

Technical Specification New Website norwerk.dk

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1. Executive Summary

This technical specification outlines the requirements for a new website to replace an existing Wordpress-based website (norwerk.dk). The website design is modern, clean, and user-friendly, with a focus on usability and conversion rate optimization. The website will be developed using Next.js and TailwindCSS. The website will be optimized for fast loading times and SEO, with a goal of under 2 seconds per page. The website will be deployed to a cloud-based platform, Vercel, and should be scalable, reliable, and secure. The freelancer should be proficient in Next.js, TailwindCSS, Node.js, and should have experience in building fast and responsive websites.

2. Design and Layout

The website will replace an existing Wordpress-based website located at

<https://norwerk.dk/>.

The website design is modern, clean, and user-friendly, with a focus on usability and conversion rate optimization. The layouts are designed with a responsive approach (see breakpoint definition below) and work well on devices, including desktops, laptops, tablets, and smartphones.

Layout specifications will be provided via WeTransfer¹. The designs are created in Adobe Illustrator and contain specifications for the following site types (homepage and product pages):

- Forside (Front page)
- UPS anlæg (Product page for UPS system)
- Generatoranlæg (Product page for generators)
- Loadbank (Product page for loadbank rental)
- Bæredygtighed (Sustainability)
- Kontakt / contact page

For each site type, there are 6 different files for the following breakpoints:

- 360 pixel width
- 428 pixel width
- 601 pixel width
- 1024 pixel width
- 1280 pixel width
- 1366 pixel width

Please consider the sliders indicated by the dots and the background parallax effect when scrolling².

¹ WeTransfer Link: [Design Specifications](#)

² See also [ge.com](#)

The site's maximum width will be 1366 px with the exception of the elements that break the grid in design layouts. All design layouts are made in pixels and the developer must be able to convert pixels so that the design completely corresponds to the design layout in Illustrator, regardless of the screen resolution the layout is displayed in!

The Ai-files is delivered with a preset RGB colour setup and needs to be followed precisely! All delivered files will be "packed" so that you will have all relevant fonts and pictures in the packed files.

The website shall be optimised for use on the following browsers:

- Chrome, Safari, Edge, Firefox, Samsung internet, Opera.
- The parallax effect is especially important to work in all browsers including Mobile Safari, and a workaround for background-attachment needs to be applied here!

The website shall be optimised for use of the following mobile phones:

- Apple, Samsung, OnePlus, Huawei, Xiaomi, Motorola.

3. Next.js Requirements

The website must be built using the latest version Next.js³ (Next.js 13) and meet the following requirements:

- Next.js should be used with Static Site Generation (SSG)⁴ to improve website speed and SEO.
- The website must be optimized for fast page loading times, with a goal of under 2 seconds per page.
- The website is simple enough to use the basic routing feature⁵ of Next.js.
- The website should be designed with SEO in mind, including the use of page titles, meta tags for description and other relevant settings, and semantic markup of the content (use heading tags <h1>, <h2>, <h3> tags to structure content).

³ [NextJS.org](https://nextjs.org)

⁴ [Static Site Generation \(SSG\) with Next.js](#)

⁵ [Basic Routing with Next.js](#)

4. TailwindCSS Requirements

The website must be styled using TailwindCSS⁶, a utility-first CSS framework that enables fast and efficient styling. The following requirements must be met:

1. Design Consistency: The website must be consistent throughout all pages. The layout, typography, colors, and other design elements must be uniform, in line with the provided design specification.
2. Responsiveness: The website should be optimized for different screen sizes, including desktop, tablet, and mobile devices. The layout should adapt to the different screen sizes to provide the best user experience. For more design specifications, see 2. Design and Layout.
3. Customization: TailwindCSS provides a wide range of customization options. Customization should be done in such a way that it doesn't impact the website's performance and load times.
4. Optimization for Performance: The website should be optimized for fast loading times to improve user experience and SEO. TailwindCSS provides built-in optimization for production builds⁷, and the website should be built using these features to ensure optimized performance.
5. Consistent and Maintainable Code: The code should be written in a way that is easy to understand and maintain. The website should be designed using modular components, and the code should follow consistent naming conventions to make it easy to navigate and update.
6. The freelancer should be proficient in TailwindCSS and should have experience in using it to create responsive, accessible, and performant designs.

⁶ <https://tailwindcss.com/>

⁷ TailwindCSS: [Optimizing for Production](#)

5. Performance and SEO Requirements

The website must be optimized for fast loading times and SEO to provide a smooth user experience and high search engine rankings. The following requirements must be met:

1. **Fast Loading Times:** The website should be optimized for fast loading times, with a goal of under 2 seconds per page. To achieve this goal, the website should take advantage of the Next.js feature Static-Site-Generation (SSG). Additionally, the website should be optimized for images, videos, and other multimedia content using techniques such as lazy loading and compression.
2. **Search Engine Optimization:** The website should be designed with SEO in mind, including the use of dynamic page titles and meta descriptions. The website should use best practices for on-page SEO, including the use of structured data, heading tags (<h1>, <h2>, <h3>, ...), and alt text for images. The website should also be designed to be mobile-friendly, with responsive design and fast loading times.
3. **Content Delivery Network (CDN):** The website should use a CDN for caching to improve page load times and reduce server load. This will help to ensure fast loading times, particularly for users accessing the website from different geographic locations.
4. **Performance Testing:** The website should be tested for performance using tools such as Google PageSpeed Insights⁸ and Lighthouse⁹. The website should be optimized to achieve a high score on these tools and meet the performance requirements outlined in this specification.
5. **Security:** The website should be designed with security in mind and deployed to be reachable via secure HTTPS connection (forwarding http:// to https://).

⁸ <https://pagespeed.web.dev/>

⁹ [Lighthouse Chrome Extension](#)

6. Development Requirements

The website must be developed using Next.js and meet the following requirements:

1. Front-end Development: The website should be built using Next.js and TailwindCSS for front-end development. Next.js will be used with SSG (see above). TailwindCSS should be used to create a consistent design throughout the website.
2. Back-end Development: Not applicable (static site)
3. Git Version Control¹⁰: Git should be used for version control to manage code changes and to ensure that the website is deployed to the production environment with the latest code. Access to a repository on GitHub will be provided by the client. During development, code should be pushed regularly to the GitHub repository.
4. Testing: The website should be thoroughly tested for functionality, usability, and compatibility on different devices and browsers.

The freelancer should be proficient in Next.js and Node.js and should have experience in building fast and responsive websites. The code should be written in a way that is consistent, modular, and maintainable.

NOTE!

The developer must be familiar with Adobe Illustrator and be able to transfer layouts pixel perfect from Illustrator to code! As previously mentioned, all design layouts will be delivered in pdf as well as AI files (Adobe Illustrator).

As this is a Danish site, letters must follow the Danish letter types, where the letters (Æ, Ø & Å) are amongst. They must not be converted into English compounds such as ae instead of Æ, etc!

¹⁰ <https://git-scm.com/>

7. Testing, Deployment and Maintenance

The deployment process should be done using best practices to ensure that the website is scalable, reliable, and secure. Vercel¹¹ is a popular cloud-based platform that supports Next.js deployments, and the freelancer should have experience deploying websites to this platform.

As the site is deployed as a static website using SSG, no regular Maintenance is expected. If there are content changes necessary, they should be pushed to the GitHub repository and auto-deployed to Vercel.

¹¹ <https://vercel.com/>

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The first point of contact from you should be a presentation of you, your credentials, your level of experience and references.

We need 4 different, solid website (not APP) references of responsive websites build using Next.js, Tailwind CSS, Node.js!

Failor to provide the above described references, the candidate will not be considered!

You need to be proficient in English.

We are only interested in freelancers that have the resources to deliver approx. 40 hours a week, starting ASAP!

The hourly rate should not exceed \$50 (most developers will be in the range of \$20).

We will choose the candidate from the following tree points. Price, experience, and references.

¹¹ <https://vercel.com/>

9 Project process

The project will be structured as follows:

Project phases (milestones):

Initial project phase and milestone 1 (10% of the project budget).

Correction of the already existing code, containing:

- Dropdown menu
- Footer
- Header
- Contact page and contact forms.
- Sign in, log in and Cookie pages / info screens.
- The remaining coding of the front page. Also performing the two missing breakpoints mobile 428 x 926 and the 1366 x 768 px grid sizes.

2nd milestone (15% of the project budget).

- Coding of “UPS anlæg” page.

3rd milestone (15% of the project budget).

- Coding of “Generatoranlæg” page.

4th milestone (15% of the project budget).

- Coding of “Loadbank” page.

5th milestone (15% of the project budget).

- Coding of “Bæredygtighed” page.

6th milestone and finish of the initial project (30% of the project budget).

- Quality control of the entire site.

In each phase, the developer must perform quality control of the code on different screens to secure that the code matches the desired layout presented in the AI-files! We will then perform a code control and a visual check on a variant of different screens, not limited to: iphones, android, PC, MAC, Ipad. and online screen size control sites. When all screens is showing to our satisfaction the budget from the project phase will be released, not before!
