



About tomorrow

Assignment 6: Design reflections

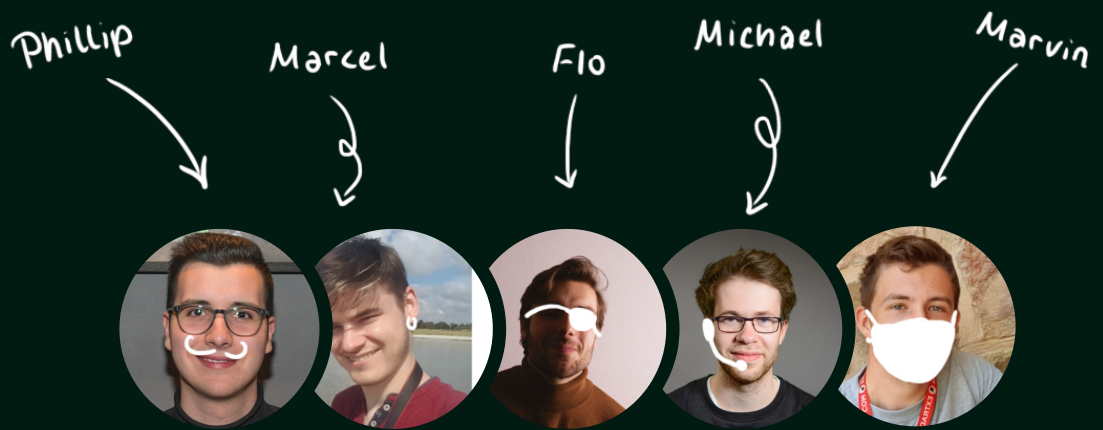


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Scenario




It's a beautiful sunny summer day and Barbara wakes up early. First thing in the morning, she waters her plants around the house. After that, she prepares breakfast for her two children. Barbara is 31 years old, happily married and lives in a small townhouse near Stuttgart. Her husband works for the company Mercedes-Benz and develops climate friendly electric vehicles. Barbara's whole family want to be as climate-friendly as possible, because they are conscious about the environment.

A few weeks ago Barbara discovered her new passion and opened an online flower shop named "mybloom". Her goal was to make it possible for everyone to buy plants easily via an onlineshop. But there was one big challenge: **How is it possible to build a website as climate-friendly as possible?** After looking for the right keywords in ecosia she found the company "about tomorrow" which suits her needs and ideas perfectly. A climate-friendly, easy to use website builder, where you can see the impact your website has on the environment. Barbara loves the builder and has developed her own shop in only a few days.

Now she is overwhelmed by the great feedback of her customers and the vast amount of orders she has received already.



Barbara

-  Has an online flavour shop
-  Conscious about the environment
-  Uses "Build Tomorrow"





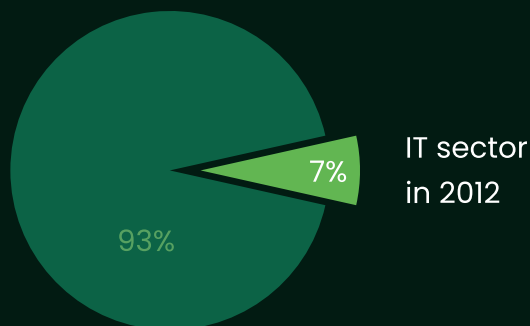
The Problem

We can all see that we need to do something about climate change. Never before has it been such an important topic. The importance of this issue becomes quite apparent if we switch on the news to see the massive floods in the northern parts of Germany and China destroying entire villages. These events raise the question: How can we tackle this issue and what can we do against climate change?

It is common knowledge that bikes and public transport are more eco-friendly than cars but for us as computer science students a different question surfaced:

What can the IT sector do to fight climate change?

That is a difficult and important question: In 2012 a greenpeace research study showed that the IT-sector already consumes an estimated 7% of global electricity and these numbers have been rising ever since.



Sources: Greenpeace Clicking Clean Report www.clickclean.org

Even worse, the way we use the internet changed a lot in the last 30 years. Websites often display more images or large video files with less content. For example the text you can see on the presentation website of the new iPhone is 6000 times smaller in resources than the other fancy media elements.



Our target audience

We changed our target audience a few times during planning and prototyping the builder. At first we wanted to have a design for beginners, but also for advanced and expert users separated. But after a feedback round we found out that a separate layout for different target audiences is not the best solution. Providing different layouts that the user is meant to cycle through over time requires the user to discard learned behaviours and adapt to new environments frequently. This would make the website more complicated and confusing to use and therefore we dropped that idea. Also a real expert in web development would not use a builder to build websites. So we put our focus onto one thing:

Making an easy to use builder for everyone.



Barbara



Ape



Markus



Andreas



Jasmin



Dima



Hans



You

Assignment 1

Finding an idea

We had a long discussion about what we want to design in this lecture. After we formed teams for different tasks, we needed to conclude all ideas and sum them up. We all agreed on the topic climate change but also wanted to create something special and innovative. So we decided to design a climate-friendly website builder called “build-tomorrow” where our users really can see their impact and not only theoretically have some recommendations.



This is the reason why we have cancelled our plan to design a checklist, because it's just not for everyone. While this checklist would be quite handy for developers, most of the users are not going to be experienced and therefore would end up overwhelmed by the system. In general a website builder is the tool to reach most people and have the biggest climate impact.

Navigation

Design System

Getting started

Customize

Layout

Content

Components

- Accordion
- Alerts
- Badge
- Button
- Button group

Helpers

Save our planet, Build Tomorrow!

- Quickly design and customize responsive mobile-first sites **NEW**
- The world's most popular front-end open source toolkit
- Install Sass and JavaScript files via npm, Composer, or Meteor
- Quickly design and customize responsive mobile-first sites

Design System

Getting started

Customize

Layout

Content

Components

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- Alerts
- Badge
- Button
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Helpers

Search Docs (Press '/')

Buttons

Use custom button styles for actions in forms, dialogs, and more with support for multiple sizes, states, and more.

Examples

Design System includes several predefined button styles, each serving its own semantic purpose, with a few extras thrown in for more control.

Primary Secondary Success

```
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
```

Outline buttons

In need of a button, but not the hefty background colors they bring? Replace the default modifier classes with the `.btn-outline-*` ones to remove all background images and colors on any button.

Primary Secondary Success

```
<button type="button" class="btn btn-outline-primary">Primary</button>
<button type="button" class="btn btn-outline-secondary">Secondary</button>
<button type="button" class="btn btn-outline-success">Success</button>
```

Concepts of our checklist idea

Code to copy

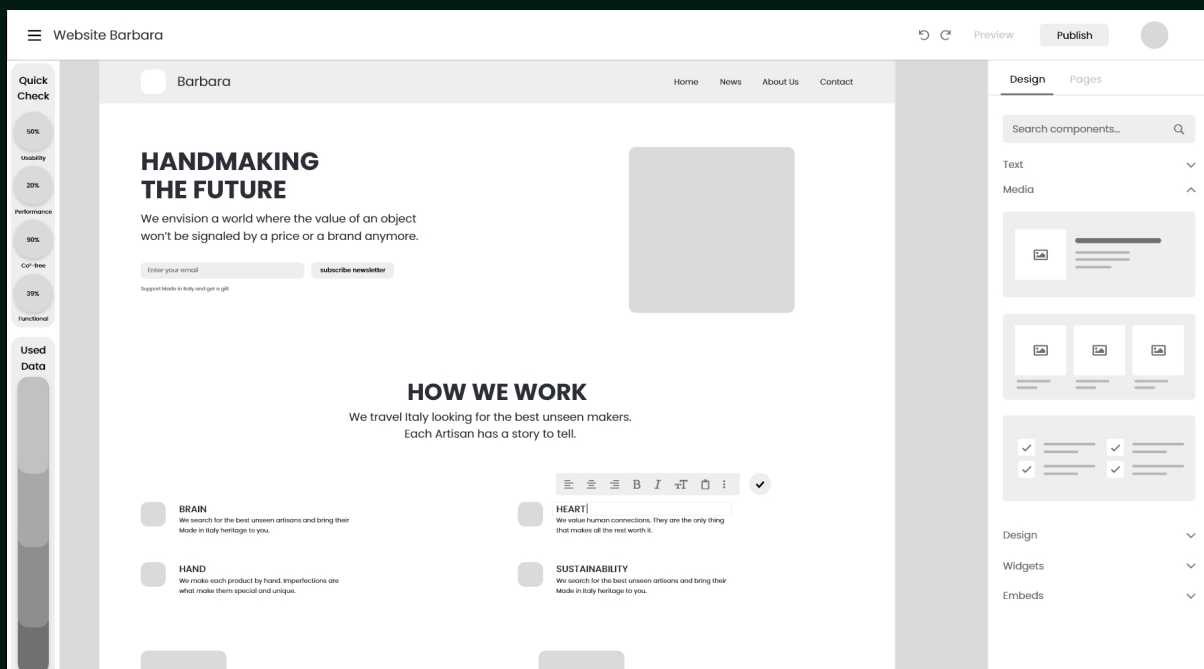
Assignment 2

Let's Low-Fidelity

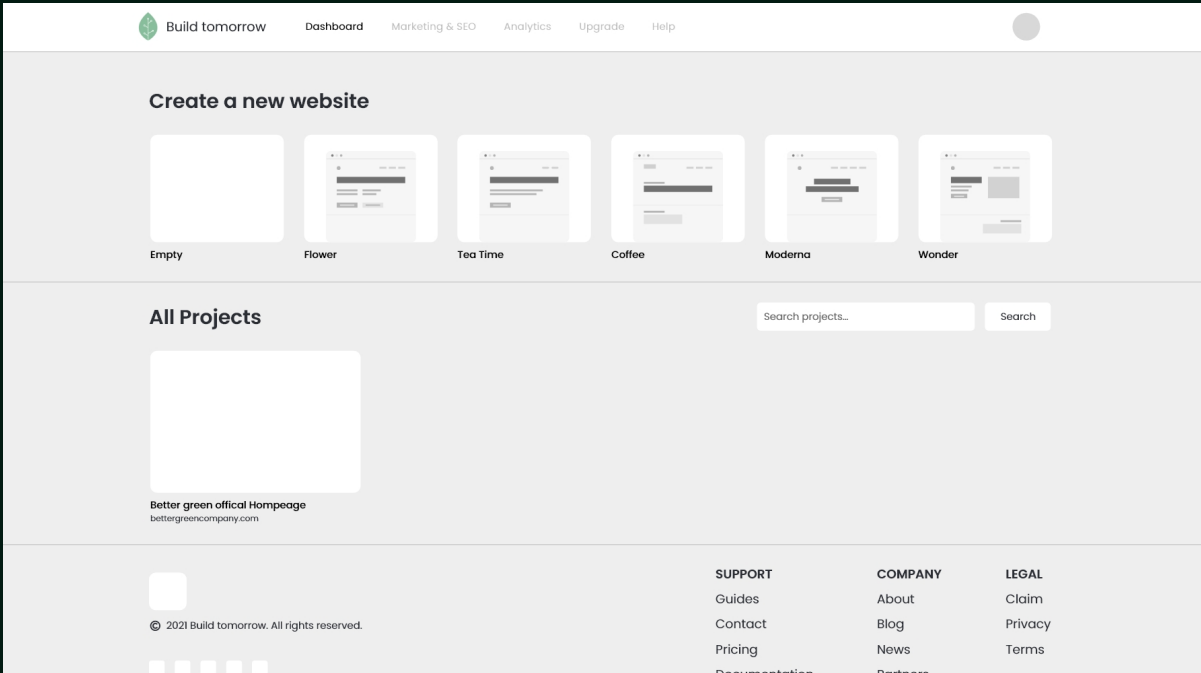
Based on our ideas, we created a low-fidelity prototype. The goal was to structure all our ideas and assign them into logical groups. During the creation process, new ideas kept coming up and we integrated them directly. We wanted to make it possible for users to create a website within a short time without any prior knowledge.

How to welcome a new user to our builder?

Our focus in development was to optimize the landing process for the website and therefore assure that the website is appealing from the very first sight. We asked ourselves how we could welcome a new user to our builder as easy as possible. The solution is our onboarding flow with our hands-on tutorial.



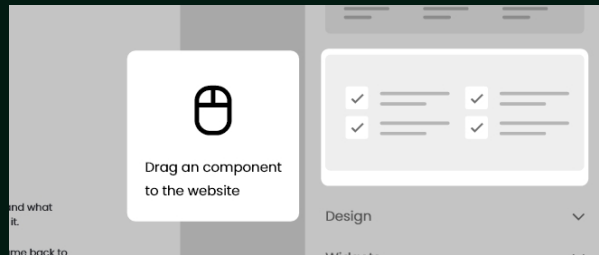
"Build tomorrow" Website Editor with emission tracker



Dashboard



Onboarding process

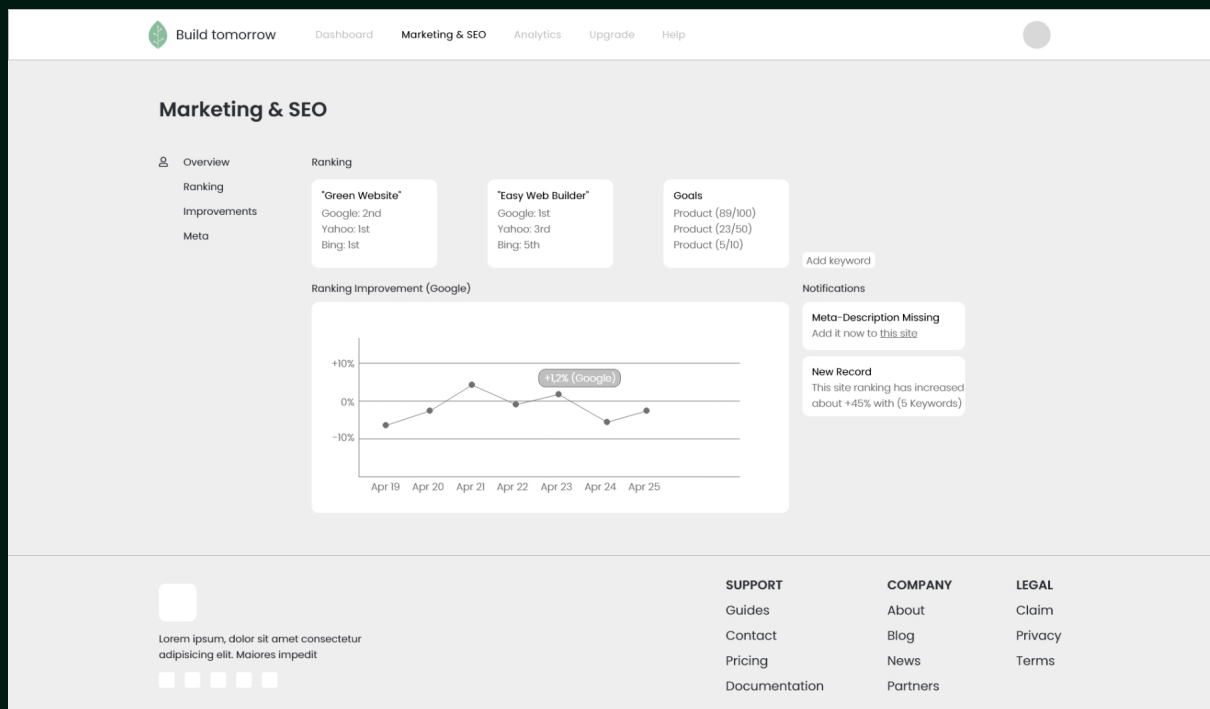


Editor Onboarding Tutorial

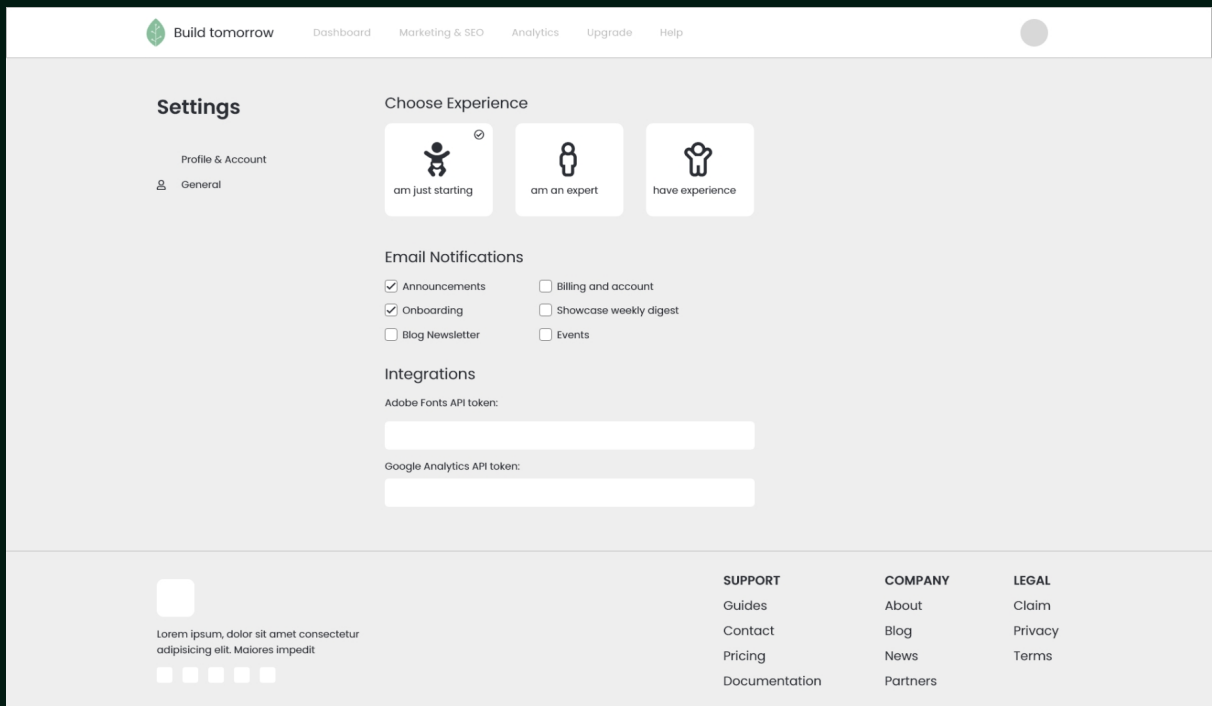
Assignment 3

Create a Wireframe

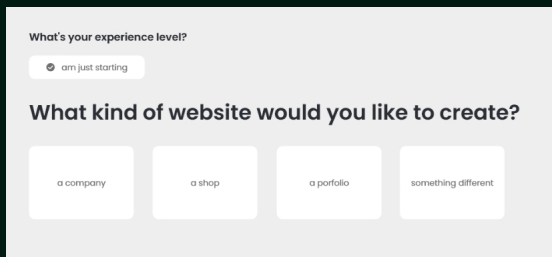
While developing the wireframe, we had three primary goals. The first goal was to be as resource-efficient as possible. We decided to use vector graphics instead of images and structured our tool with a lot of reused components. With this technique we can save CSS code by reusing the same as much as possible. The second goal was to make the website easy to use. The builder should not be bloated with too many UI elements at first sight and only the most important ones should be displayed. With the given navigation the user can then find the more complex (and therefore less frequently used) features. The final goal was to visualize the direct impact of the user's actions. We implemented our emission tracker which shows a lot of interesting data about the climate friendliness of the website. With these optimizations we created a better user experience and also strongly integrated the sustainability factor.



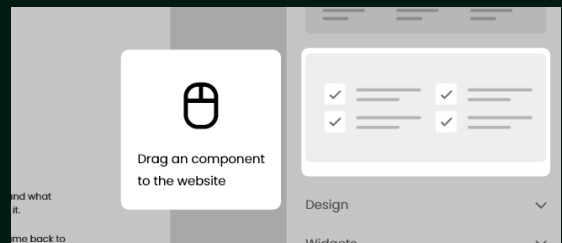
We created new pages



Setting pages



New Onboarding process



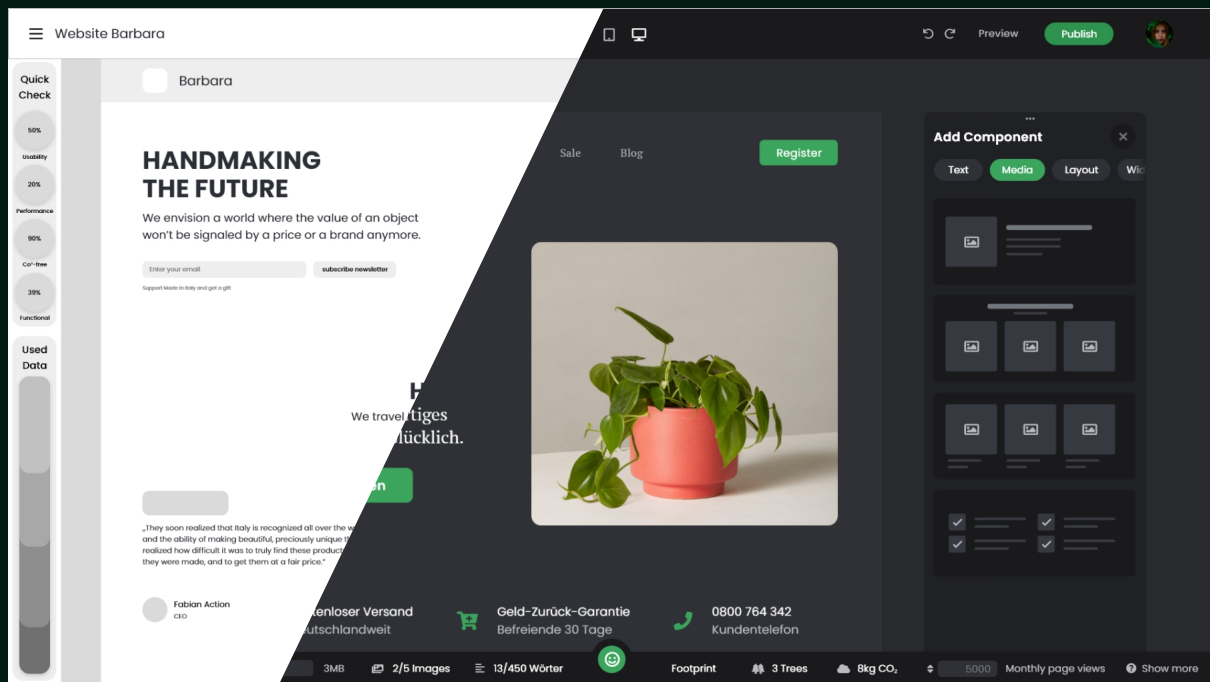
Editor Onboarding Tutorial

Assignment 4

Make it Visual

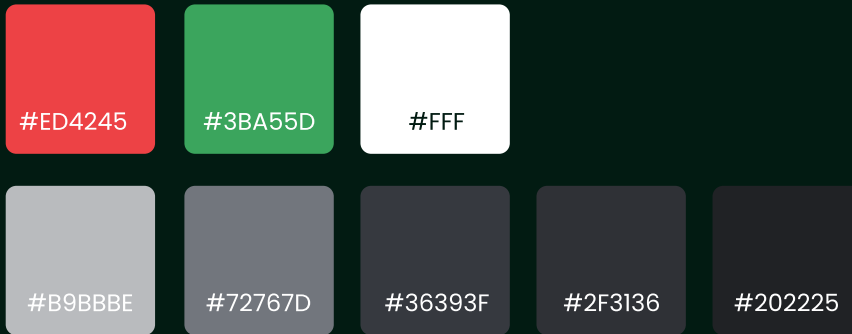
For the visual design we also used the three primary goals, we mentioned in Assignment 3. We designed an UI Kit for all important design guidelines in our high fidelity prototype. Our UI Kit contains fonts, font sizes, spacings, states and colors. All design choices were thoughtfully made with our product and target audience in mind. In this phase we also added first animations to enhance the visual appeal of the builder. For example button and text field animations.

- ✓ GUI Kit
- ✓ Corporate Design
- ✓ Based on target audience



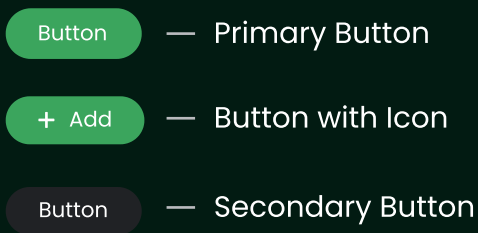
Migration from Wireframe to Visual

Colors



Optimized for dark themes

Buttons



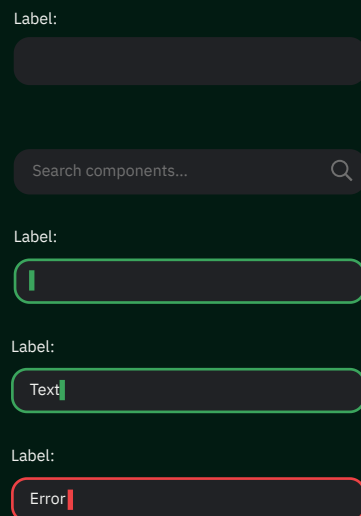
Buttons for different states

Icons

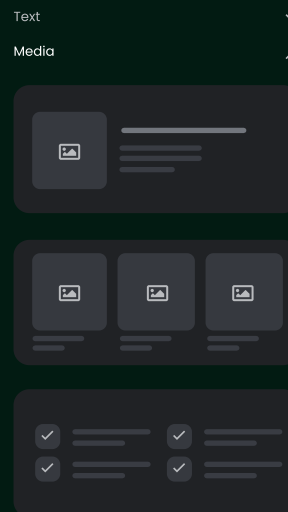


Iconography Font Awesome 5 Pro

Textfield



Dropdown



Assignment 5

High-Fidelity Prototype

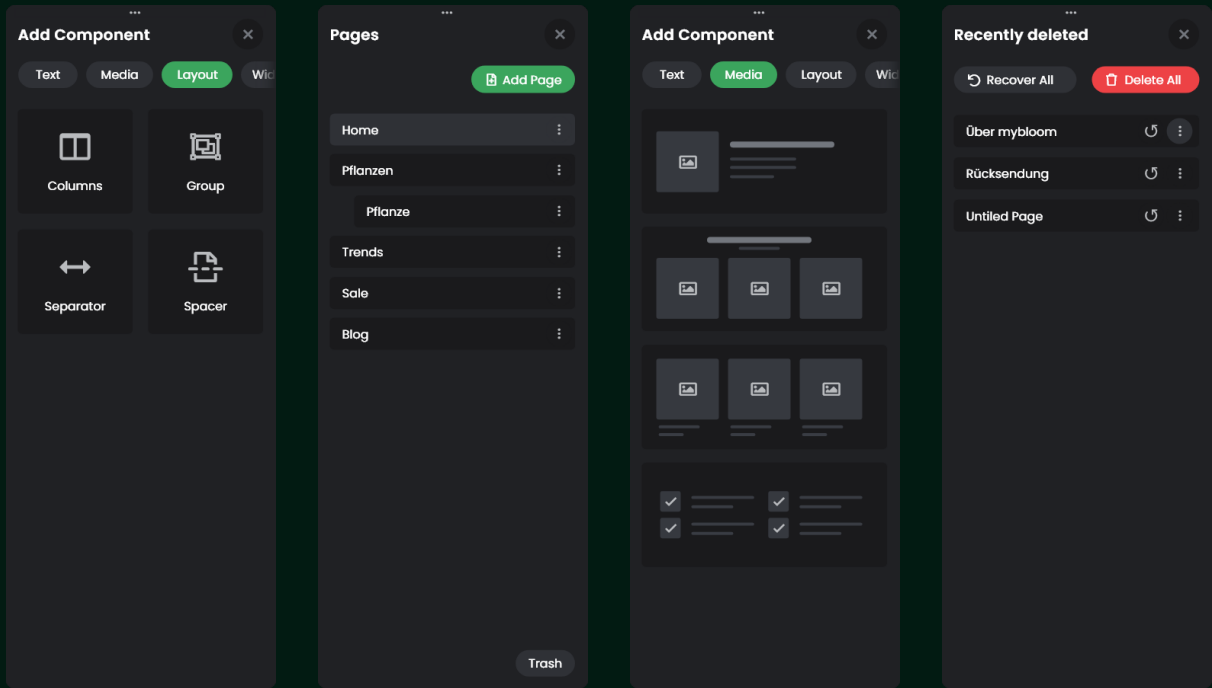
During the development of the High-Fidelity Prototype, we focused on how to communicate with our users through visual design. We applied the previously created UI kit to all our screens. To improve the usability we integrated different animations and added some new screens to the prototype. In the end, we connected everything and created our fully functional high-fidelity prototype.



Our emission tracker cards



Our emission tracker background



Builder Toolbar



Sidebar

Final Product

With our final product the “Build Tomorrow” Website-Editor you can easily create your own low-impact, climate-friendly website. Our mission was to design a beginner friendly onboarding process with nontechnical questions to make it as convenient as possible for our target audience. A Website-Editor with intuitive controls where you can instantly see your footprint of your created website. And best of all: The editor itself is optimized on resources!

- ✔ Super easy to use
- ✔ Gentle on resources
- ✔ See your impact

The screenshot displays the 'Build Tomorrow' website editor interface. At the top, there's a navigation bar with a '+ Add' button, 'Pages', 'Emission Tracker', and a 'Publish' button. The main preview area shows a website for 'My bloom' with a navigation menu (Pflanzen, Trends, Sale, Blog) and a 'Register' button. The main content features the headline 'Best friend of an human is a plant.' and a sub-headline 'Entdecke unser großartiges Sortiment und werde glücklich.' with a 'Alle Pflanzen' button. A large image of a potted plant is also visible. On the right, an 'Add Component' panel offers options for Text, Media, Layout, and Widgets, with icons for Paragraph, Headline, List, Quote, and Code.

Below the preview, a 'Footprint' dashboard provides real-time data: Data Budget (1.3MB), 3MB used, 2/5 Images, 13/450 Wörter, 3 Trees, 8kg CO₂, and 5000 Monthly page views. The dashboard is divided into three sections:

- What is using data?** A donut chart showing: Required scripts (0.32 MB), Text content (0.14 MB), Images (0.84 MB). Includes a tip: 'Tips how to optimize images'.
- Your results compared to others** A bubble chart comparing 'Scripts', 'Text', 'Meta', and 'Vector Images' across 'mybloom.de', 'Avg. Built Tomorrow Site', and 'Competitor'. Status: 'All good'. Tip: 'Smaller ring is better'.
- Your footprint** Shows: 90 Days, 5000 Monthly Users. Metrics: 103 kg damage CO₂ you save, 17 Trees has to get planet, 793 km you can drive with a car. Includes a tip: 'What are good values?'.

“Die Blumen kamen super frisch und nicht kaputt an trotz online Bestellung! Danke!”

 **Florian**
Ist kreativ

“Die Bestellung kam super schnell an und mein Schatz freute sich über die Blumen. Weiterempfehlen!”

 **Marvin**
Begesitert

“Absolute Qualität und sehr kreatives Team. Besser geht es nicht!”

 **Stock**
Wird heruntergeladen

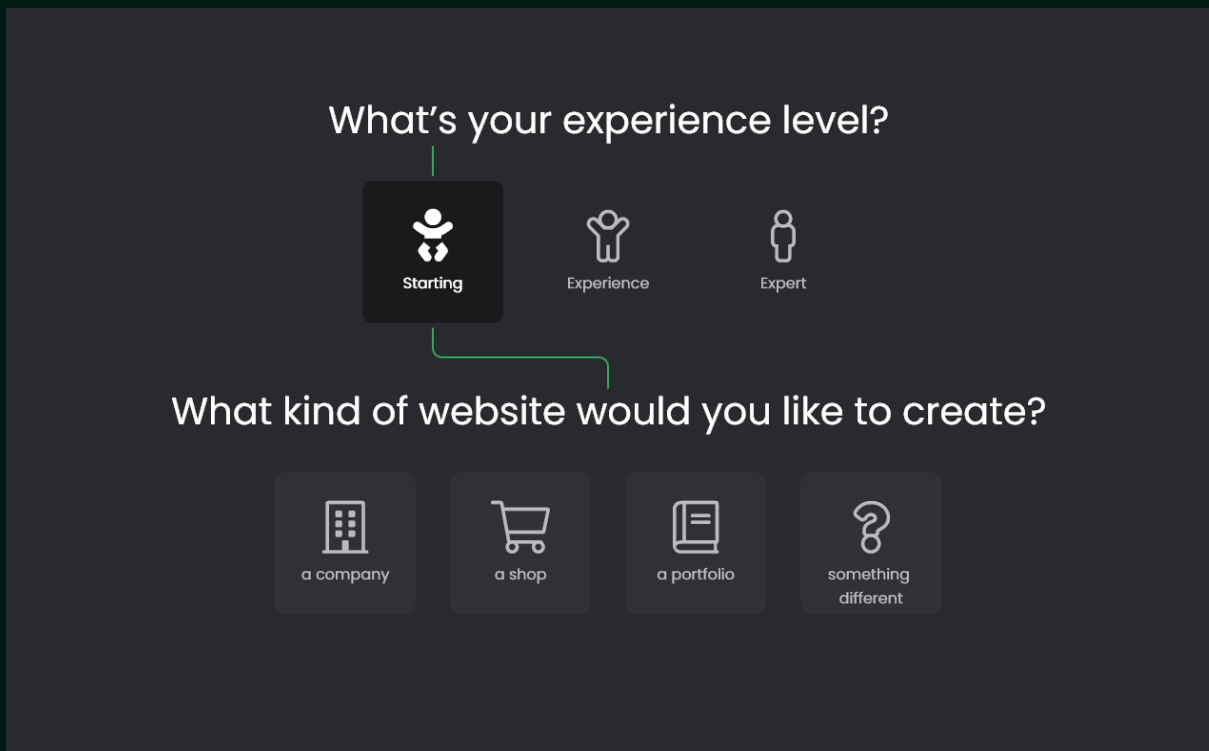
“Wunderschöne Blumen mit vielen coolen Tipps für Zuhause”

“Habe einen schönen Strauß mit roten Rosen gekauft und der war

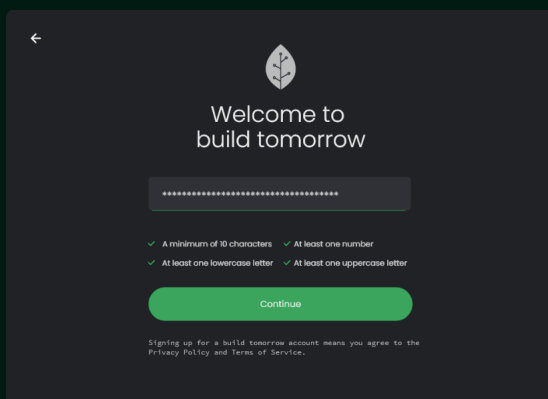
“Sehr gute Beratung und gutes Sortiment an Blumen und Pflanzen. Immer wieder gerne. Danke mybloom!”

Onboarding

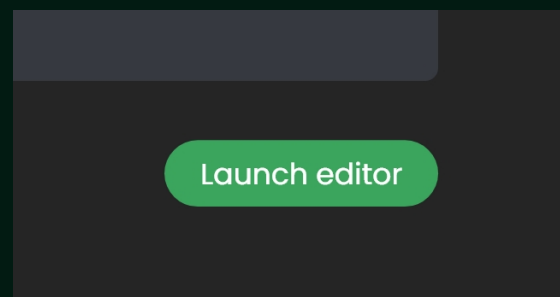
The first thing a user sees when deciding to create a website is the onboarding process. In this step it is crucial to ensure that the user is introduced to the UI and all visible features in the right way. After all, we want to make the user excited for our product, answer all pre questions and make it easy to get started.



Only necessary questions. (The user want to start building a website, not filling out forms)



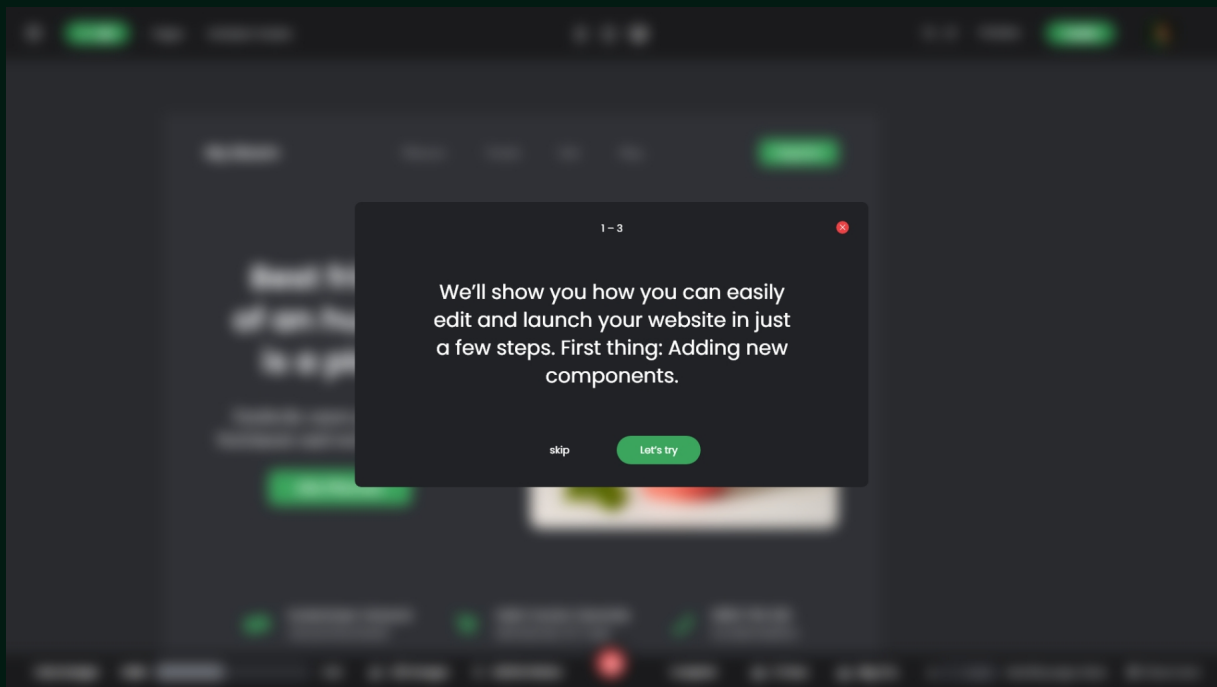
Login with password policy



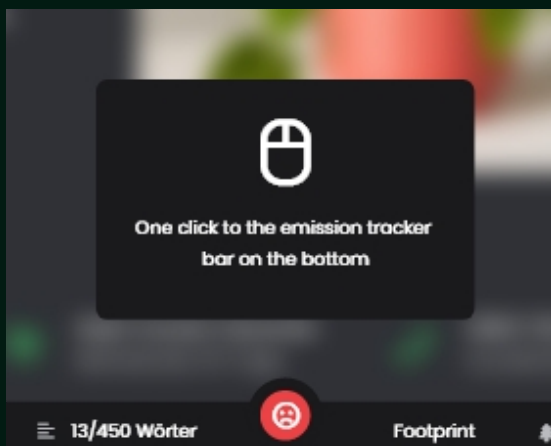
A clear "Call-to-Action" on each page.

Tutorial

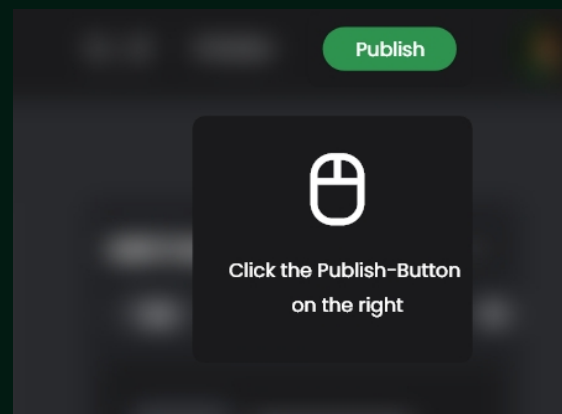
When the user enters the editor for the first time, we will start with an onboarding tutorial where we showcase some of our basic features. We combine tips with some “challenges” where the user has to do some fundamental tasks for the best learning effect on how the editor works. We think this is much better than a long FAQ or complicated pages describing simple features. If the user wants to discover our editor at their own pace they can always skip these challenges or the whole tutorial.



Onboarding tutorial



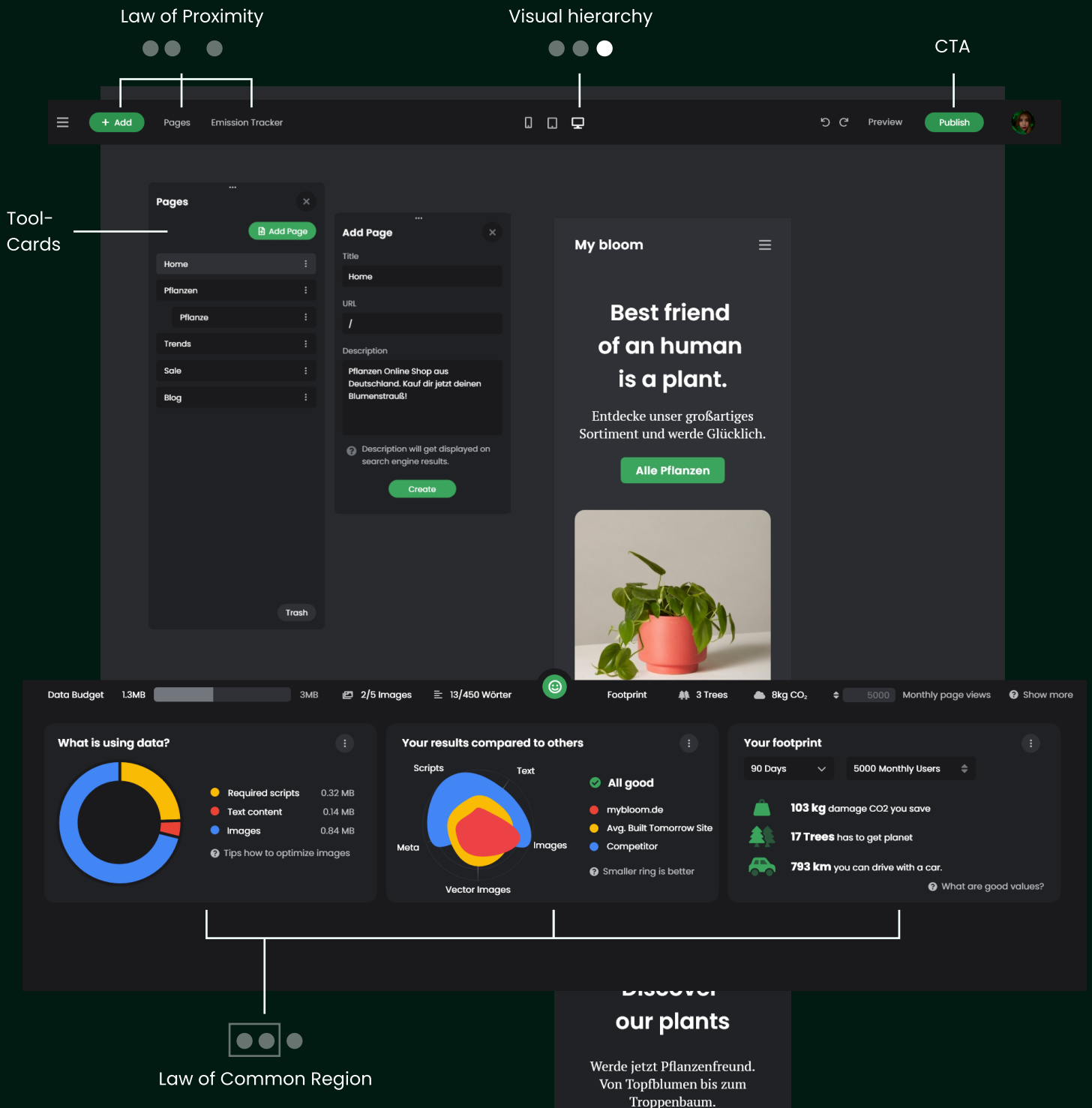
Tutorial how to use the Emission Tracker



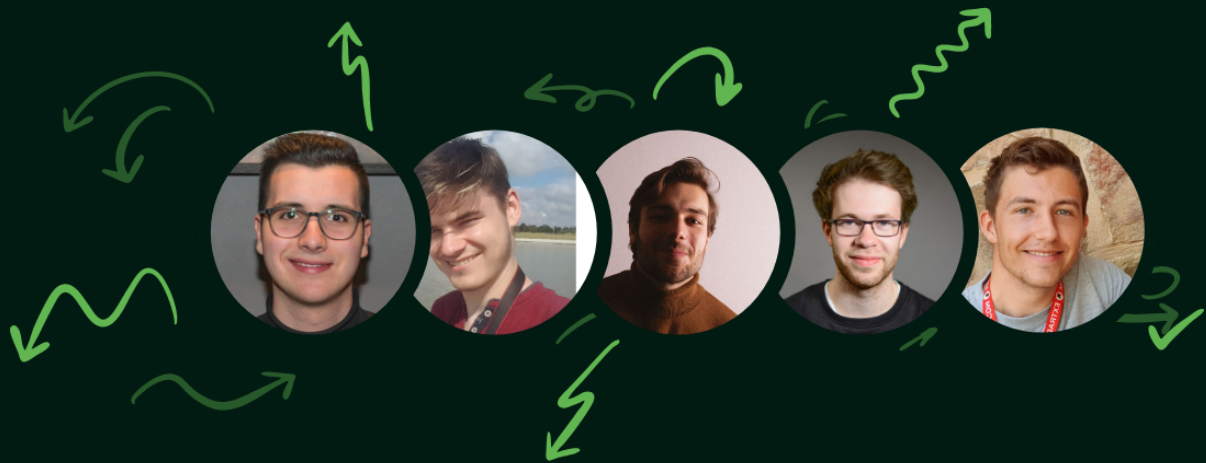
Tutorial how to public your website

Editor

The “Build Tomorrow” Editor is the place where the user is building their website. Here we combine all our three goals together to build a simple, intuitive and creative User Experience. In the navigation the user can always open up the Tool-Cards they is currently requiring. They can close or move the cards based on their own preferences. In combination with the editor “Pan”, which allows the user to drag the camera of the builder, this creates a dynamic and personalized user interface.

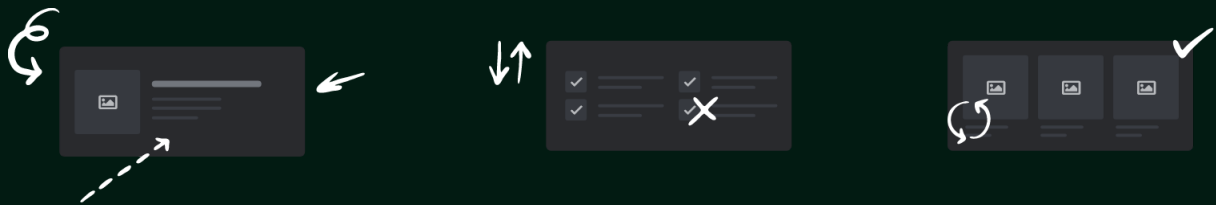


What have we learned in the process?



Communication

In the beginning it has been very difficult to work with five people on a design project. Each of us had a different level of experience and different ways of making design decisions. First we didn't know how to divide up the tasks effectively. But over time we have learned a lot about project structuring and discussing design decisions. The biggest lesson we learned in this project was that when discussing design, you should base your arguments on the design, not on our own opinions.



Create a simple Low Fidelity Prototype

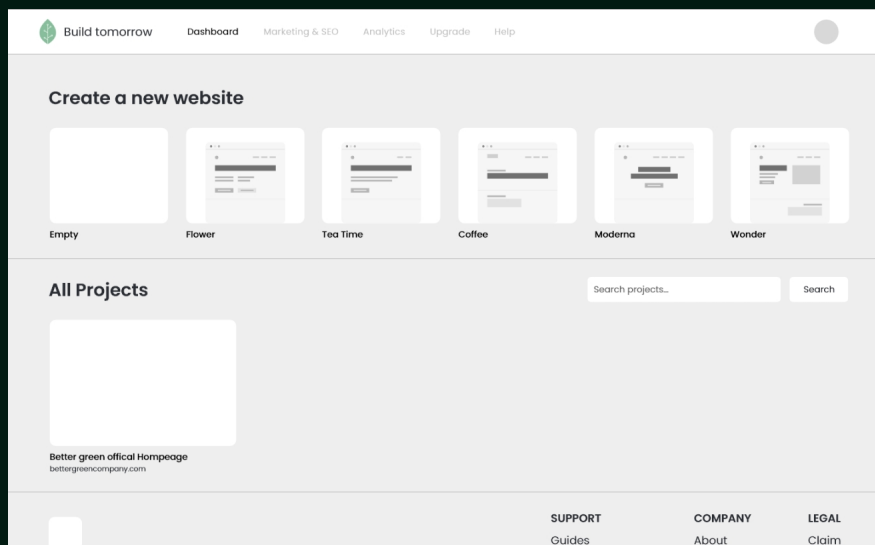
When we designed our low-fidelity prototype, we paid too much attention on visual details. This resulted in a quite similar high fidelity prototype since there was too little room to make changes. In the next project we only want to focus on the user flow and functionality while designing the low-fidelity prototype.

Low Fidelity should include:

- ✔ User flow
- ✔ Functionality
- ✘ Visual design

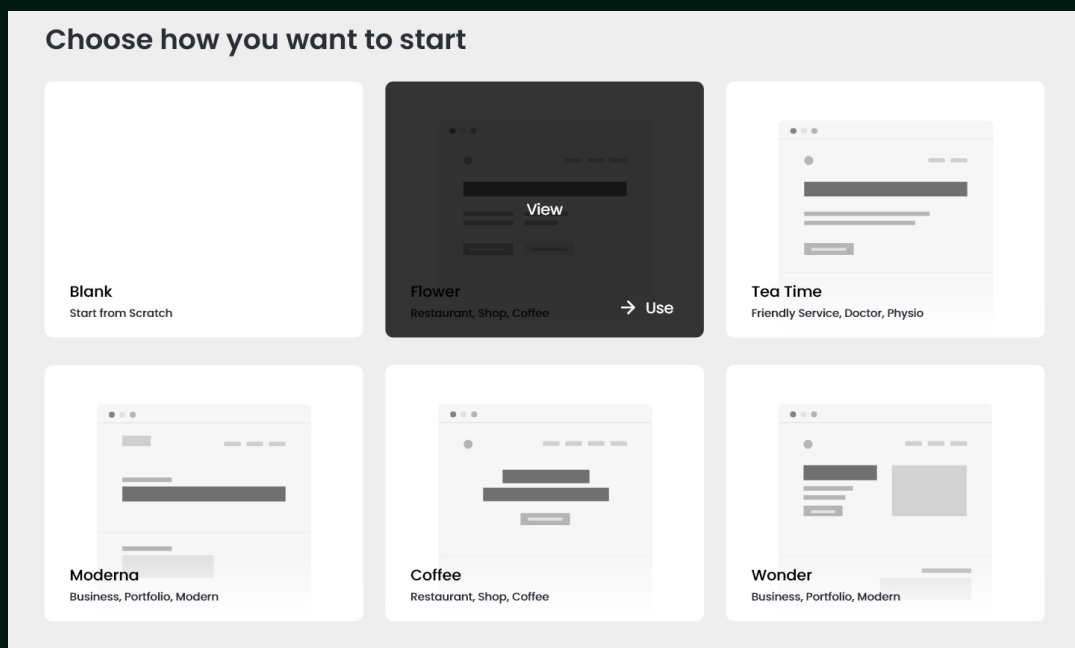
Ask your target audience

As a designer, you shouldn't just rely on your experience. You should also involve the user actively in the development. Often users see the product from completely different perspectives. This point of view is very important because we are developing products for our users and not for ourselves. When we did a few user tests, we gained some new insights that we have not had before. With this knowledge, we were able to revise our product and improve the overall usability.



Found out with user tests

Themes cannot be previewed. Small illustration showing the theme.



Themes can easily be previewed. Big previews with tags describing the theme.



This PDF is compressed!

We laughed, worked, and learned a lot. The emissions were a bit high in some situations, but in general we were climate-friendly. We became a good team and we are looking forward to using our new knowledge in future projects.

Thank you for this opportunity!

Created with 