Nomad, the design system

This case study highlights my role and experience in the growth of a design system over 5+ years.

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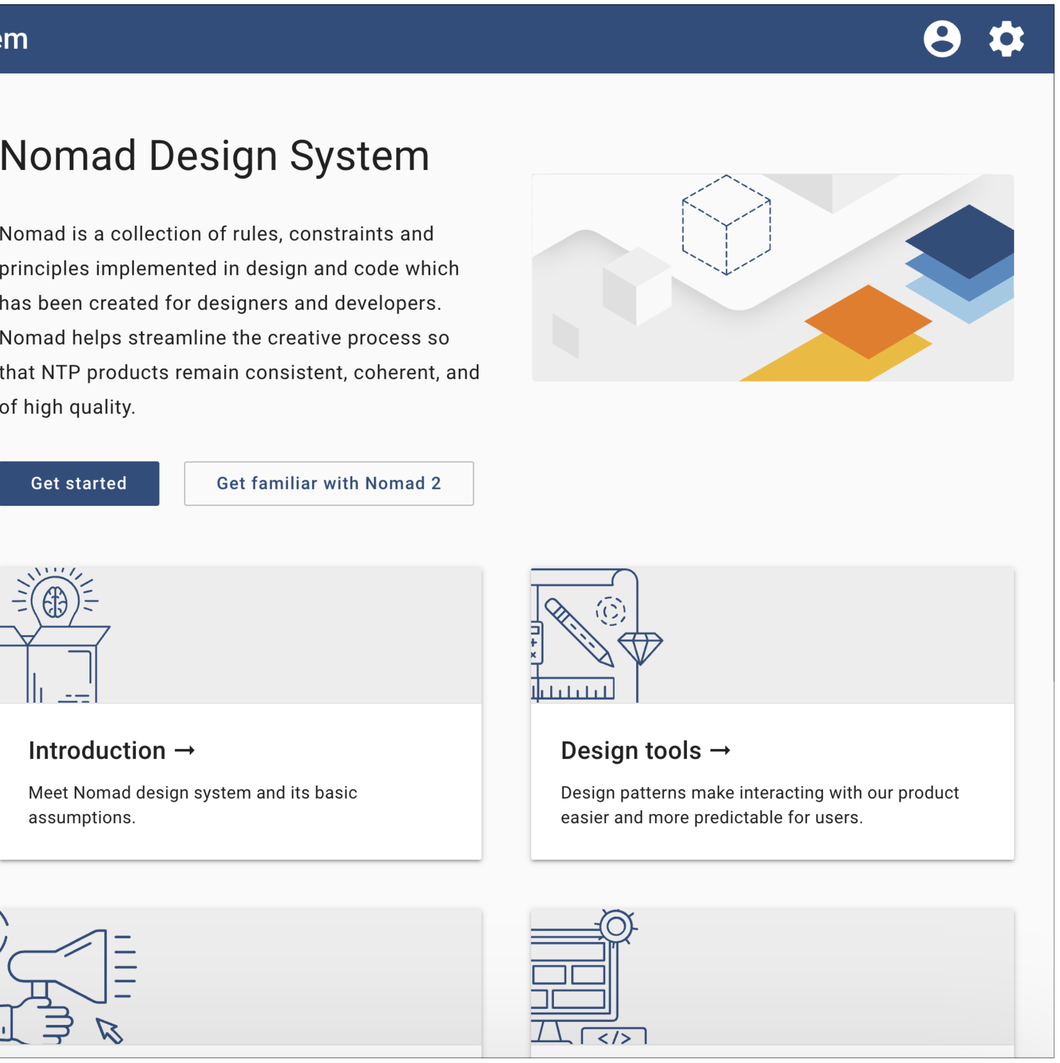
About Project



Main page screenshot – June 2023

Nomad stands for Novomatic Material Design. It's a design system based on the MUI, an open-source react component library. As any other design system Nomad helps streamline the creative process so that Novomatic products remain consistent, coherent, and of high quality.

Novomatic is a large international gaming company headquartered in Gumpoldskirchen, Austria. Nomad was created in our Novomatic Poland office with the aim of becoming a web application design standard for all Novomatic R&D offices around the world.

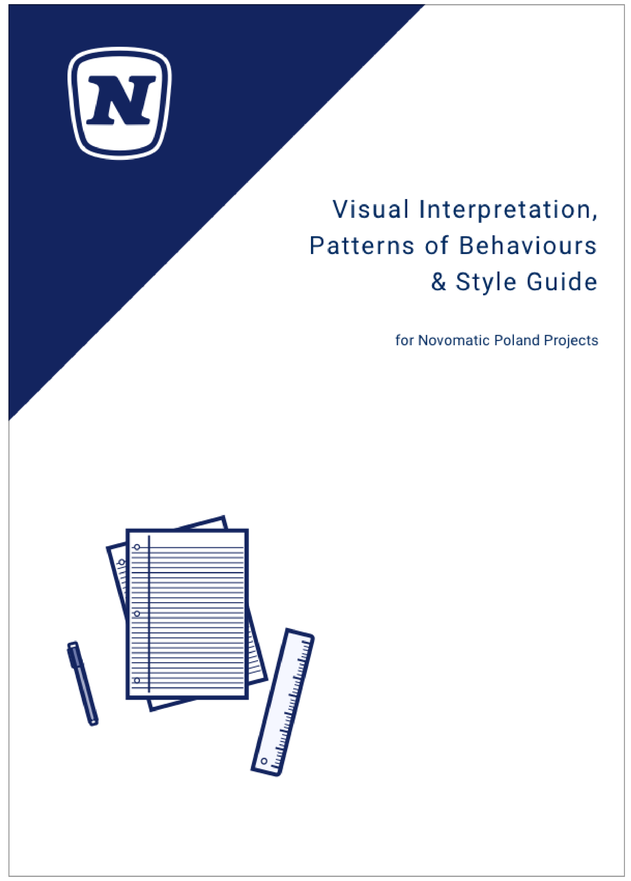
Stable public version: https://nomad.novomatic-tech.com/

In October 2017, because of the hype behind design systems my colleague and I decided to push the idea of design process optimisation to management and finally succeeded. However, we faced limitations in terms of time and budget. In 2018, Google released the 'Material Theming' plugin for Sketch, which proved to be a significant game changer and marked the beginning of the Nomad story.

My Role

As one of the project initiator, I have to describe my role first. I have always been involved as a key contributor to this project. Initially, my task was creating the UI kit for casino administration tools and services (2017) and then crafting symbols and artboards from the Material Design theming tool to fit our needs (2017-2018).

Over the years, I have been designing components within the Sketch library and ensuring their high-quality implementation in the React library. I have worked closely with development teams and designers, providing support and collaboration on component-related matters (2018-2022). However, since taking an extension on the role of Product Owner, my responsibilities and duties have undergone a significant shift (2023).



First UI kit title page – March 2017

There is a list of my tasks for the middle of 2023:

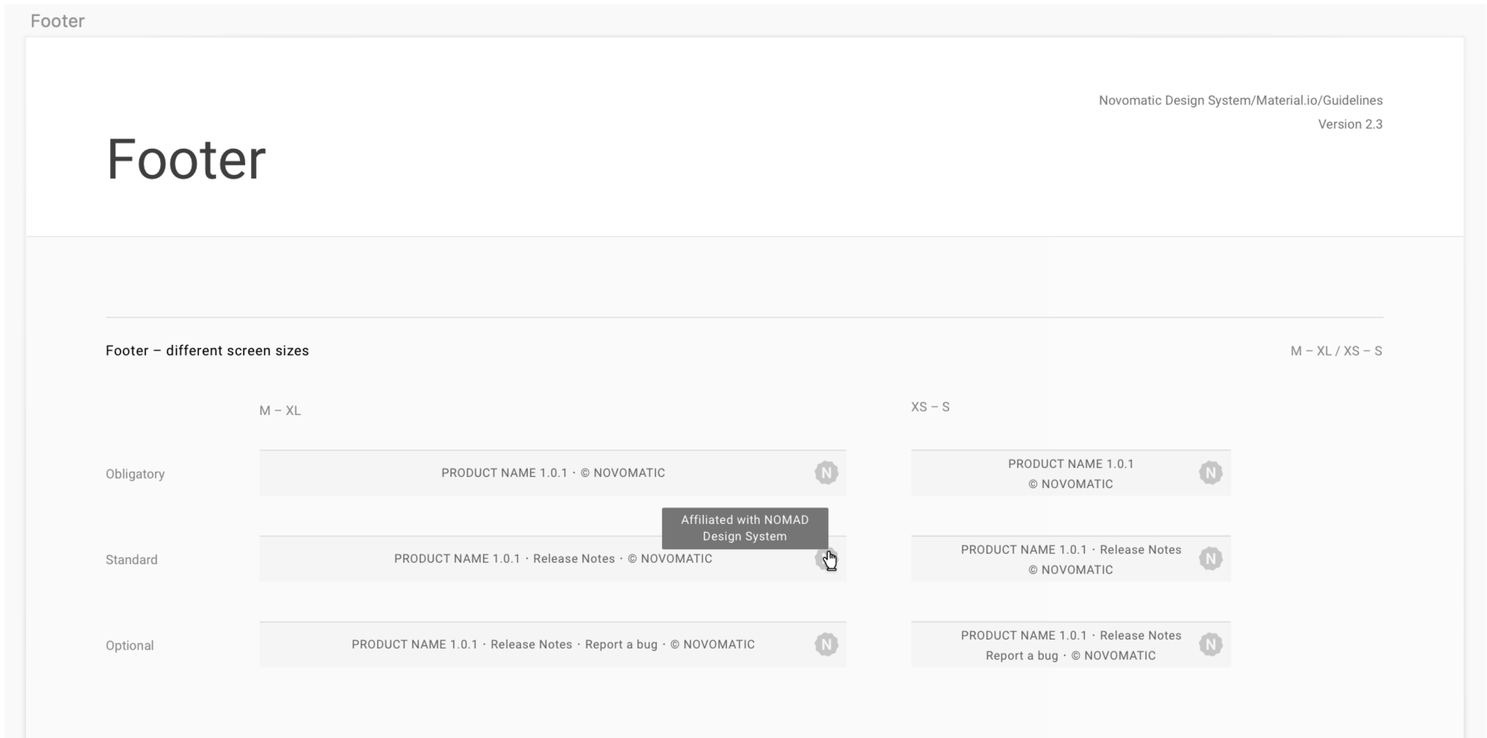
- Crafting Figma library of Nomad components
- Design acceptance and components quality assurance in Figma
- Leading team during migration to the new MUI 5 react framework and Storybook
- Project vision and leading

Initial Process

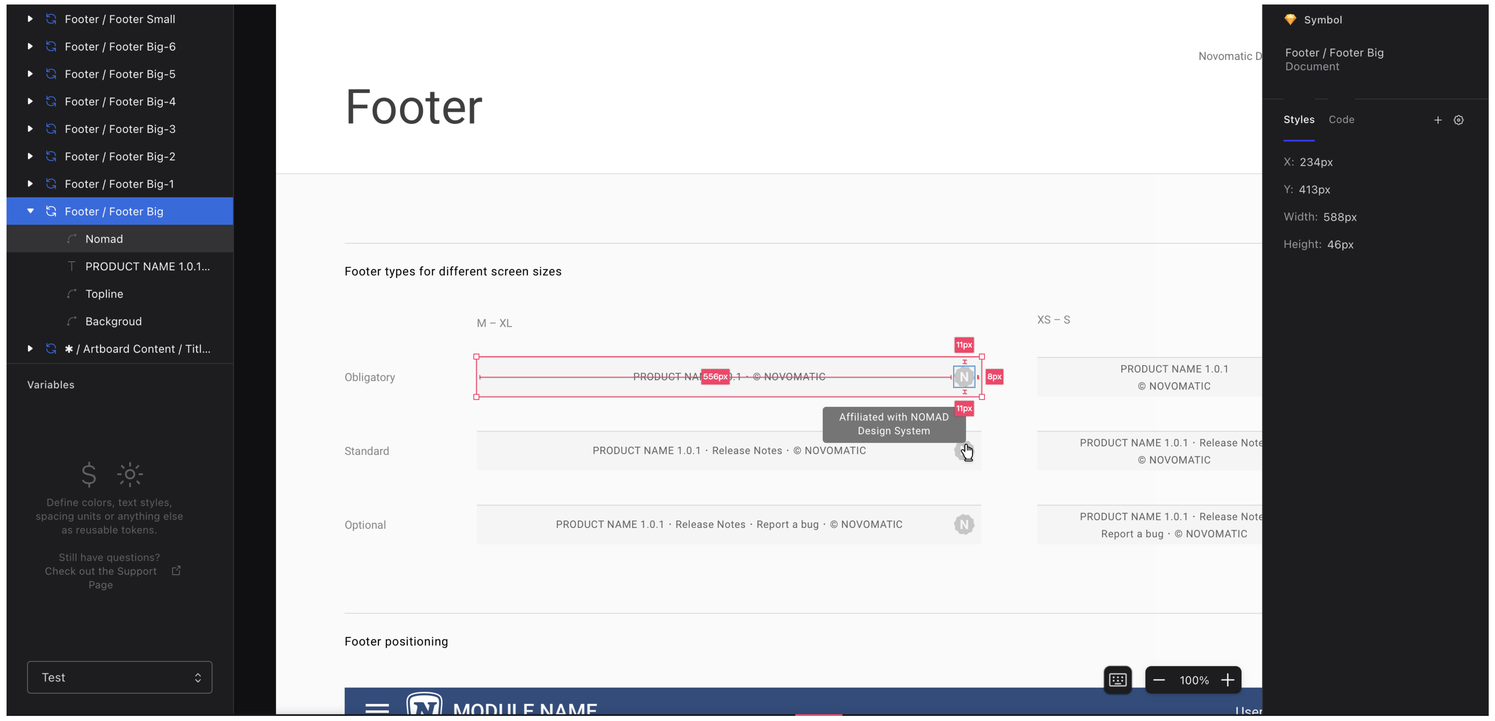
Let's go back to the story. At Novomatic, we constructed web applications using "Google Material Design" before Nomad, but it was far from a consistent and cost-effective approach. We also had a "Novomatic corporate design manual" for marketing materials. We took that experience and adapted our corporate colours for conventional web standards. Then we used the 'Material Theming' plugin for Sketch to build a design base for Nomad. And finally, we applied the theme to mui.com react framework.

The simplified workflow looked like this:

1. Firstly, we analyzed MUI components and what we need to develop as a component regarding previous experience. The first list was the MUI components which we had to style. I adapted artboards and designed additional variants for them in Sketch. The second list was the custom components. I built them from scratch in Sketch and aggregated them as symbols in the shared Sketch library.



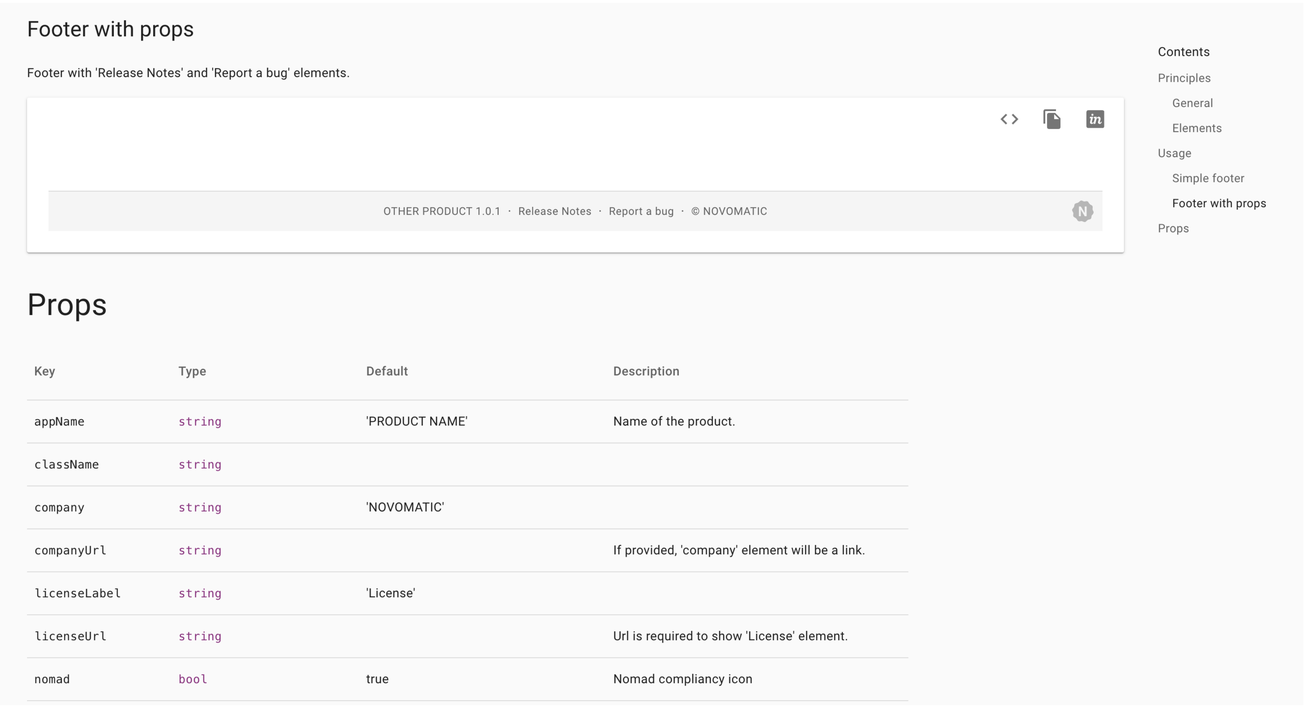
"Footer" one of the custom components in Sketch – 2017



"Footer" in Invisionapp – 2017

2. The next step is exporting assets for devs. We used the Invisionapp + Craft plugin for it. Before the development or adaptation, the designer made a quality check.

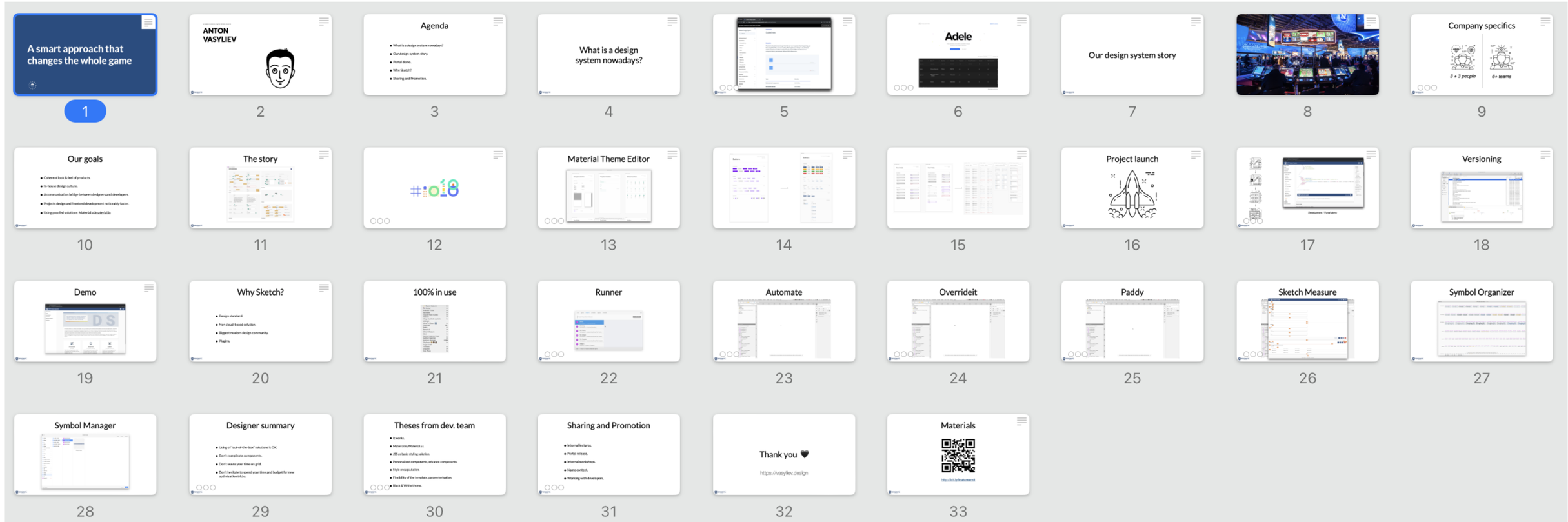
3. Last but not least is the coding and presenting step. We developed the portal, which includes usage and props documentation for our developers. It's the final place for testing and design acceptance. Then the component went to live with a package update.



"Footer" – https://nomad.novomatic-tech.com/advancedComponents/footer

Presentations

In 2019, we developed and tested 16 basic components and 23 custom components through current projects. It was the perfect opportunity for a public presentation. The Kraków EMIT community graciously provided me with a presenter slot at one of their events. It was a personal challenge for me, but I was thrilled to share the story of our successful product-building process. Additionally, our frontend developers from our Kraków office conducted a one-day "Introduction to Nomad" workshop at the Novomatic headquarters in Austria, inviting company developers from various regions.



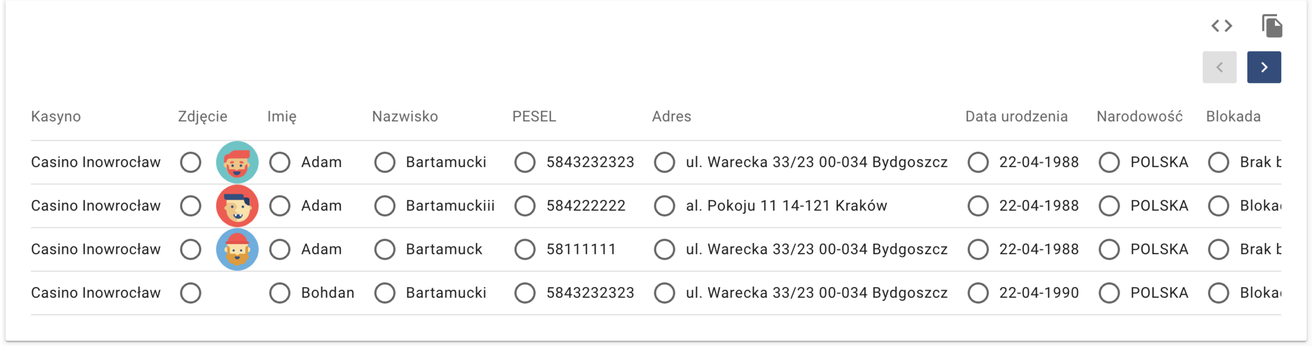
“A smart approach that changes the whole game” presentation – March 2019

Me during the “EMIT” presentation – March 2019

Support Project

In early 2020, Nomad shifted to a support project. During this time, we collaborated with developers to make minor component improvements and extensively tested Nomad. However, it's natural that we encountered numerous mistakes along the way.

1. Building complex components proved to be a trap. Both design and development teams faced challenges on this slippery road. We ended up creating numerous complex components to fulfill specific project requirements, only to find that they were rarely reused.
2. We unfortunately delayed some minor updates from MUI, which resulted in difficulties during migration to a new major version. For instance, implementing TypeScript for custom components became problematic due to this oversight.
3. In 2021, I made the mistake of not considering Figma as a competitor to Sketch. However, I now recognize the value of Figma and its ability to enhance productivity and streamline workflows between designers and developers.



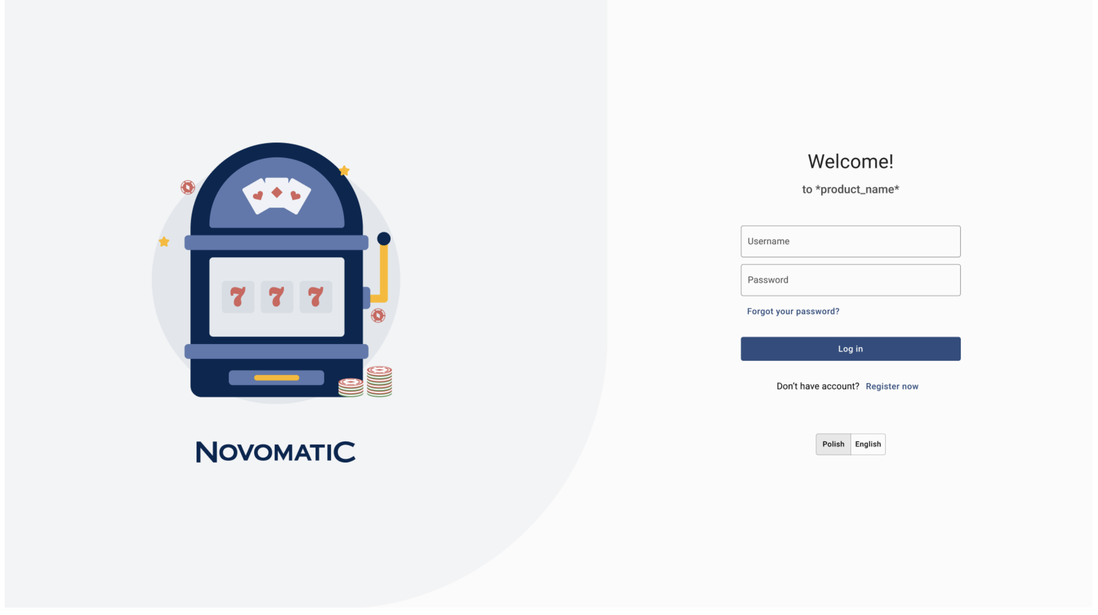
Example of component that should be a template

Current state

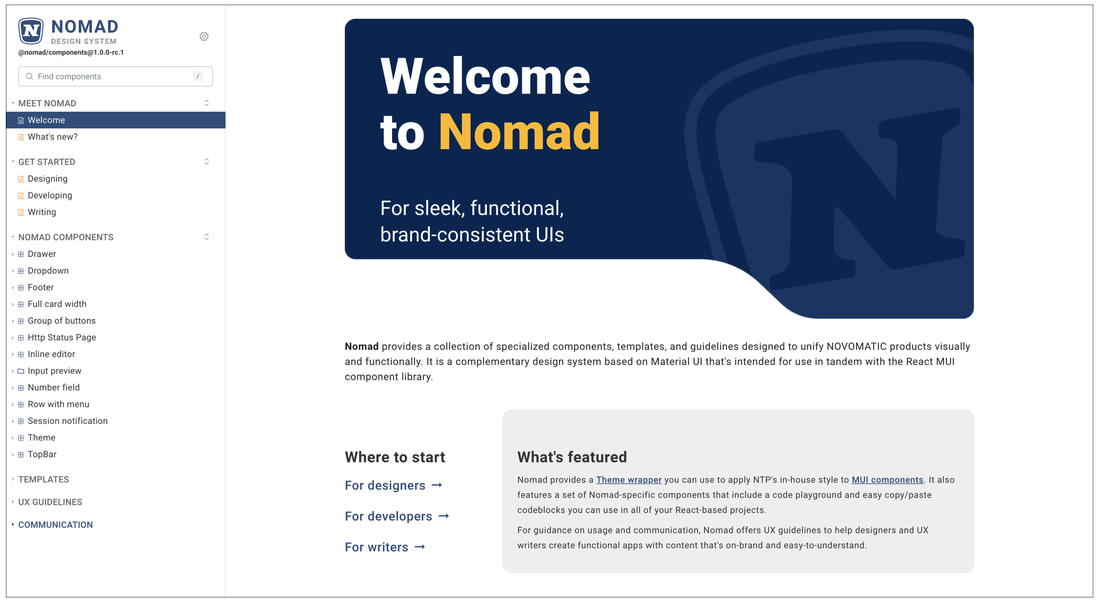
At the end of 2022, I decided to bring Nomad back, now as a Lead designer/Product owner. The current project has several goals, including:

- Conducting research with active users.
- Refining of components.
- Addressing technical debt by updating to the latest version of MUI.
- Migrating to Figma and supporting WCAG version 2.1, level AA criteria.
- Transitioning to Storybook for improved documentation accessibility.
- Developing new basic templates for developers.

However, the primary challenge lies in team motivation. Nomad is like a pet project for all of us, and each team member has their main responsibilities. My role includes engaging, leading, assisting, and motivating the team, as well as overseeing design and design acceptance tasks.



New page templates – June 2023



New welcome page – June 2023

Summary

I have some key takeaways from Nomad.

Firstly, it has provided me with continuous opportunities for self-development. I have learned the importance of actively listening to my teammates and users, and how to effectively incorporate their feedback and ideas. Previously, while working in outsourced companies or having limited involvement in a product, I had always aspired to contribute to the creation of something substantial and genuinely useful. With Nomad, I can experience that sense of fulfilment every day.

The second key takeaway is the significance of adopting a systematic and meticulous approach. Every aspect of a component's state interaction holds importance, necessitating careful examination and synchronization of appearance between design and code. This attention to detail demands time, and encourages a mindset focused on optimization. It constantly improves my design process.

For 5+ years, I have had more than enough different stories and technical nuances to share. Please don't hesitate to ask me anything about this project. ;)

Thank you, contact me on anton.vasyliev@gmail.com