space values must be determined from your eye. Pixels and percents only matter relative to other items on the page. So, once you can recognize poorly-structured white space, it'll be so much easier to understand *why* it looks bad and how to fix it.

Let's first cover the many problems with using too little or too much white space. These are just general ideas but they can relate to all website projects. From there, we'll wrap up with a series of practice routines to help designers improve their eye and their creative design process.

The Perils of Not Enough Space

When you don't leave enough room on the page, then elements begin to feel cramped. This isn't good for the visuals, but it's completely repugnant for text.

Users must be able to read and understand text with ease. White space allows this to happen – but you must consider not just the white space between lines of text, but also the space between paragraphs and full content sections.

A senior military official investigating the crash told the New York Times that audio from Flight 93's voice recorder reveals one pilot is heard leaving the cockpit, then there's increasingly frantic banging on the door as the Airbus A320 inexplicably begins to descend. Within ten minutes, the plane dropped from an altitude of 38,000 feet to about 6,000 and crashed into the mountainside — all while one pilot was apparently locked out of the cockpit and the other gave no response. "The guy outside is knocking lightly on the door and there is no answer," the investigator said. "And then he hits the door stronger and no answer. There is never an answer." He added, "You can hear he is trying to smash the door down."

There have been a number of plane crashes attributed to [pilot suicide](#). Robin said there was nothing to indicate that the crash was a terrorist attack.

What makes the report even more bizarre is that there's no indication of any friction between the pilots up to that point. The investigator said their conversation had been "very smooth, very cool" throughout the flight. It's unclear why one pilot left the cockpit, but "what is sure is that at the very end of the flight, the other pilot is alone and does not open the door," the official said.

After 9/11, most international airlines implemented procedures to keep cockpit doors locked. These doors have the ability to prevent anyone outside the cockpit from coming in, although there is an emergency override for other crew members on the plane. Standard procedure is for a flight attendant to block the door with a food cart when a pilot opens the door to leave, and to take his or her place in the cabin until they return. "Procedurally, something was very wrong," Glen Winn, an aviation instructor at the University of Southern California, told the [Los Angeles Times](#). "You ask any pilot that'll tell you the same thing ... They



Not a Very P.C. Thing to Say

55k shares



Restaurant Calls Out Lying Yelper by Posting Surveillance Footage

32 Shares

3 McDonald's Spent \$40 Million Yesterday on a Worldwide Promotion, and Hardly Anyone Noticed

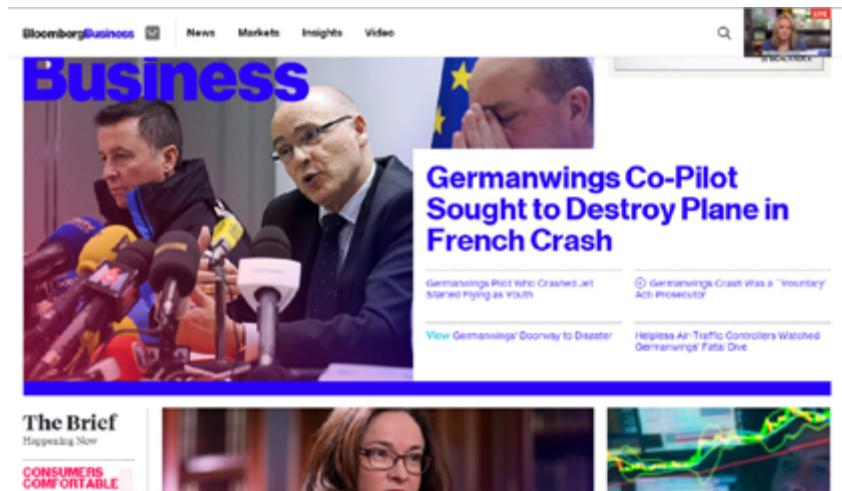
877 Shares

4 The 13 Most Ignorant Quotes From That Awful Deadline Article

Source: [NYMag](#)

For example take a look at the above screenshot taken from a [NYMag article](#). Each paragraph feels a little squished together in reference to both line height and paragraph margins. When content feels packed together, it seems more intimidating and fewer people are going to stick around to keep reading.

It's also a bad idea to have content sections run up close to other sections of the layout. White space must be used everywhere from the larger interface objects down to the minutiae of page content. Visual hierarchy also dissolves when you don't leave enough white space. When everything is crammed together, it's difficult to visually understand which paragraphs belong to which headings. It might even be difficult to figure out when a paragraph ends or when another one begins, which definitely isn't useful to readers.



Source: [Bloomberg](#)

Consider [the Bloomberg homepage](#) layout design. While the magazine features some great writers, the homepage style feels a little much. A litany of columns are pushed together with no balance or coordination. Text placement looks odd and images feel packed together like a tetris puzzle.

The bigger picture of hierachal order is what creates a sense of comfortable usability. Users may not know the technical terms for header, navigation, sidebar, or carousel widget, but they should be able to visually recognize the placement of these elements in the overall layout. Even if users don't know exactly what these terms *mean*, they must be able to *visually understand* their purpose.

If users can't understand, then they'll just leave your site [within 10-20 seconds](#).

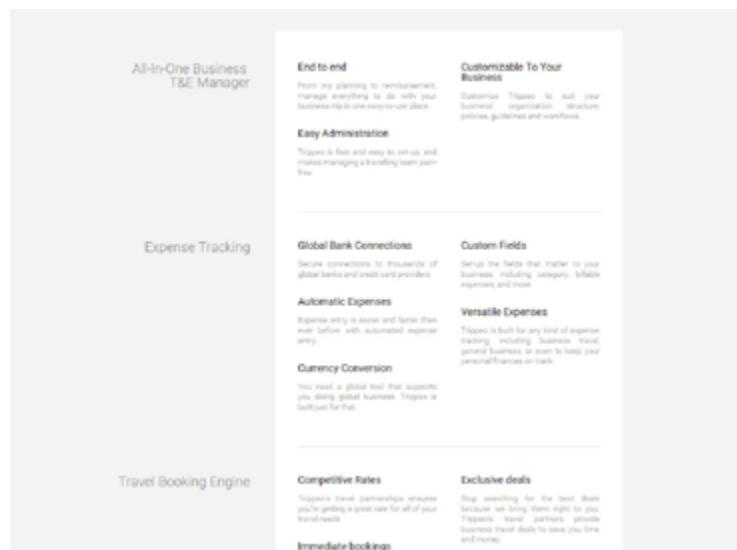
Without enough white space, all your content areas break down and blend together into a large amorphous blob.

The Perils of Too Much Space

On the other hand, consider the impracticality of using too much white space. Excessive white space eventually creates a low information density on the page, which means the layout provides less information than users expect. Content is spaced too far throughout different sections and visitors have no choice but to commit to a lot of scrolling.

Without enough white space, all your content areas break down into a large amorphous blob.

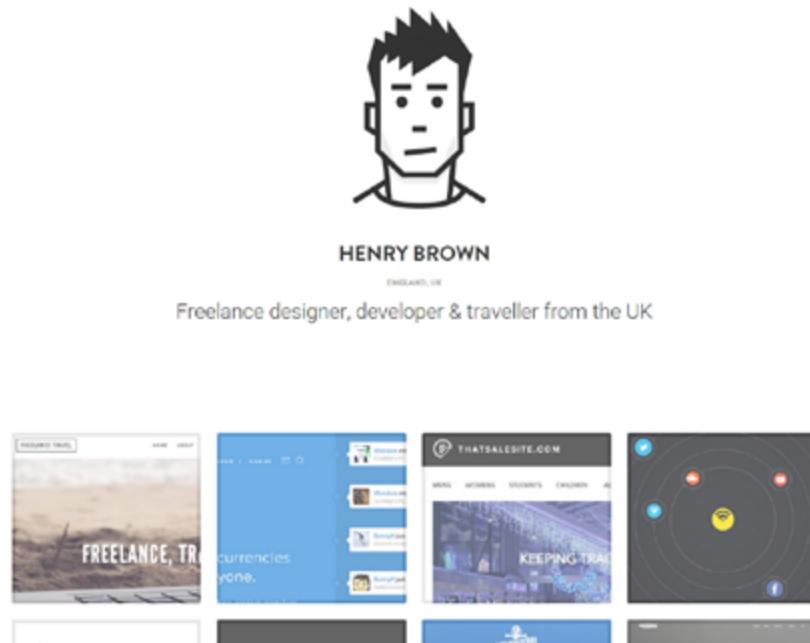
Not to mention, mobile visitors would be especially annoyed on their smaller screens.



Source: [Trippeo](#)

We feel that the [Trippeo](#) layout uses an odd style of white space. The page is centered with a small container of content which all feels cramped into a tiny box. It's hard to read through content without

straining your eyes or losing your place. Although the design is spacious, it all feels cramped and too homogenous for a clean experience.



Source: [Henry Brown](#)

Keep in mind that if a website doesn't contain too much content, then it can get away with extra white space. You can instead use large photos and oversized text to fill up the page. For example [Henry Brown's portfolio](#) (pictured above) uses a vast amount of white space and very little content.

The design style works because portfolios are meant to focus solely on the work. But this style wouldn't be appropriate for a blog or an eCommerce site where content is expected to overflow at the seams.

Lower [information density](#) also affects page hierarchy. When content is too spaced out, then everything feels fragmented. Visitors can't be totally sure how the page lines up because there's so much space be-

tween different content areas. Even with less page content, you must still design the layout with sections relatively close to each other to communicate relationships between interface objects.

By looking at many different websites you can train your eye to recognize white space values on command. Start by focusing on the bigger picture like the full webpage composition and the white space found between content areas(header, navbar, sidebar, etc). Most designers create website layouts by focusing on these larger page elements first. Once the overall composition looks good then move onto smaller details like visual white space(Icons, buttons, image galleries) and textual white space(paragraph margins, line height values).

Unfortunately since white space is heavily dependent on the type of website and content, there's no easy way to understand the proper amount to use. White space must be seen and recognized for what it is, and over time these ideas will become ingrained into your mind.

Mastery of White Space in Web UI Design

1. Study the work of those who came before you

The first step is to review some websites from this guide and others that you find online.

Take some time to research white space on forums and blogs. Study from live examples and pick out areas which look good versus others that look bad. Studying live websites is the best (and quickest way) to train your eye to recognize white space in relation to other page elements.

Here's a few of our favorite visual resources for white space:

- [**The Best White Layouts Selection**](#) – A fantastic selection of 37 websites that strike a fine balance between white space and clear relationships between interface objects
- [**Best Minimalist Websites**](#) – Minimalist websites by definition must demonstrate a mastery of white space. When in doubt, it's always a good idea to see how these sites remain usable without tipping past the knife's edge of acceptable spacing.
- [**21 Inspiring Examples of White Space**](#) – A nice collection of websites across all industries, from designer portfolios to refreshingly designed charity websites.

But training your eye is only half the battle. To really master the concept of white space you'll need to spend time practicing.

Repetition is the key but you also need to have a level of discernment about your work. Be ready to tweak or even junk your design mockups when they look bad. This can be tough because designers tend to fall in love with their work. However the best designers are able to see everything from an objective eye.

2. Wireframe and prototype as much as you can

A great starting exercise is to create multiple website wireframes or prototypes. It doesn't matter whether you do this digitally or with pencil and paper, so long as you can spend time designing website layouts. If you're new to wireframes or prototypes, then feel free to check out the [*Guide to Wireframing*](#) and the [*Ultimate Guide to Prototyping*](#) which includes plenty of tips, examples, and methodologies.

Wireframes force you to think about design structure and content layout (which includes the placement of elements in relation to each other). Remember that white space is used to define relationships and hierarchies, so you'll want to get comfortable with what looks "good" to the average person.



Source: [UXPin](#)

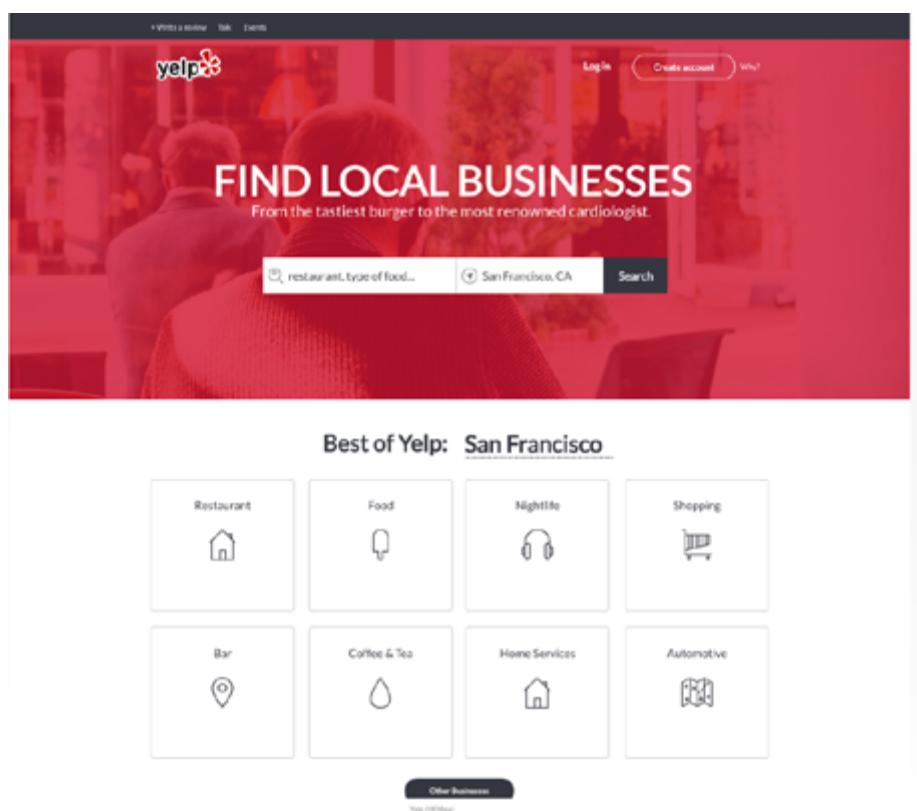
Prototypes will then allow you to confirm the usability of your design. While the spacing between elements may look aesthetically pleasing, you won't know until you prototype whether it actually improves comprehension for users. If you're using [UXPin](#), you can actually turn your wireframe into a prototype with just a couple clicks, then [test it with users right in the app](#).

Remember that wireframes create structure, while prototypes create the right user context for your designs.

3. Refine the details with a high-fidelity mockup

Once you've created some wireframes and prototypes that you like, try designing a full website mockup. This can be done in any graphics design program from Photoshop to SketchApp (both of which [integrate with UXPin](#)) or even GIMP.

The important part is to start diving into more visual design detail. Follow your original wireframe or prototype, but also try adding some placeholder images and rough copy. Continue adjusting line height and spacing between page elements all while keeping the “big picture” in mind.

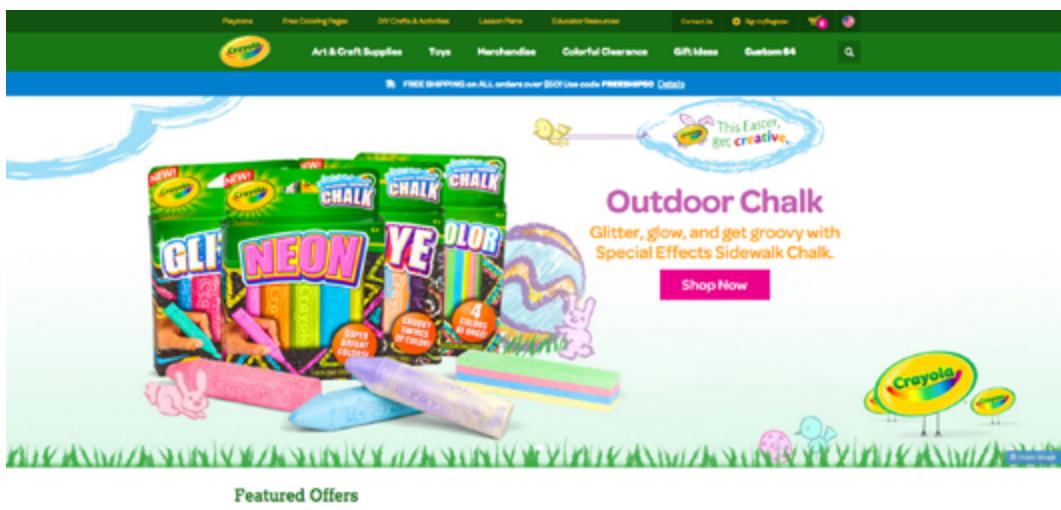


If you follow this routine enough times you will notice improvement. In between iterations, it’s a good idea to find time to analyze other websites and even build a clone mockup for an existing website from scratch. As we described in the [Guide to Mockups](#), this was actually one of the first steps in the design process for our CEO Marcin Treder in our Yelp redesign exercise. To familiarize himself with the content design and spacing of elements, he first redrew the Yelp before reducing it to a minimalist layout.

4. Never forget your users

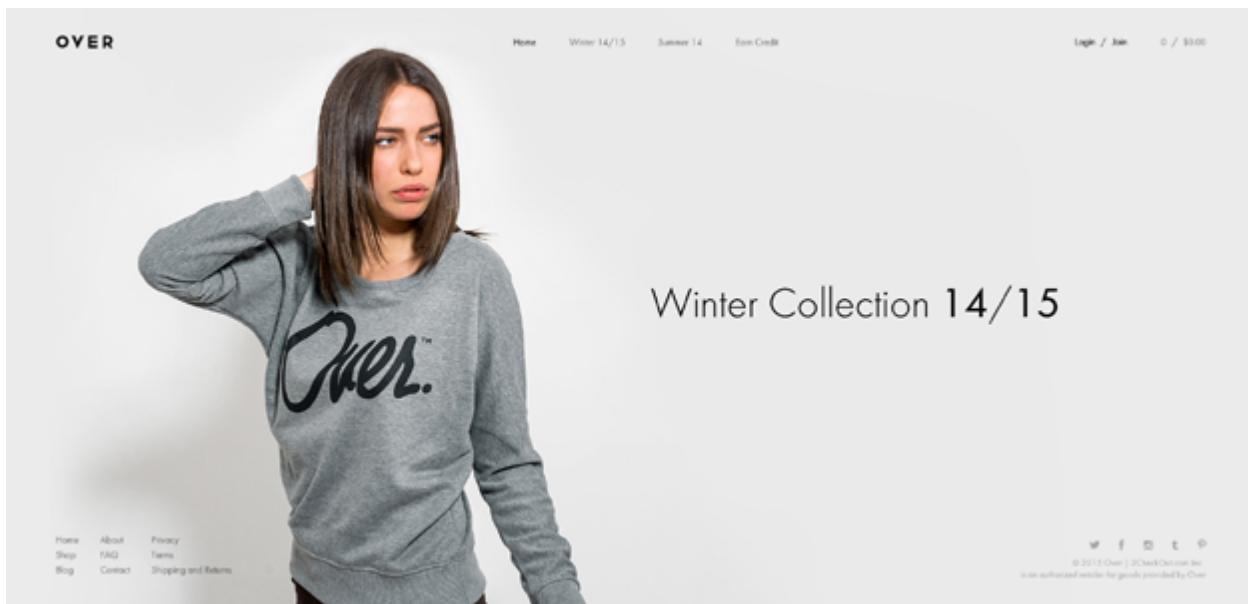
Finally, and perhaps our most important point, make sure you absolutely understand who you're designing for. If you don't know *who* you're designing for, then it doesn't really matter *how* you execute the design elements.

For example, [Crayola's website](#) teeters on the edge of clutter given the vibrant colors in text and images. But there's still enough white space to call attention to the feature space and primary CTA on the page. If the site was intended for adults rather than children (who may respond well to the overstimulation), then we may want to either tone down the colors or increase spacing between elements to let the colors breathe.



Source: [Crayola](#)

On the other hand, the subdued minimalist design for trendy clothing company [Over](#) is perfect for its audience of streetwise adults. In this case, the generous space between the featured headlines and other elements creates a sense of sophistication and luxury.



Source: [OverClothing](#)

As we explained in the [Guide to UX Design Documentation](#), study your personas and user scenarios. Never forget that your design is just a vessel for what the user wishes to accomplish.

Study your users, start sketching, then dive into wireframes, prototypes, and mockups. website prototypes or designing high-fidelity mockups. Try making your page elements too close just to see what they look like, then make them too far apart.

Mastery arises from continual practice, whether it takes days, months, or years. With serious observation and practice, you'll find the happy medium in white space.

Takeaway

The final piece to the puzzle is your mindset in approaching each website project. Great designers weigh many different options and obsess over finding the *right* idea, not the *best* idea.

Keep an adventurous playful attitude about your creative work and projects will be much easier. Make sure you learn the rules [before you break them](#). You must create websites from the bigger picture down to smaller details. White space encompasses a core piece of the overall composition, which means it's one of the first items to consider.

But designers usually don't sit around thinking about how to add white space to a wireframe. Instead they think about which page elements are required for the layout. Proper white space values can only arise from this explorative process.

Aim to clearly recognize white space in different websites because training your eye improves your imagination. And once you can envision beautiful websites from memory and imagination, then you'll really be thinking like the best designers.

White Space & Minimalism

White space is the ultimate sculpting tool in minimalist design. Since content is the foundation of the minimalist design philosophy, white space helps you trim away any elements that are unnecessary for the core experience.

Although the current minimalism trend is centered around [negative space](#) and black lettering – the core of minimalism – it is not a technique that is unique to web design. In fact, [roots of minimalism](#) in design can be traced to the early 1900s as print designer Lucian Bernhard pioneered a simpler design language.

In this piece, we'll explain how space is used in the minimalist design philosophy, then explore a few situations in which less space is not always the best idea.

Design in Space

The primary design philosophy that most people associate with white space is minimalism.

But as we described in *Web Design for the Human Eye*, minimal design isn't just a small visual surrounded by a colorless expanse. The style also encompasses space of any color, although textures are not included in this context. White, black or very dark backgrounds are the most popular, but some designers also express negative space through full color backgrounds.

As shown below, [Lindvall A&D](#) uses a bright aqua background with simple navigation, elements and a line drawing on the homepage to lure users into the architecture firm's website.



Photo credits: <http://www.jonaslindvall.com/>

Interior pages fit into the minimal style as well, with simple images against a stark white background. A common element across the color and white pages, both pages include plenty of negative space (alternate term for white space) which further emphasize the images on the page.



Photo credits: <http://www.jonaslindvall.com/>

Generous negative space [creates a sense of luxury](#) while drawing the eyes more towards the visuals. The treatment makes a lot of sense for this architectural design firm, considering how they want to appear sophisticated and draw attention to the most important part of the page: the images of their work.

To learn more about using negative space as a design tool, we highly recommend [this practical guide](#) from **Six Revisions**.

Visual Harmony Through Spatial Symmetries

To be most effective, a minimal design framework needs a solid backbone and structure. The key components of visual organization include a strong grid, visual balance, and close attention to alignment.

A strong grid is the foundation for organization. The grid creates a sense of space and where space “lives” in the design, helping the designer place and arrange elements in a way that communicate purpose.

It's also very important to clarify that alignment is not the same as centering content.

While many minimal designs include the bulk of content in the center of the screen, it is not the only solution. Elements can be aligned anywhere along a grid – text, in particular, can be aligned to the left, right or center.

Arko, below, does a great job of mixing and matching alignment styles to create visual interest and balance while using plenty of white space.



Supreme at Ellerslie

Commercial
Residential
Exhibition
Courtyard

Our concrete exhibition garden won three awards at the Ellerslie Flower show 2013, including a silver distinction, judges and supreme award for construction.

The exhibition itself is a journey. The deliberately minimal palette of architectural materials along with non-traditional design and construction techniques have been specifically chosen to

The path surface was finished with a texture roller to give a manufactured rather than hand-finished look. All the faces were then striped and finished to match the surface.

Commercial
Residential
Exhibition
Courtyard

(1)
(2)
(3)
(4)
(5)

Photo credit: <http://www.arko.co.nz/>

When it comes to minimalism, many people jump to perfectly symmetrical concepts, but this is not a necessity. Because content will likely be simple and streamlined, the most popular ways to accomplish this are through pairings of large and small elements that balance each other out.

1. Balance comes in four forms:

- Horizontal symmetry: Both sides of the screen have equal weight with similar groupings of elements.



Photo credit: Hungcwot via awwwards

- b. Approximate symmetry: Elements are different on the screen, but the visual weight is the same; this is often accomplished by pairing a lot of space or one large element against a grouping of smaller elements.



Photo credit: Squarespace

- c. Radial symmetry: The focal point of the design starts in the center of the screen and moves outward in an almost concentric-circle style pattern, such as the [Carlo Barberis site](#) below.

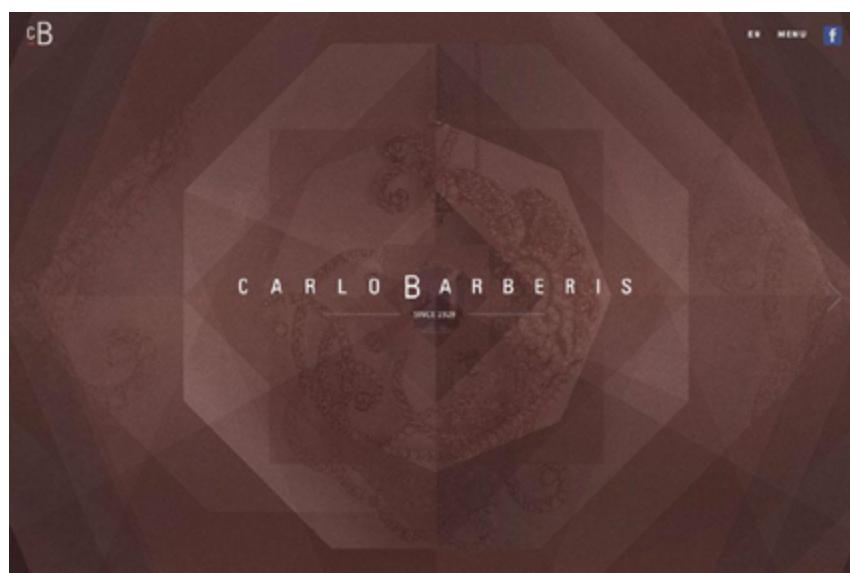


Photo credit: <http://www.carlobarberis.com/en/>

d. Asymmetry: Objects are designed to purposefully counter one another on the screen with shapes, colors and sizes of contrasting styles. This is arguably the most difficult layout to execute well, considering there's only a fine line between a visually interesting layout and a confusing mess.

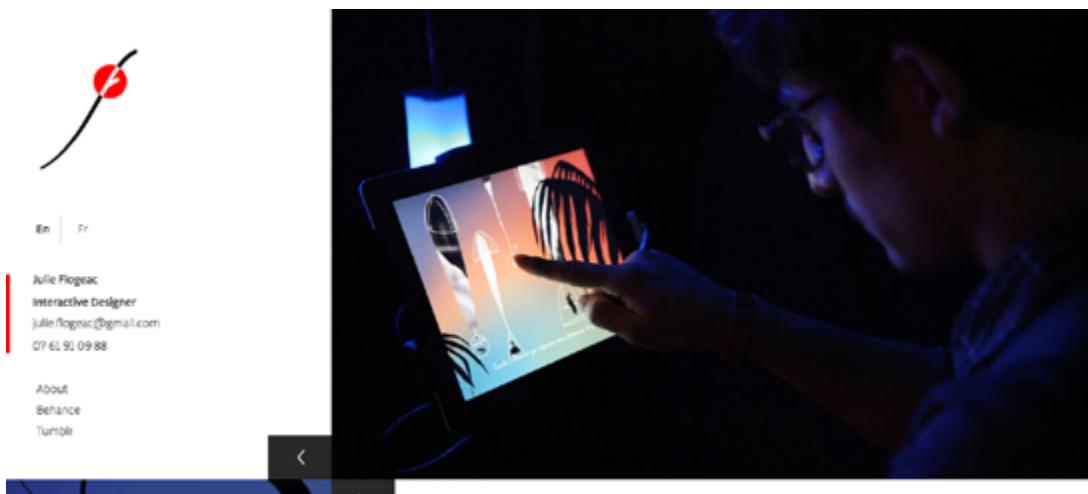


Photo credit: [Julie Flogeac](#) via [awwwards](#)

Contrasting Elements

The white background is such a popular choice among minimalist designers because it's the perfect canvas for creating contrast. A hallmark of minimalist design, black or white backgrounds are commonly overlaid with small colorful elements or a bold image.

As we described in [Web Design for the Human Eye](#), designers can create contrast with color, size, shape, location and scale. Contrast brings focus and attention to a design element, but also creates a sense of direction and hierarchy so that users feel guided through the visuals.

Photographer Jorge Riera's site uses contrast in beautiful ways that change page by page. On the homepage, a large white canvas includes simple, single-line navigation and a large image and the bottom of the screen in black with thick strokes and a bold feel.



Photo credits: <http://www.jorgerieraflores.com/>.

Move to the “Who I Am” page for a lesson in typographic and size contrast – custom lettering versus a simple sans serif, and oversized font versus a size that many designers would consider more appropriate for [microcopy](#) rather than body copy.



Photo credits: <http://www.jorgerieraflores.com/>.

Normally, we'd recommend against this tactic due to accessibility and usability issues, but this is an edge case in which small body copy might actually be acceptable since it's not the focal point. Instead, most of the page is occupied with images and examples of work (as you scroll down), which makes sense for an art director who probably prefers to show rather than tell.

How to Design Minimally With White Space

A minimal design framework can be a challenge if you are not prepared. Designers – and clients if the site is work for hire – must be willing to do without a lot of common design elements and features. Content and messaging must be streamlined and simple.

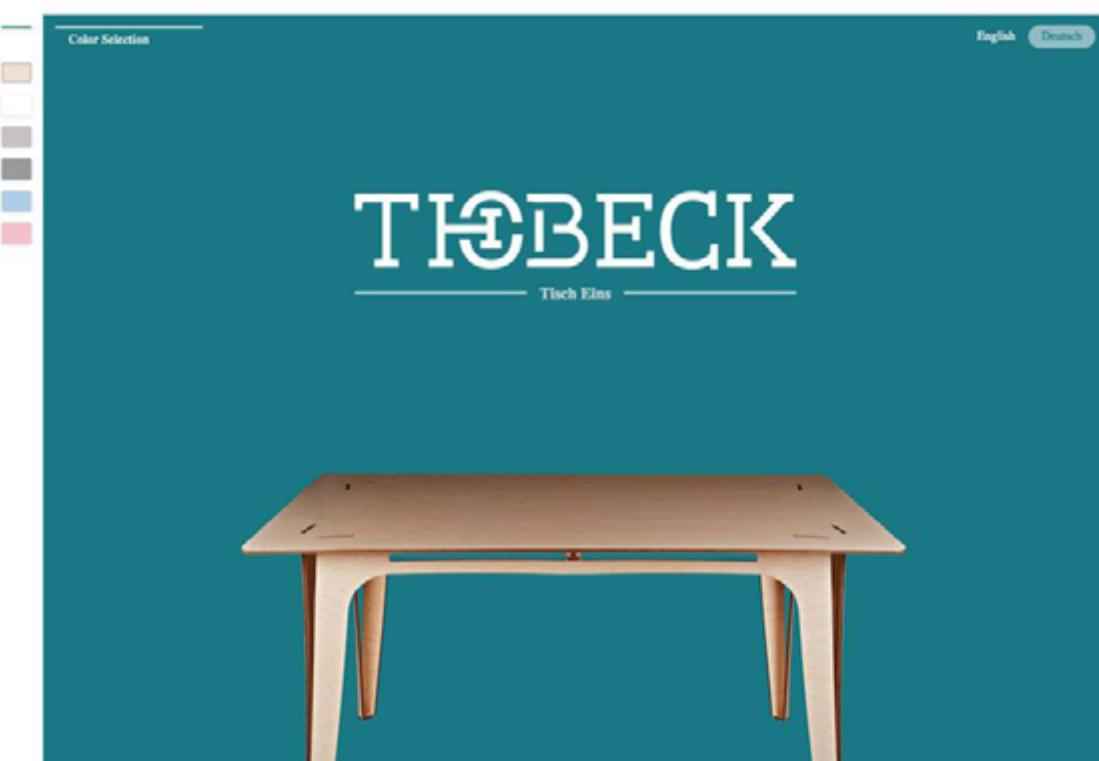


Photo credit: <http://thobbeck.com/>



Photo credit: <http://www.cultivatedwit.com/>

For these reasons, minimalism is most commonly used for agency sites and creative portfolios – it can be difficult to execute for larger businesses considering the vast inventory of content and the unfortunate reality of separate departments (like marketing) arguing for different priorities.

However, you could pursue the option of creating a landing page using the minimal style that serves a gateway to the rest of the site or other information. Even if you don't follow this exact tactic, you can still achieve a more minimalist look across the entire site by designing from the content outwards.

As **Squarespace** shows below, exercise Hemingway-like discipline in your copy, then pair it with captivating images.

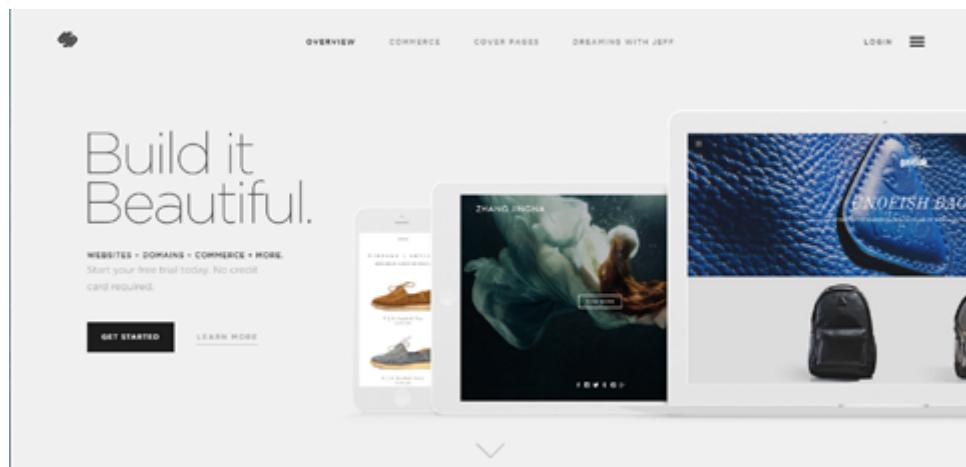


Photo credit: Squarespace

Be realistic with how users browse sites by placing high-level content at the top of the scroll (sparse copy and images), then increasing the density of text and images as the scroll deepens.

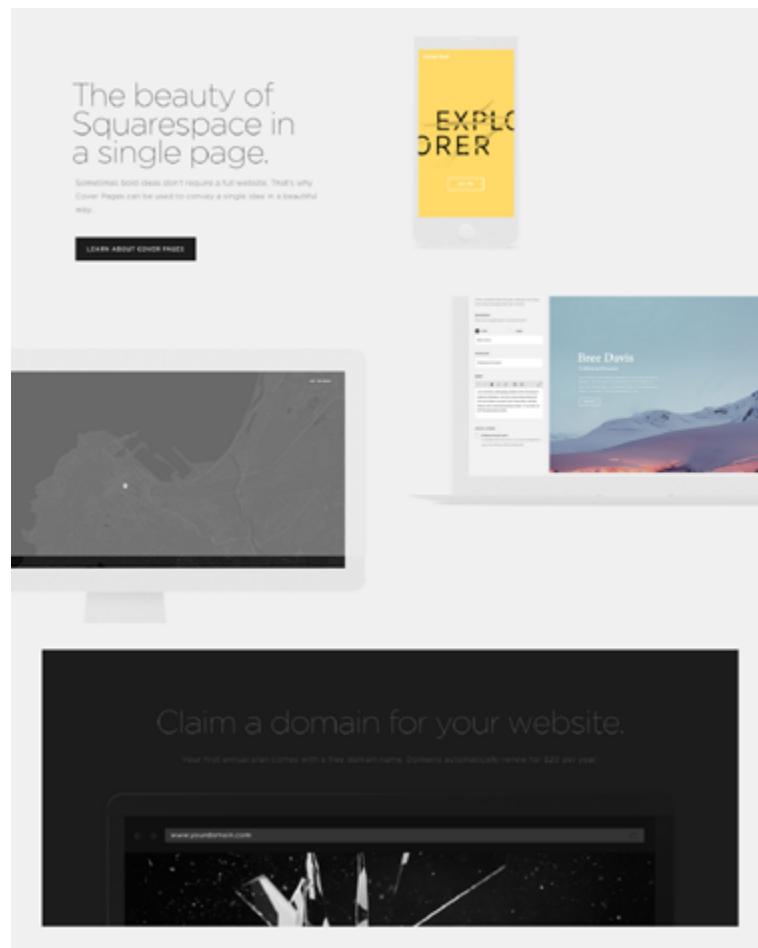


Photo credit: Squarespace

To prevent visual burnout, you can apply the different types of symmetry we discussed earlier to different parts of the scroll as well as alternating the placement of text and images for a [Z-shaped reading pattern](#).

While this doesn't fit the popular minimalist aesthetic, remember that minimalism is more of a design philosophy than a single look. It's just been expressed in such similar ways that we've come to expect minimalist sites to be pure white backgrounds with either text-only interfaces or a strict grid layout. As Squarespace elegantly demonstrates, it's more important that you follow the spirit of minimalism.

Here's some more tips for simplifying your web UI designs:

- Group your site content into a handful of major sections (five or fewer if possible)
- Determine necessary elements – logo, navigation, body content, contact – and get rid of everything else
- One content concept or idea should occupy a page
- Pick a single visual to focus on for each part of the scroll
- Prioritize content and only use the top five items
- As you iterate the design, adopt a subtractive sculpture mindset and try to remove as much as possible at each step
- Start the design in black and white (or a low-fi wireframe) and only

add visual touches, such as color, after the basic design is complete

- As dictated by [Hick's Law](#), limit choices for users so that a page only leads to one place or call to action (aside from basic navigation)

Common elements that are left out of minimalistic design frameworks:

- Social media icons or links
- Bulky footers or sitemaps
- List-style widgets, such as top or recent posts

Minimalism is Not for Every Site

Minimalism can be a difficult design technique to use. It requires a specific and focused attention on content and desire for every piece of the site to fall into that pattern.

For sites with a lot of content, this style is not particularly effective. This includes sites that are ad heavy, have an abundance of features or user options or content that is designed for children.

Ad heavy sites and minimalism can be a challenge because the minimal style may differ drastically from what is coming from an ad server. The ads – while often separate from the main content – can detract from the design and actually prevent users from accessing the content.

When put up against a busier framework, minimalism can often get lost because of its innate simplicity.

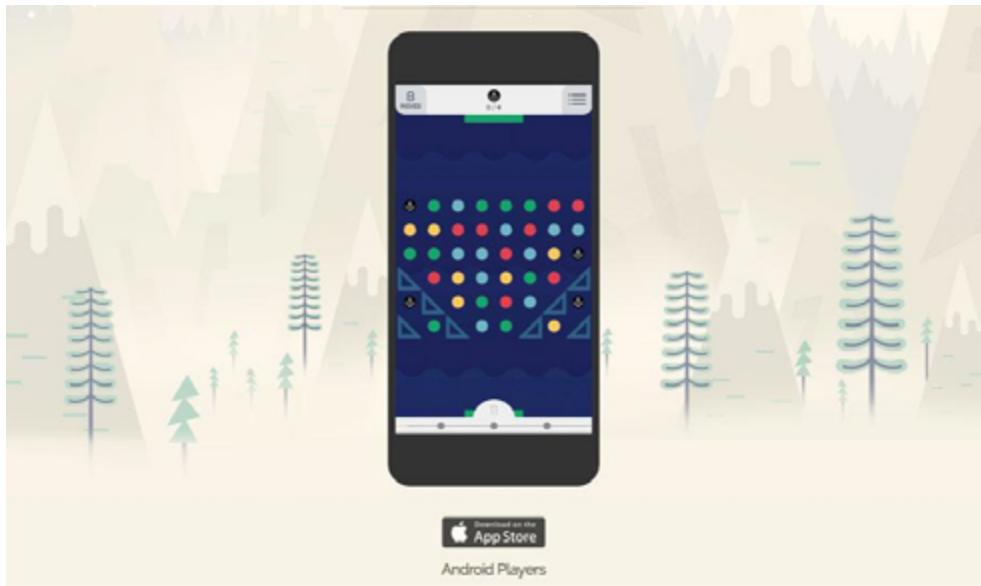


Photo credit: <http://weplaydots.com/twodots/>

The same concept applies to sites with a lot of features. While there are a few out there, such as the popular [Two Dots](#) (above), games are a prime example of sites that include too many features for a minimal style design to be effective.

Generally, e-commerce tends to be another area where some concepts of minimalist design may be suitable, but an overall minimalist aesthetic is not realistic due to the enormous amount of information needed to describe and actually sell items.

Of course, this depends greatly on the type of ecommerce site. Some clothing retailers (like [Over Clothing](#) below) can pull off the minimalist look by revealing more information on hover. Remember, however, that this is only possible because it suits the users (street fashion

connoisseurs probably appreciate a more avant-garde design) and the content isn't overly complex (you don't need multiple tabs for technical specs).

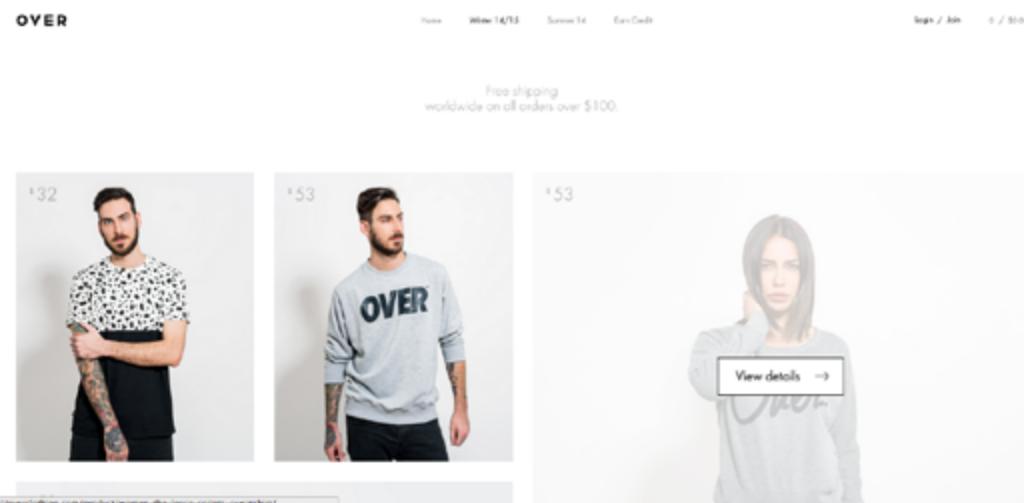


Photo credit: Over Clothing

The same design would not work so well for a general ecommerce site like [Ebay](#) or [Amazon](#) who require complex information architectures and whose wider audience probably appreciates a more traditional UI design.

Sites designed for younger users should also avoid minimal frameworks in most instances. The simple design is often seen as “boring” for a set of users that wants to be stimulated and usually have shorter attention spans.

Like we emphasized in [Web UI Best Practices](#), don't apply a design trend just because it's the hip thing to do. Know your users, create your personas, then make sure your design decision helps them best accomplish their goals.

White Space is Forever

Minimalism prevails because it is an effective and visually stunning option for designers. Like all lasting design philosophies, it's experienced multiple evolutions over time and meshes well with a variety of other trends and design techniques.

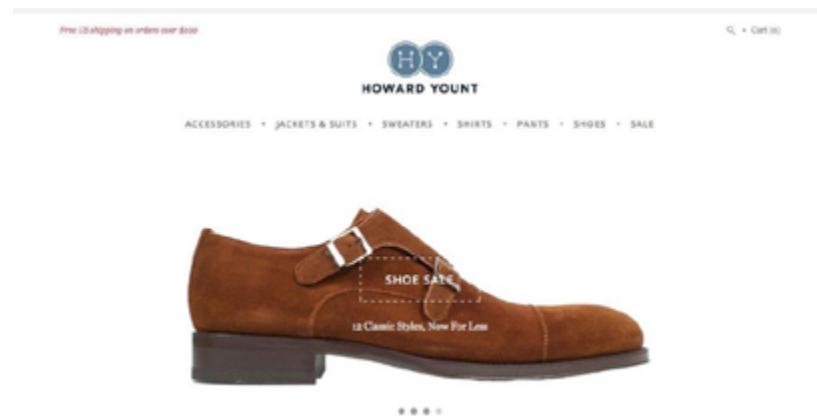


Photo credit: <http://www.howardyount.com/>

Minimalism is effective and lasting because:

- The classic style has roots in fundamental design theory [over 100 years old](#).
- Design techniques work easily with responsive design frameworks.
- Less information for browsers to process leads to faster site load times and better site performance.
- The concept is content-driven, which could not be timelier given the rise in [content-first design processes](#).
- It applies to a variety of disciplines beyond web design, such as architecture, interior design and art.

Takeaway

When it comes to white space in web design, don't mistake the expression of minimalism with its intent.

It's not about white space and grid layouts – it's about following a design philosophy that prioritizes content. Never misinterpret minimalism as a design goal, otherwise you'll just as likely find yourself deleting elements with irreplaceable functionalities.

White Space Tips & Resources

Studying websites can be one of the most useful techniques for internalizing how white space looks and feels in a completed layout. Duplicating a design from scratch trains your eye to recognize white space in relationships of grouped page elements. Once you can see how to use white space properly, it will become easier to imagine your own ideas.

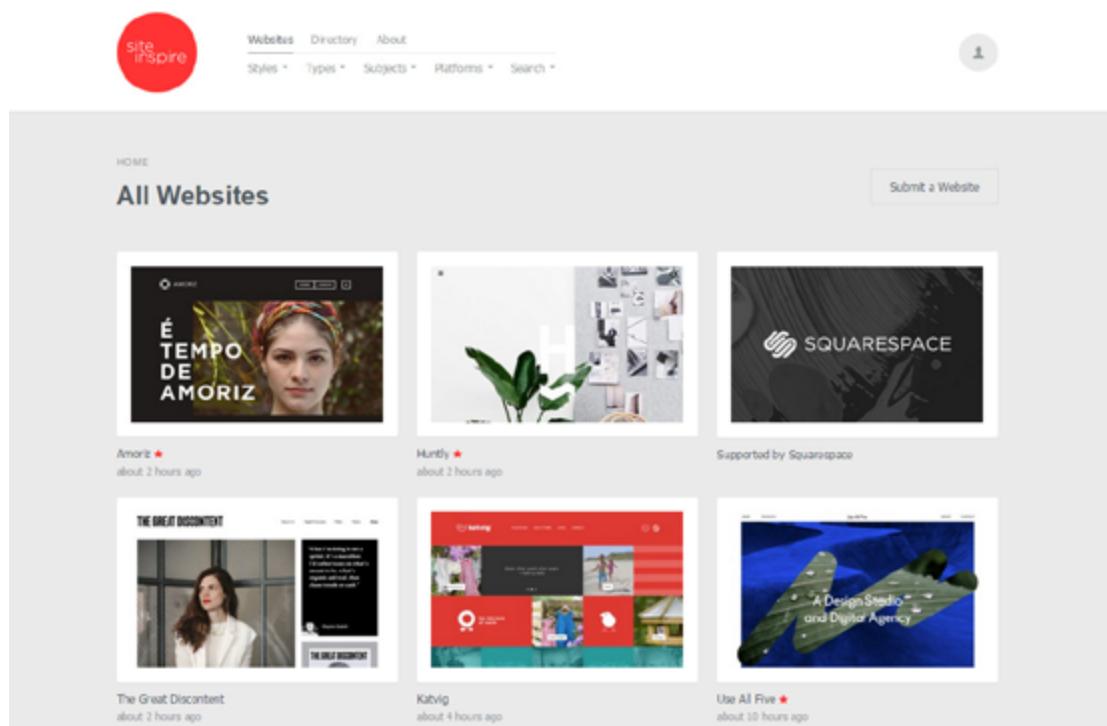
The following tips are meant for any designer regardless of skill level. Learning design often requires time to study, copy, and then implement what you've learned into your own ideas. Keep in mind that *doing* is still your most powerful teaching tool.

Over time, repetition ingrains habits and techniques into your mind. Follow along with these tips & resources to see what might provide the most value to your practice sessions.

Web Inspiration Galleries

Sometimes while browsing the web, you'll stumble onto a beautiful website. The process of unearthing a lovely new website is sporadic and difficult to predict. But there are online galleries which contain well-organized lists of beautiful websites for free.

[siteInspire](#) is a great resource for designers because the websites are organized by type, color, tag, or design style. It's easy to search and find layouts that capture your attention.

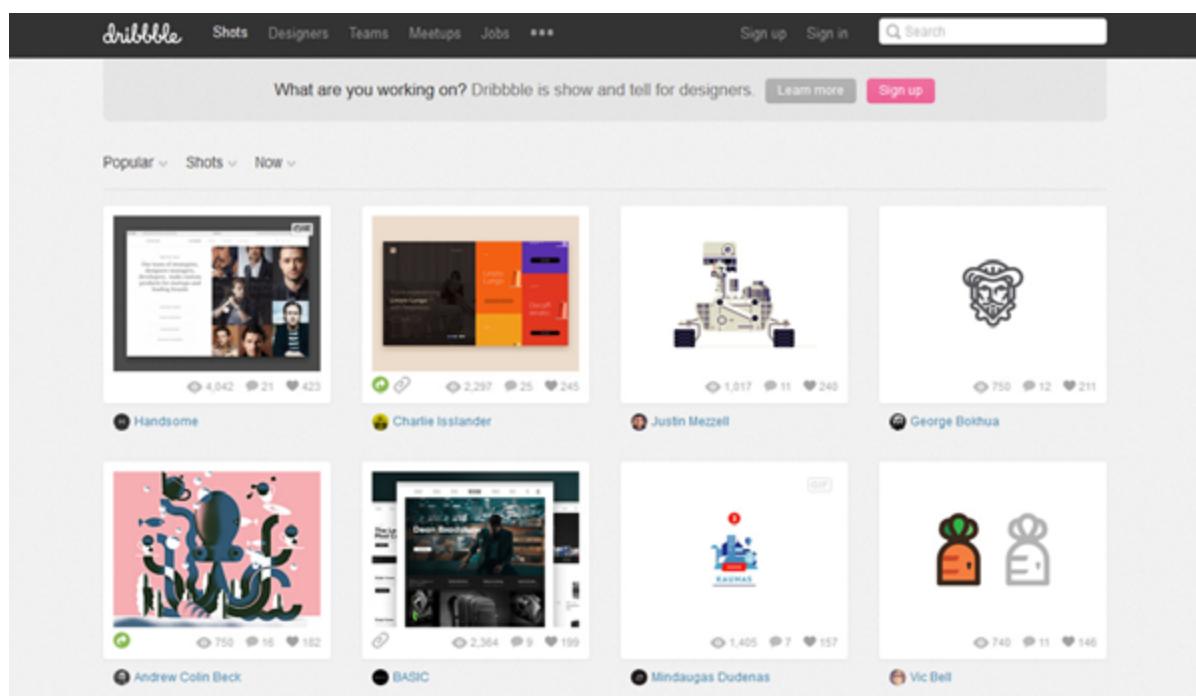


Source: [siteInspire](#)

Use inspiration galleries to locate intriguing ideas for your own web projects, or to find layouts worthy of cloning. Here are a few other web galleries that we recommend for white space inspiration (and overall web UI design best practices):

- [Web Inspiration](#)
- [Best Web Gallery](#)
- [Angel List's Trending Startups](#)
- [Startup List](#)
- [awwwards](#)
- [cssdsgn](#)
- [CSS Design Awards](#)

While online galleries are nice for live examples, there is one other network that's perfect for designers. As you might know, the online sharing network [Dribbble](#) features thousands of designers all around the world posting shots of their work.



Source: Dribbble

The designers on Dribbble are simply phenomenal and the quality of design shots are exceptional. With a quick search, you can find tens of thousands of shots featuring beautiful layouts.

Dribbble is an invite-only community which makes it hard for less experienced designers to join (which also maintains their standard of quality). When we're looking for inspiration for our [free UI kits](#), Dribbble is actually one of our top resources.

Luckily, you'll find that designers on Dribbble are very open to sharing their expertise. They're very open to questions about how to replicate a texture, how to measure space properly, or how to recreate an effect from scratch. Alternatively, you could ask for help on design communities like [GD Exchange](#), [/r/web_design](#), or [Designer News](#).

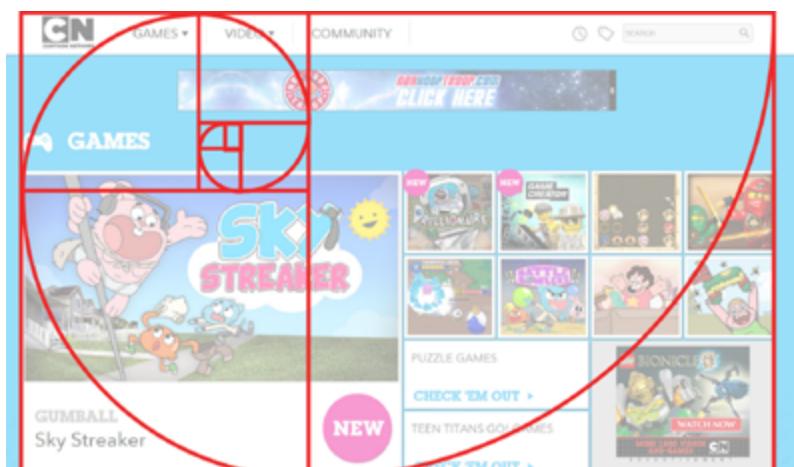
Those who are willing to teach themselves should be willing to seek out help when needed. Use as many free resources as possible and keep iterating on existing UI patterns.

Golden Ratio Design

We won't focus too much on the golden ratio, we will quickly touch upon the concept since it's very relevant to spatial UI design. Of course, remember that this is just a guideline and not a rule set in stone.

1. The fundamentals of the golden ratio

The golden ratio dictates that two elements are in perfect harmony when measured to the ratio of 1:1.618. The pattern is found almost everywhere in nature and it applies to design composition as well. You don't need to strike this ratio for all relationships on the page, but you should certainly understand its value as a timeless design fundamental – it is, after all, [almost 2400 years old](#).



Source: [Cartoon Network](#)

The golden ratio can be visualized as a diagram where content blocks shrink down in a repeating pattern. Drawing a spiral from the largest block to the smallest creates a curved pattern on top of the squares, as you can see above. You can follow this pattern to design certain areas of the page as more detailed and content-driven.

As the spiral dwindles, it leads into more detailed areas of the page. The golden ratio can thus help determine the location of important content relative to other elements on the page.

To learn more about the practical application of the golden ratio, we highly recommend the below tutorials:

- **Smashing Magazine** – *Applying Divine Proportion to Web Design*
- **Hongkiat** – *Applying the Golden Ratio to Modern Designs*
- **Tuts** – *The Golden Ratio in Web Design*

2. Free Golden Ratio Resources

A [small online webapp](#) created by UX Triggers allows you to resize and scale the golden ratio rectangles on top of any website. If you have time to spare, try playing with some different websites to see if the ratio fits with any layouts.



Source: [NYTimes via UX Triggers](#)

Adobe users may alternatively want to check out how the ratio works in Photoshop. Try downloading [this freebie PSD](#) containing resizable ratio rectangles. The [custom ratio shape](#) freebie is another great choice if you'd rather scale the vector shape directly in Photoshop.

[This golden ratio calculator](#) created by Miniwebtool is also remarkable. It's an online webapp that allows designers to set a pixel value for either part of the ratio which then automatically generates the other value.

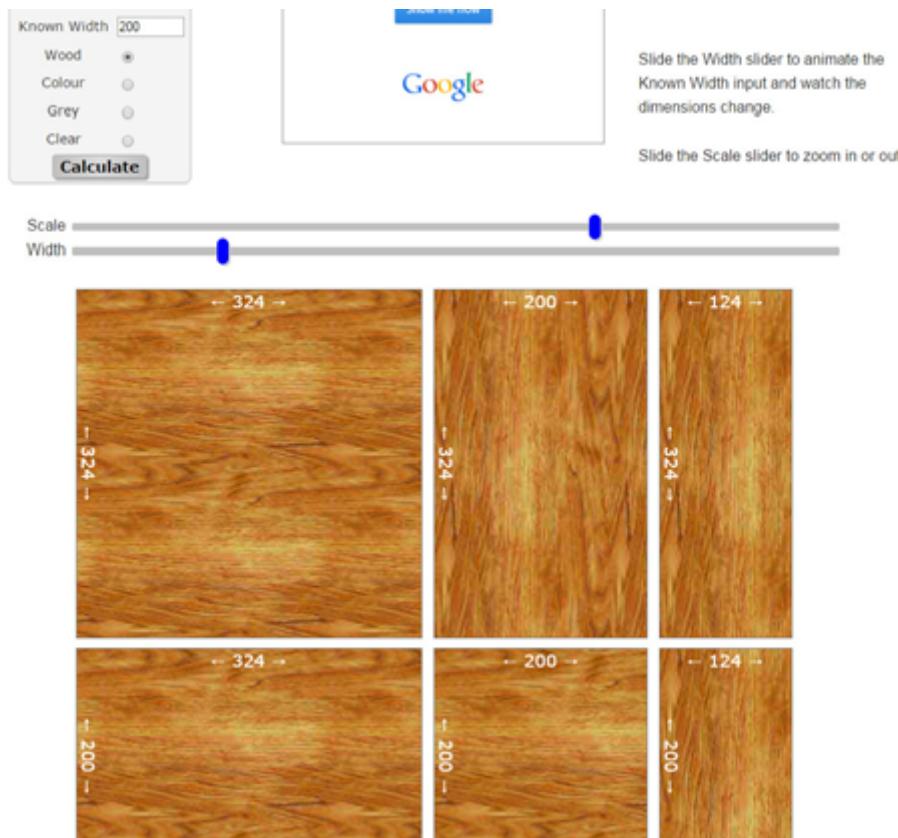
Result

$a+b$:	a	=	a	:	b
242.71						
$= 150$						
$= 150$						
$= 92.71$						

Source: [Miniwebtool Calculator](#)

As you might conclude from this webapp, the formula is a little tricky but it breaks down like this:

A+B compared to A creates a ratio. This **exact same ratio** should appear when comparing A to B. If this sounds confusing, then you'll save yourself a lot of grief by using a calculator.



Source: [Golden Rectangle Calc](#)

To see the ratio more compositionally, check out [this ratio calculator](#). All of the square blocks represent the whole ratio in a full composition. Horizontally, you'll see row relationships and you'll vertically see column relationships. If you just want to see the blocks as simple elements, you can easily change the wooden pattern to grey or clear

Aside from compositional design, the golden ratio also applies to web typography. Consider the relationship between two headers, or the distance between two paragraphs. [This Stack Overflow answer](#) explains how you can set a golden ratio value in CSS.

Also try skimming through these other related golden ratio links:

- [Golden Ratio Slideshare Presentation](#)
- [The Golden Ratio Explained \(YouTube\)](#)
- [Examples of Golden Ratio Principles](#)
- [Ideal Uses for Designing with the Golden Ratio](#)
- [Understanding & Using the Golden Ratio in Web Design](#)

Remember, however, that the golden ratio – like all design best practices – does not live in a vacuum. As described in [Web UI Design for the Human Eye](#), make sure you also consider the [F & Z Pattern](#) to design for how users scan websites.

Online Typography Tools

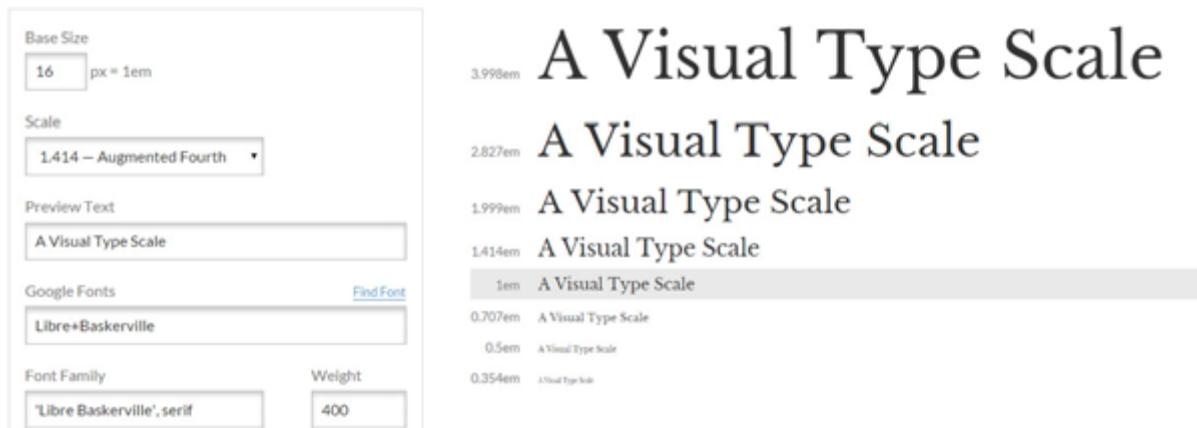
Typographic design relationships don't always need to follow a particular ratio, but they do need to be consistent with page design and font styles.



Source: [Modularscale](#)

When it comes to practicing web typography, [Modularscale](#) is a very handy webapp. The app helps determine accurate ratios for font sizes in any type of web design project.

CSS font size code is given beside each text block for an easier time copy/pasting into a stylesheet. The whole application is based on scaling fonts. If you want to learn more about how it all works, check out the instructions panel located on the right-hand side.



Source: [Type Scale](#)

Our design team also recommends [Type Scale](#) for toying with typography. You can set the base pixel value (which is typically 16px in most browsers) to any ratio, including the golden ratio or whatever custom value makes the most sense.

The best part, however, about Type Scale is that you can dynamically change the font family to anything you'd like. All fonts on the page are hooked up to [Google Fonts](#) so you can manually change the font family at will. We'd highly recommend this site to anyone who wants to play with or plan out font size ratios.



Web Safe fonts

Click on any paragraph and start typing. The quick brown fox jumps over the lazy dog. Foxy Parsons quiz and cajole the lovably dim wiki-girl. Watch "Jeopardy!", Alex Trebek's fun TV quiz game. How razorback-jumping frogs can level six piqued gymnasts! All questions asked by five watched experts — amaze the judge.

Click on any paragraph and start typing. The quick brown fox jumps over the lazy dog. Foxy Parsons quiz and cajole the lovably dim wiki-girl. Watch "Jeopardy!", Alex Trebek's fun TV quiz game. How razorback-jumping frogs can level six piqued gymnasts! All questions asked by five watched experts — amaze the judge.

Click on any pi jumps over the lovably dim wi quiz game. Ho gymnasts! All amaze the jud-

Source: [Typetester](#)

To focus more on paragraph styles, check out [Typetester](#). This is another free webapp that lets you set values for different font families, sizes, margins, and other text features. To make comparisons easier, Typetester lets you play with typographic styles in multiple columns.

If you want to test line height (the vertical space above and below a line) you can also use Typetester or the excellent online webapp [CSS Leading](#).

Both sites allow web designers to visualize how their paragraphs will look on a live site without hard coding CSS from scratch. All of these tools serve as both design playgrounds and learning centers for designers experimenting with negative space for typography.

Online Grid Generators

Finally, let's cover some resources for negative space in composition. **Grid systems** are perfect for designers who want a pre-built setup to organize a new layout quickly.

But CSS grid systems are often separate files which turn into extra HTTP requests. Sometimes it can be easier just to use online grid generators for obtaining column & gutter sizes.



Source: [Gridpak](#)

Gridpak offers everything you would expect from a grid generator. You enter values for the number of columns, plus the column/gutter size. If you set a maximum width, the internal columns will be squeezed into the container. Responsive designers should also enjoy Gridpack since it can generate breakpoints for CSS media queries.

Once finished editing, you can download the grid's CSS in a .zip file. The whole layout is structured into dynamically generated CSS with

optional SCSS/LESS files. Gridpak requires some acclimation, but it's an excellent method for visualizing your completed layout.

The screenshot shows the Responsify webapp interface. At the top, there are settings for 'Gutter Width' (set to 1.5), 'Add Breakpoint' (set to 480), and a '+' button. Below this is a navigation bar with three items labeled 'nav item'. The main area is a grid-based layout editor. It features a dark header row with the word 'responsify' and a dark footer row. The grid itself has several columns of varying widths, indicated by thin vertical lines. Content is placed into these columns:

- Section h1:** Contains two paragraphs of placeholder text (Lorem ipsum...).
- Section h2:** Contains two paragraphs of placeholder text (Lorem ipsum...).
- Section h2:** Contains two paragraphs of placeholder text (Lorem ipsum...).
- Aside h2:** Contains two paragraphs of placeholder text (Lorem ipsum...).

 The background of the grid cells is a light pink color.

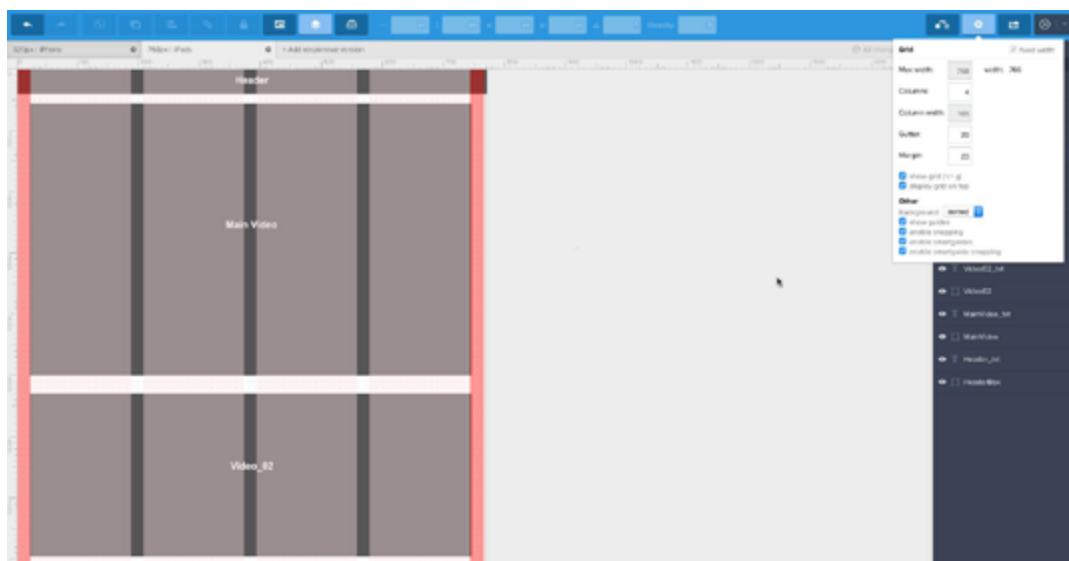
Source: [Responsify](#)

On the subject of responsive design, another useful webapp comes to mind. [Responsify](#) uses a demo layout on the screen with column overlays. Many designers will find this site easier to use for visualizing how a layout should be structured.

Responsify is yet another tool for generating your own custom responsive HTML/CSS template. But you do not need to actually download the files if you'd rather create them from scratch. Responsify can still be useful as a free visualization tool for understanding the use of white space between columns and page content.

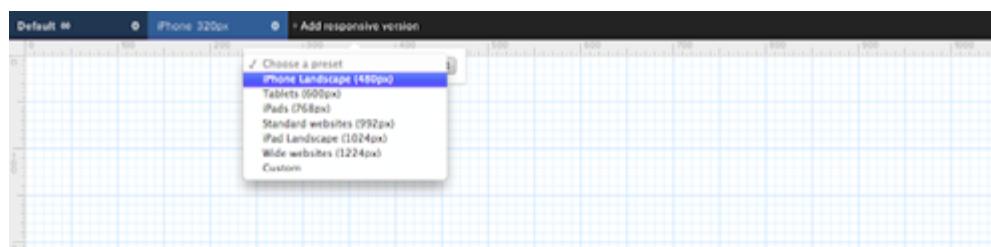
If you'd like to peruse other grid generators then take a peek at these alternates:

- Gridulator
- GridKit
- GridCalculator
- Responsive Grid System Calculator
- Responsive PX



Source: [UXPin](#)

On a side note, it's also worth mentioning that UXPin comes pre-loaded with a grid generator and the ability to [create multiple responsive breakpoints](#). As you wireframe and prototype, you'll be able to create quick responsive iterations while maintaining consistent alignment.



Source: [UXPin](#)

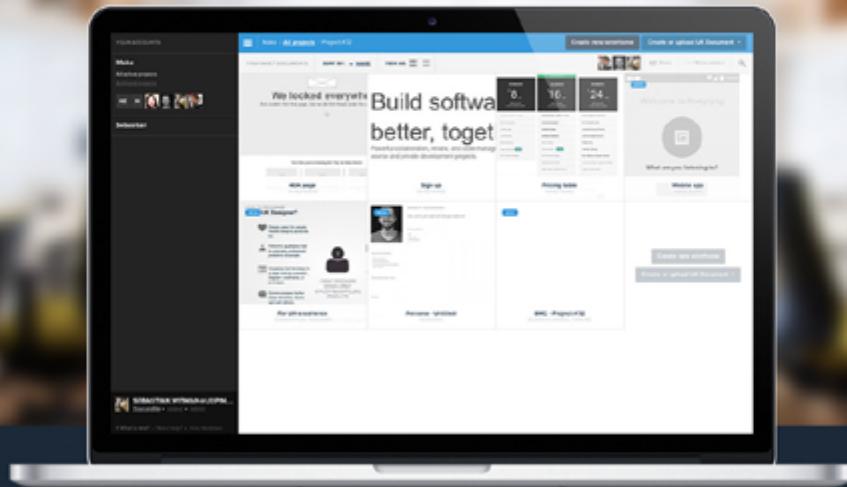
Conclusion

Online tools and resources are great because they'll save you time and help you see the design process more clearly. But they should never become a crutch where you're reliant on tools to create UI designs.

By continually practicing, you'll improve your awareness and skill-set to grow much more comfortable designing web interfaces from imagination. For a quick reference, we recommend that all designers check out [this guide to visual composition](#). If nothing else, it's at least worth a quick skim over the negative space section.

White space as a fundamental design technique requires a lot of practice to fully comprehend. You'll need to create dozens of websites before achieving any serious results. But all of the tips, resources, and examples from this book should be proof positive that anyone can learn to design confidently with white space given enough time.

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- ✓ Integration with Photoshop and Sketch



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