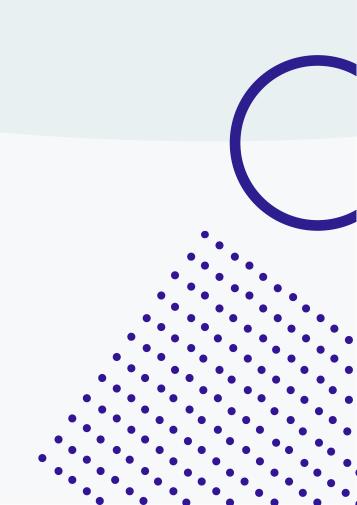
Ethical Web Design Framework

PLANK



Plank's Ethical Website Design Framework is a set of user-centric principles that ensure all of our websites meet our five core goals;

Accessibility & Inclusion: By meeting the W3C WCAG 2.1 AA guidelines - optimizing sites for slow connections to serve rural communities as well as those with limited access to modern technology - we will ensure that each website we create offers a comparable, high quality experience to all of your users.

Privacy & Security: In order to ensure transparency and secure data handling, our processes are built upon the seven principles of the GDPR - the EU's basic regulations and expectations for data protection. These principles lay at the heart of our development approach, allowing us to be proactive rather than reactive.

Device-First Design: In addition to developing all of our websites using Responsive Design principles and offline loading opportunities wherever possible, our team will tailor all aspects of the website experience to the type of device that your users are visiting it with.

Best Practices & Sustainability: Our team will continuously verify and improve our work using Google's WebDev standards - a series of tests to benchmark our work on Performance, Accessibility, Best Practices and SEO. We will meet a minimum of 90% in all categories.

Environmental Considerations: We will continue to optimize our code and assets to lower a site's carbon footprint and energy impact, ultimately delivering you work that is, at minimum, 75% cleaner than all sites on the internet.

With the launch of this framework, we are setting website design and development principles that make sense to us as a team and are to the benefits of our clients, prospective clients as well as their customers and communities. It gives us a benchmark for how we develop web projects, and a point of discussion and consideration for UI/UX design principles. It gives our prospective clients an even clearer view as to why they should or shouldn't work with us.

Below is our approach and expectations when we develop a website project. While many of these we have been doing formally for years, there are others that we haven't as clearly communicated, until now. We have established five pillars to our framework, each of which are important to the successful delivery of a website project.

Accessibility & Inclusion

When it comes to the web, accessibility means that anything on the screen, whether it's websites, tools, or technology, are designed and developed so that those with disabilities can use them.

Why is it so important? What accessibility essentially boils down to is: essential for some and useful for all. Web accessibility is about making digital spaces inclusive to everyone who comes across them, no matter their disabilities. When your website is more inclusive you make your content available to more people, improve your overall user experience and even improve your SEO. That means there's absolutely no reason you shouldn't make the extra effort to help those who need it.

While some government initiatives such as the Accessibility for Ontarians with Disabilities Act (AODA) mandate the implementation of accessibility guidelines into websites, we believe that all websites should be inclusive of as many people as possible.

Plank's Commitment

By meeting the W3C WCAG 2.1 AA guidelines - optimizing sites for slow connections to serve rural communities as well as those with limited access to modern technology - we will ensure that each website we create offers a comparable, high quality experience to all of your users.

The web is not targeted for one audience, as 15-20% of the population lives with a disability (colour blindness, visual impairment, etc.), this is why it's important to be inclusive and think of branding as something that needs to work on the web and in print.

Meet W3C WCAG 2.1 AA Guidelines

While our testing guidelines will go into much more detail to meet, at the very minimum, the AA Guidelines, we wanted to share with you the overall intentions of the different core goals for each of our projects.

Perceivable

- Provide text alternatives for any non-text content
- Provide alternatives for time-based media
- Create and present content in different ways without losing information or structure
- Make it easier for users to see and hear content including separating foreground from background

Understandable

- Make text content readable and understandable
- Make Web pages appear and operate in predictable ways.
- Help users avoid and correct mistakes.

Robust

 Maximize compatibility with current and future user agents, including assistive technologies.

Operable

- Make all functionality available from a keyboard.
- Provide users enough time to read and use content.
- Do not design content in a way that is known to cause seizures or physical reactions.
- Provide ways to help users navigate, find content, and determine where they are.
- Make it easier for users to operate functionality through various inputs beyond the keyboard.

Be inclusive of as many people as possible

In addition to being accessible and inclusive from a technical point of view, we want to be sure that from a content, navigation, technological and design perspective we represent as many users as possible. Our goal is to take into account the following strategies and meet their expectations:

- Test the navigation and user experience of our sites with real users
- From a design perspective, make sure that all users, in addition to the principal audiences see themselves reflected in the site
- Make sure that all content is clear, concise and written for a diverse and age appropriate audience
- Make sure that the site content is written for people and not to fool search engines into ranking or displaying information in unexpected ways
- Be mindful of people who have slow internet connections because of location, economic situation or access.



If you'd like to learn more about web accessibility and how you can create a more accessible website, read our blog post outlining 12 Tips for Publishing Inclusive Content. We know that our current plans aim to account for as many people, situations and experiences as possible, but we also know that as time goes on we will continue to identify groups that we haven't yet considered.

Privacy & Security

In a world ruled by data, privacy and security become a very important concern. Many, if not most, of your daily actions are monitored and tracked using technology.

While we continue to reap the benefits of innovation, we must also protect our choice, control and security of our personal information. Privacy has evolved over time beyond the legal requirement - it has also become a central part of business. Think about it like this: Business runs on trust, consumers today have the power to drive your brand image, and ensuring user privacy & security is a critical step in gaining trust. That means that, not only is it legally required to be transparent and respect the personal data of your users, it is also key to the health of your brand and your bottom-line.

When it comes to building a website, we often innovate and create through a "design-thinking" approach - "a way of viewing the world and overcoming constraints that is at once holistic, interdisciplinary, integrative, innovative and inspiring." (Source: Privacy by Design) This perspective must also be applied to the way we approach Privacy - by integrating security & privacy into data systems and technologies from the get-go. They should be immersed into every standard, protocol and process, in addition to project objectives, planning and priorities.

The most challenging part here lies between the desire for a more personalized user experience and the legal obligation to collect user information in an unobtrusive and responsible manner. This is why design and development need to work together to build security and privacy into the foundation of a website, ultimately predicting privacy and data threats before they even occur. Think proactively vs. reactively.



Plank's Commitment

We believe that your users' information is of primary importance, and we should be clear about what your organisation will do with their data. This can be achieved by being transparent about your position on meeting all the different national guidelines such as CASL or GDPR. We are committed to making sure that all data is transacted securely and that we will not store any personal and private information.

Here are some **Security Measures for Your Website** you can put in place to protect your website, company and users.

We've seen that some clients are frightened by what they perceive to be the bureaucratic nature of these obligations but from our perspective, most of it follows **common sense**principles that allow for clear and measured use of information.

Meet the Seven core principles of the GDPR

While there are many global standards and guidelines to securely store and manage personal data, we use the European Union's General Data Protection Regulation (GDPR) as our baseline as it is currently the most detailed and explicit. The GDPR is based on Seven Key Principles, which make up the core principles of our approach to Privacy and Security.

- 1. All individual data is processed lawfulness, fairly and transparently
- 2. Limit the collection and processing of information to its original purpose
- 3. Gather the minimum amount of data required that is adequate and relevant
- 4. Keep only accurate data and take the necessary steps to ensure if not, that it is erased or corrected as soon as possible
- 5. Limit the storage of information for only as long as is necessary
- 6. Ensure that all information is secured and confidential and that it is stored with integrity
- 7. Be able to demonstrate that we are accountable for and can comply with the aims of the GDPR as stated above

Communicate clearly and openly

With so much of people's lives taking place online, an increasing volume of personal information is stored somewhere on the internet. In addition to the GDPR standards, we want to also be clear about some specific policies and principles that are important to us and a part of our commitment to our clients and their users when we build a website. Our core principles are:

- Clearly communicate in our Privacy & Terms of Use what information we collect, how we store it, who we share it with (which is as few 3rd party partners as possible) and what exactly it is used for.
- Make sure that in addition to all data transactions are over https: that we regularly audit our code to ensure that others aren't using or capturing our data in malicious ways.
- With technology like Cookies and local data storage, there are opportunities
 for developers to use a local computer in malicious ways. We are committed to
 developing a no Cookies strategy that stores as little information and code on
 individual machines.

We are driven by white hat development principles and want to be sure that everyone that interacts with our work knows that they have arrived at a safe place.

Device-First Design

In the earlier days of the Internet, websites were designed for desktops with smaller screens and lower resolutions. As technology evolved, so did the devices we use and the ways we use them - including the rapid evolution of the mobile device. As of today, it is estimated that nearly 5.3 billion people have a mobile device in the world. We carry them wherever we go and check them more than we wish to admit.

This means that it is essential to create immersive website experiences on mobile. However, it is equally as important to create consistency in those experiences across all devices.

Device-first design simply refers to the process of placing your users at the fore-front by first designing the site for the device that your visitors use the most, then adapting the online experience to cater to other devices. If we design with a "mobile-first" approach, that does not mean that we can neglect the desktop experience, it simply means that we design with that in mind first. While mobile usage continues to increase, desktop will always remain relevant for certain activities.

While we more often hear the concept of "mobile-first" nowadays, it is important to consider every organization in their own unique way when designing a website. In order to create meaningful user experiences, we must follow the user journey and cater the design approach to them, while still considering the holistic online experience.



Plank's Commitment

In addition to developing all of our websites using Responsive Design principles, we ensure that all aspects of your website experience are tailor made to the device that your users are visiting it with. The site will also deliver the correct, optimized result without any experience, content or navigation limitations. We will also aim to use offline loading opportunities as much as possible to limit the bandwidth needed.

Mobile First Responsive Design Principles

Responsive design is what allows developers to create an equal user experience regardless of the device being used. Instead of creating completely different websites for each device, the site is developed to adapt automatically to a user's screen, allowing us to keep up with the ever-increasing number of devices. When mapping out content, it's imperative to think about the screen's real estate and content levels of priority - which will vary from one organization to another.

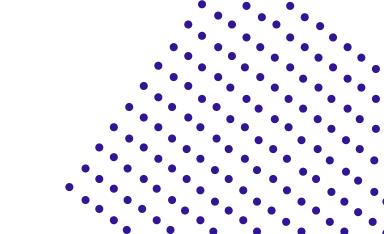
We also begin our planning, design and development process with a Mobile-First philosophy so that it's at the core of our process, and not an afterthought or a secondary priority. With 50% or more of all website traffic on mobile devices it needs to be our primary concern, and we have to account for elements such as proper sizing of text and visual elements as well as touch points and accessibility.

You can read our blog post outlining **5 Elements of Responsive Web Design.**

Consider performance from design to development & beyond

When we talk about performance, we're referring to the time it takes for your website's content to load and render in a web browser, and how well it responds to user interaction. While computer processors and network speeds continue to improve significantly, slow loading websites are still a very prominent frustration for the general public. That's because network speed is not the only factor that affects performance - we must also consider the optimization of your website. For this reason, we prioritize performance by integrating it into our workflow and process.

With search engines currently acting as your homepage for most users, an investment in optimization is crucial. Google expects that your site loads in less than three seconds, and we suspect that users expect it even faster, otherwise you risk losing them. As a result, we will ensure that the page speed is optimized by using modern coding standards, enabling site caching and optimizing all media. With high-quality hosting, your site will exceed performance expectations.



Be bandwidth-conscious when optimizing performance

We should always think about performance as a subset of web accessibility. With performance - like how we approach the topic of accessibility - we consider what device a visitor is using to access the site and the varied levels of device connection speed. This is where we need to be conscious of bandwidth - aka the volume of information that can be sent over a connection in a measured amount of time. Although there are many fast data connections available for web surfing, the actual connection speed will vary among different regions where fast connections may not always be available (or even during natural disasters!) - meaning that individuals in different regions visiting the same website will have different user experiences if not properly optimized. While we still have more learning to do, here are a few ways that we design with bandwidth in mind:

- Load content in order of priority rather than all at once, i.e. main navigation items at the top of the page.
- Optimize and reduce the number of images on your website (consider file types, size, resolution and even plug-ins).
- Carefully design your information architecture to bring users to the information they need or want within a fewer number of clicks.
- Use offline loading opportunities wherever possible to limit the amount of bandwidth needed.
- Minimalist design always remember "a little goes a long way."

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Performance is the key to good design. By **reducing your** website's load times by even one second, you are thinking more inclusively, improving your users' experience, increasing your site visitors and ultimately contributing to your bottom line.

Mindful of old technology

With new technology comes great power - and with great power comes great responsibility. While we always want and need to stay on top of the newest technologies and constant updates to stay relevant in the competitive space, we have the responsibility to consider others in this equation. Backwards compatibility refers to the concept of making sure a new version of technology continues to work with the current version externally. It can be daunting for web developers because we always strive to be innovative and one step ahead of the tech curve. However, when you think about all of the individuals around the world that may not have access to technology, let alone the newest technology - we must keep in mind that they also deserve the chance to visit your site and connect with your organization.

Our team is committed to prioritizing inclusivity from all angles. For this reason, we are very mindful of functionality with new & old technology to ensure that all of your visitors have a positive user experience. Throughout the design, development process & again in our QA testing, we run compatibility checks for browsers as far back as we can without damaging the user experience. While accessibility carries its own set of standard guidelines, we feel the importance in considering it through every aspect of our work.

To support those with a faulty network connection, we will continue to offer offline processing as much as possible. This allows users to access web pages and applications even if they are offline. By storing important resources locally on your device, web applications are able to function without a network connection. Offline navigation is a cornerstone of accessibility because it allows users to quickly access information regardless of their reception or data limits.

Best Practices & Sustainability

A lot goes into building a website! It can be overwhelming to keep track of everything, especially if it's your first time overseeing a site redesign.

One thing to keep in mind is that your website is more than just your organization's visuals. A visually pleasing website is important of course, but branding standards aren't the only thing that will shape your site. You also need to think about the navigation, the behind-the-scenes coding, as well as your overall business goals, in order to be successful.

Below, we've outlined some of the key web design considerations for an appealing and functional website. Whether you're building a website yourself using pre-built templates or working with a web design agency, these are some of the basic practices that you should be aware of before starting a redesign.

- **Branding Standards** the design elements that define your brand and attract your target audience.
- **Navigation Standards** the principles that affect how users navigate your site and improve your users experience.
- Coding Standards the standards that ensure your website runs smoothly and efficiently on all devices.

To learn more about best practices from a branding and navigation perspective, you can read our **full guide** for your next redesign.

Plank's Commitment

To ensure the long term health of your website, we make sure that the code is developed using best practices, and is forward thinking so that it can be easily maintained and iterated on. We also invest into documentation so that our team and yours can work with the site, improve it and make sure it can be well taken care of by any future member of our teams.

Our team is continuously learning and keeping our skills sharp so that we are on top of all best practices and build forward-thinking websites and take into account relevant browsers and devices. With search engines now also ranking your site based on how well it is coded and considerate of the modern web, we must meet all technical expectations of any online search, optimisation, ranking or analytical platform.

Meet Coding and Development Best Practices

We work with a testing guide and QA grid at regular intervals during the development of the project. We are therefore able to confidently state: Our standard browser testing covers: Microsoft Edge; The most recent versions of Firefox and Google Chrome; Safari 12 and above for Mac; Safari and Google Chrome for iOS 12 and above; Google Chrome and Firefox for Android 10.0 and above. We test every site we build against benchmarks at web.dev to meet a minimum of a 90% ranking across all four categories: Performance, Accessibility, Best Practices & SEO.

We also know that good design doesn't happen in a vacuum. We work closely with both the project managers, developers, and our clients, every step of the way, to resolve any conflicts as soon as they arise and arrive at the best possible solutions. It's what sets a project apart from good to great.

One of the most important parts about being a responsible digital citizen is the willingness to keep learning. The Internet is constantly changing and new technologies are being developed every day. For this reason, our process consists of peer reviewing our work, ensuring proactive problem solving, version control best practices, proper documentation and overall deploying websites that our team and our clients are proud of. We acknowledge that we will make mistakes but we will continue to push forward, own our mistakes and learn from them to keep getting better at our craft.

Our goal is to meet a **professional code of conduct** that will allow us to take care of our team, our clients, their users and generally make the internet a better place.

Be good teammates & members of the development community

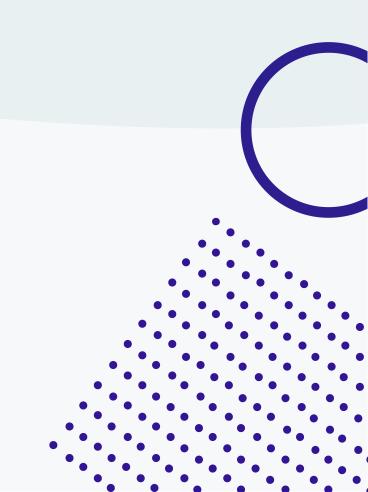
The foundations of the internet and open source community were built on the principles of access, collaboration and generosity. It's with that in mind that when we can, we aim to contribute back to the open source community and add to the knowledge of the community. We recognize how much we benefit from it so we try to give back as much as we can. We want to help improve the skills of our team, the development community and the internet community as a whole. We believe that it's our responsibility to always be working hard not only to level up our team's skill set through ongoing training and development, but also to give them time to experiment and research. We want them to always stay up to date and be iterating on their work and doing better. We want them to take calculated risks and push our boundaries and craft forward. We also want them to create work that considers who will have to work on it and maintain it as if they aren't there anymore so we believe in meeting quality coding standards and ensure that everything is well documented.

Invest in proper training & documentation

In addition to ongoing collaboration with our clients, we always set up training sessions to walk them through the best practices for working on their website. With the proper documentation throughout the development process, we can ensure the sustainability of the site post-launch and for years to come. It's important for an organization to make that the way to work with your website, CRM and CMS are available to any of your team members. Our goal is to ensure that our clients' institutional knowledge can be easily passed on.



Environmental Considerations



The benefits of technology and going digital are endless. Technology allows us to optimize our workflows, facilitate collaboration across departments, make education more accessible, information more readily available to consumers, the list goes on. But we rarely think about what it takes to get there. The reality is that it takes a lot of resources to build all the technology we use daily, and most of the time we never think of the consequences - the heaps of garbage that build up from all the latest tech drops and the warming oceans due to adjacent data centers.

We have a responsibility as individuals to be more sustainable in our own practices because a lot of companies only care when it affects their bottom line. That's the power we have, choosing where and how we spend our money. If we actively seek out sustainable options in everything we do, we are pushing for a greener planet.

So what is digital pollution exactly? This refers to the waste and energy consumption created by three main drivers: device manufacturing, e-waste and digital practices.

Digital practices are the lesser evil out of the three, but still a major contributor. All the energy consumption that comes from using your favorite devices does affect our planet. And it's all thanks to our data centers, aka the large computer systems that hold the data of the entire internet. Data centers use up electricity every time you search for something on the web, listen to a song, or send an email. The carbon footprint produced by global consumption of technology is similar to the amount produced by the airline industry. What's even scarier is that it's expected to double by 2025 as more people around the world gain access to tech.

Plank's Commitment

Every time someone loads a page of your website, there is a small energy impact, which at first seems negligible. But if the code and assets aren't optimised and you experience a lot of traffic, the impact builds up quickly. As a result, we will test our websites using the Website Carbon Calculator to ensure that our work is, at minimum, 75% cleaner than all other websites. We also recommend using a green hosting partner or paying to carbon offset the annual impact.

Optimize our code and assets

While we want all of our projects to be outstanding and award winning from a design perspective, a website optimized for speed and performance matters just as much, if not more. As a result we do not use unnecessary or bloated code and are mindful to offer a high quality user experience that keeps people coming back to and engaging with our work.

The benefit of investing into optimization isn't only load time and user retention but also to reduce the energy used by a server by taxing it less, reducing the energy needed to transmit and deliver all of those pixels and the computing power needed to display our work. While all of this effort may seem like a lot to invest into a smaller, low traffic website, the impact grows exponentially on high traffic sites. Something as simple as optimizing an image properly can quickly add up if you have 20,000 or 250,000 unique visitors on a daily basis.

Use a Green Web Hosting

A green website hosting company is one which aims to reduce the environmental impact of their organization, technology and energy consumption. Through multiple strategies such as carbon offsetting or using renewable energy, and reducing overall energy consumption strategies, energy hungry computer servers can be run carbon neutral.

There was a time when the idea of using a green website hosting partner was a very difficult and niche option to entertain. With so many mainstream and reliable partners, using an environmentally responsible hosting company is as viable an option for hosting any modern website.

Use a Green Search Engine

The search engine Ecosia uses its profits from paid advertisers to fund reforestation projects. Involved with 9,000 planting sites, they've already helped plant over 123 million trees all over the world! Reforestation is an important cause for so many communities because trees do so much more than absorb CO2. Trees can restart water cycles, protect and create wildlife habitat, improve soil fertility, and overall uplift local communities. That's a lot of good for a simple search.

Use Carbon offsets

While doing everything outlined above ensures that our projects will have a lesser environmental impact than most other websites, working on some popular and high trafficked sites means that our work will have an impact, no matter our effort. As a result, we benchmark the expected traffic based on past analytical information and the expected load time of our pages, code and assets.

With traffic information we should be able to pretty accurately estimate the carbon impact of the site traffic, hosting power used and figure out the monthly total carbon footprint. We will then assess the financial impact with our client and purchase carbon offsets so that we can be sure that our work is carbon neutral.



To learn more about device manufacturing & e-waste and some of Plank's internal processes for minimizing our own carbon footprint, read our blog post about <u>9</u>

Ways to Reduce Your Digital Pollution. For now, we'll focus on digital practices.



Final Words

Conclusion

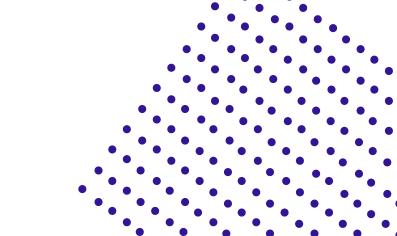
While our goals with our Ethical Website Design Framework are lofty, we are also well aware that we haven't and cannot be a perfect internet citizen. We are always going to miss some opportunity to do better, act better and serve our clients and their users in ways we haven't considered. As a result, our framework is, and always will be in a constant state of flux.

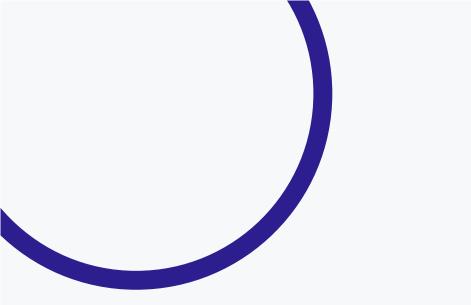
We are committed to remaining accountable & transparent and hope that everyone feels comfortable to let us know if they encounter any area where we are falling short. The internet changes everyday and we must adapt with it responsibly so we will start benchmarking our work and sharing the results, as well as our failures publicly. We will continue to share our findings, knowledge & actionable tips to encourage others to make the web a better place.

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Thank you!



