

Towards a User-Centered Design Approach for the OpenEBench Benchmarking Platform

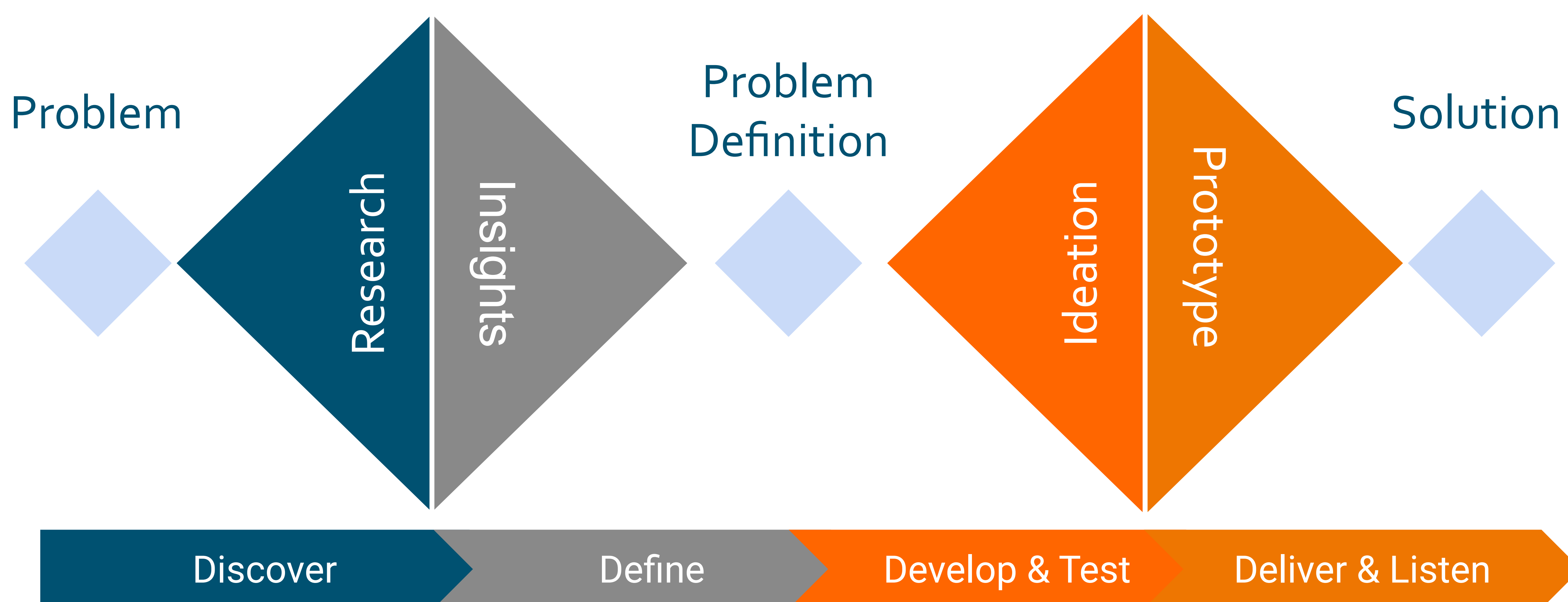
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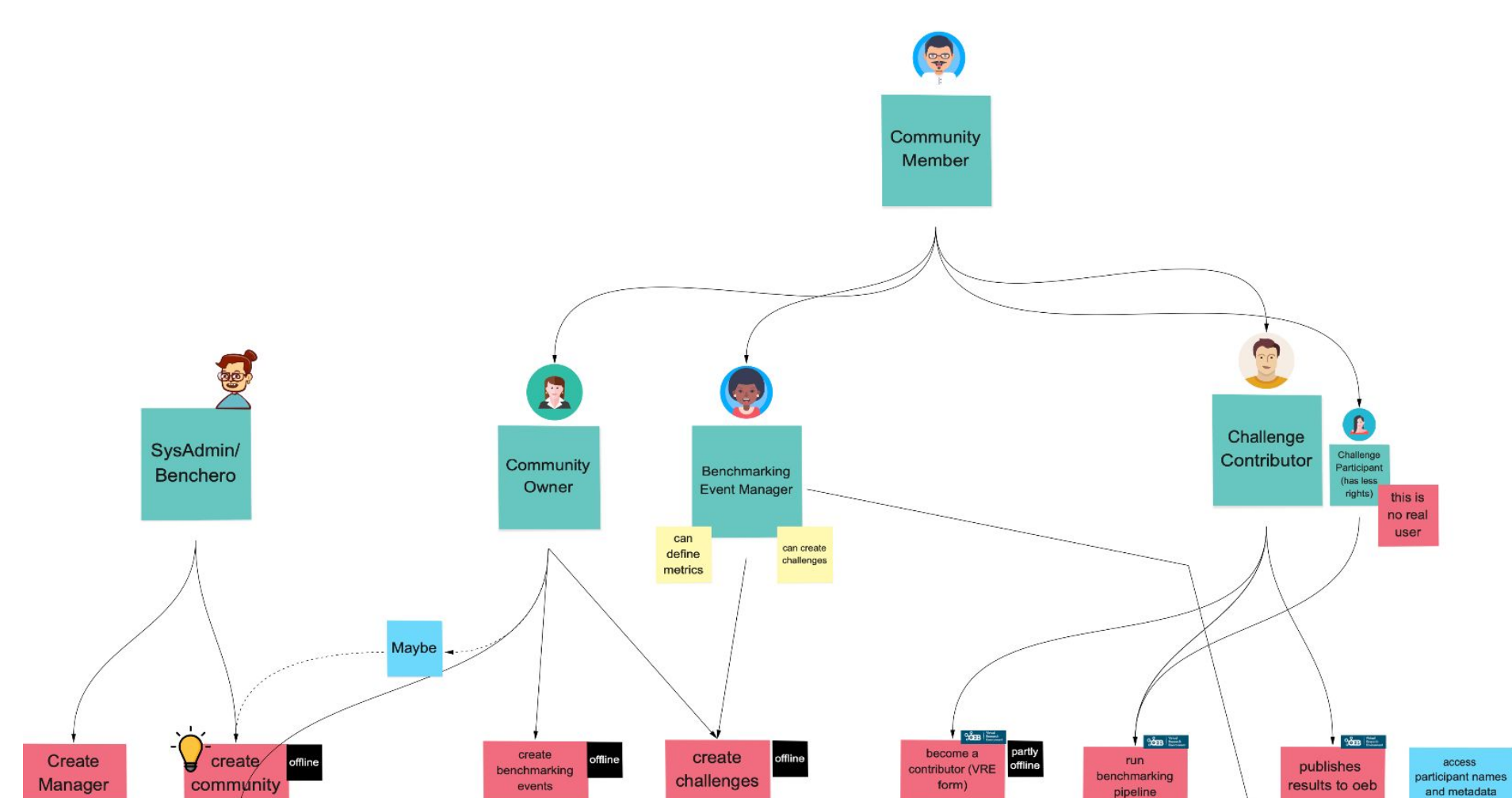


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Complex research software projects are frequently developed with a strong focus on technical requirements, mainly when the target group consists of developers and researchers. Focusing on technical requirements often leads to organically grown user interfaces and systems, which are difficult to use and navigate. User Experience (UX) issues can lead to a smaller user scope, potentially disappointed users, and lower content-quality perception, including the perception of hard-earned research results. We tackle this problem by applying user-centered design methods to OpenEBench to explore user needs, requirements, and context-of-use (divergent thinking). Afterward, we focus on implementation efforts (convergent thinking).



User Story Mapping



Matching of user types with tasks, goals and touch points

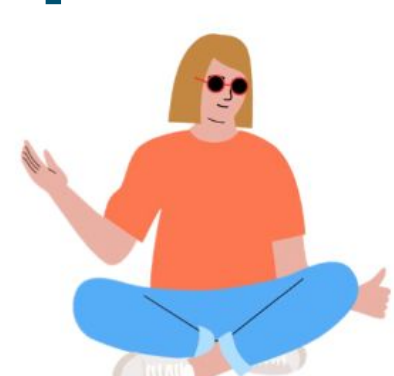
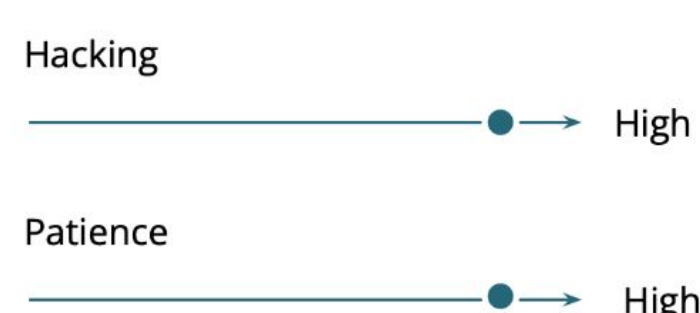
Qualitative Interviews

Semi-structured interviews: 6 current users, 3 future users, and 2 stakeholders about expectations and challenges in benchmarking

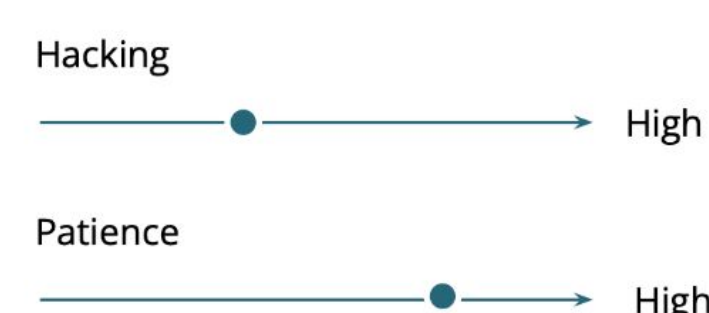
Deducted Archetypes



The Benchmarker
Developing and hacking her/his own tools the benchmarker wants to improve, compare, and publish results. An automated benchmarking solution makes her/his day



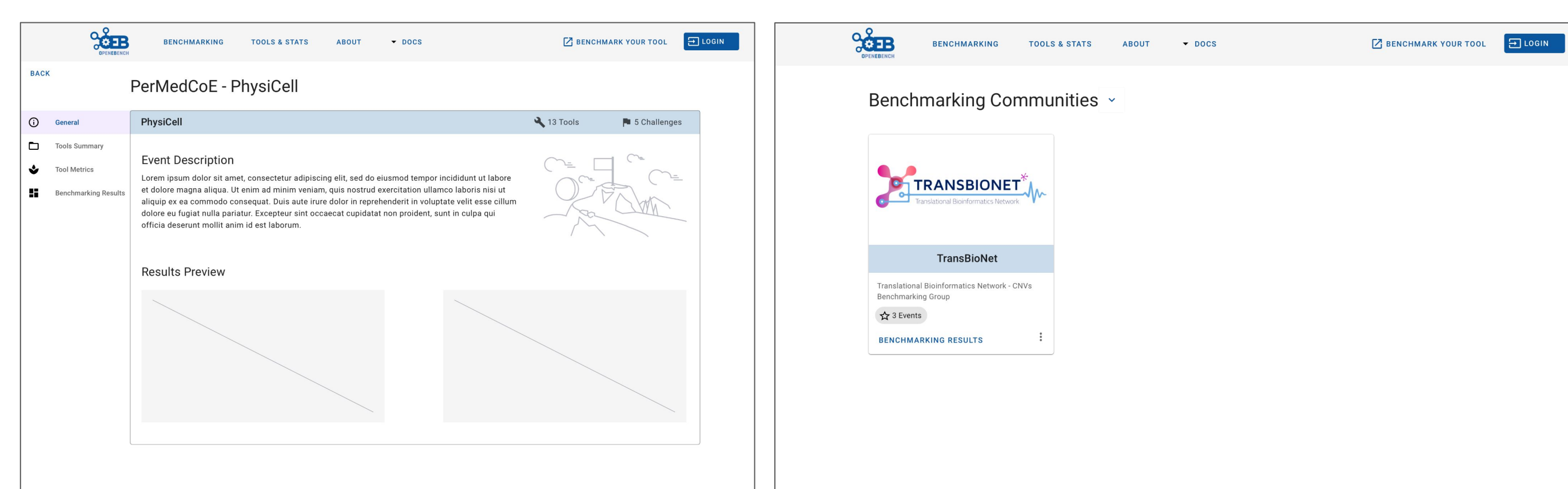
The Researcher
The researcher wants to find out which tool does the job. She/he wants to get an easy entry to compare tools/functions and find results. Maybe she/he even want to benchmark her/his own tool.



The Reviewer
Reviews research work, needs to access gathered data and benchmarking results



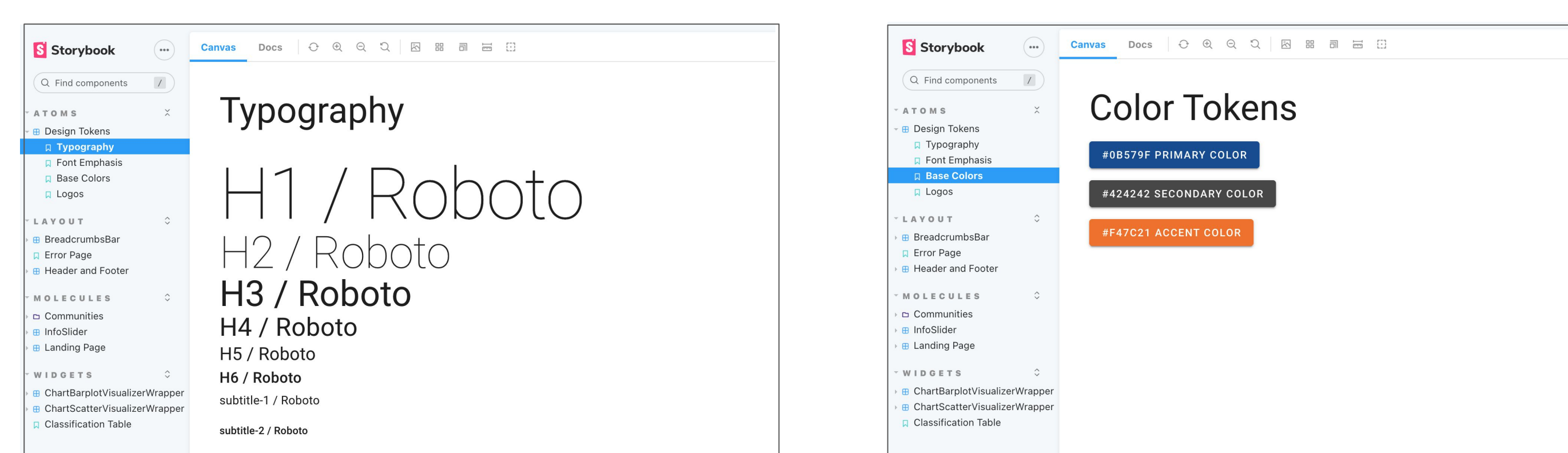
Lo-Fi & Hi-Fi Mockups



Low-fidelity Mockups: We used lo-fi wireframes as a cheap tool to validate assumptions and identify existing problems.

High-Fidelity Mockups: With Hi-fi prototypes we aimed at being pixel-perfect, close to the final product and show all the visual and typographic design details.

Design System

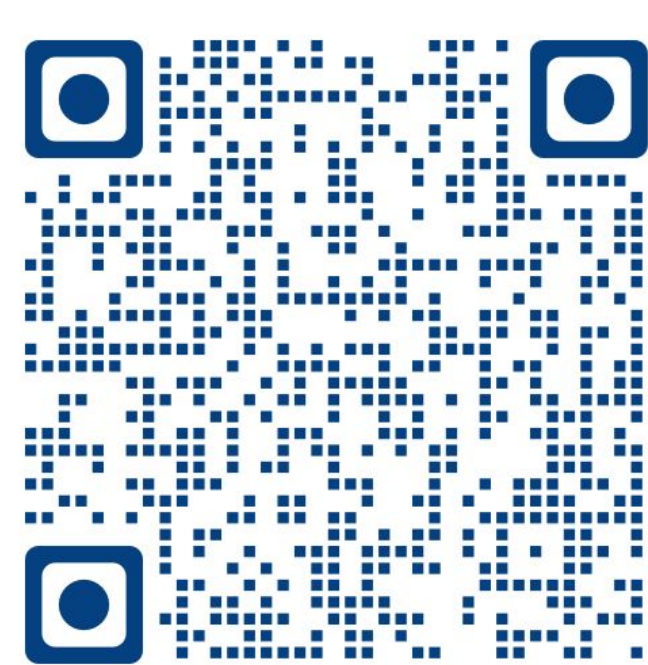


Testing and Feedback

- Application of an iterative approach to continuously improve solutions
- Continuous Deployment allows rapid iterations

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