

ABOVE. Final design mockup for an idea of UI Scalability`

DESIGNING A NEW CAD EXPERIENCE

GOALS

The goal of this project was to outline some strategies for UI Scalability in Onshape, a new Computer Aided Design (CAD) software that exists in the cloud. As the software started becoming more feature heavy, it became vital that some strategies were implemented to keep the UI clean, while managing the number of tools and features.

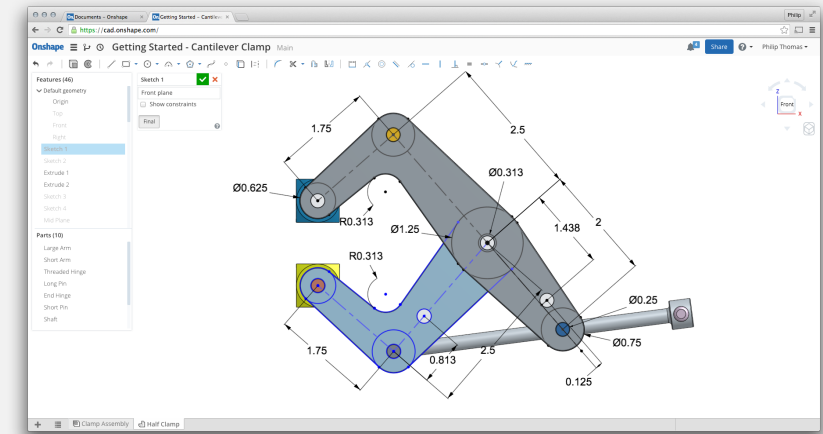
OUTCOMES

The result of this project was a set of mockups highlighting a set of design strategies that could help manage the new features and tools. The main idea is to split the toolbar into two levels. The most used tools would exist on the toolbar, and the rest of the tools could be found in a toolbox. Users can make a add or remove tools from the toolbar to customize it to their needs.



For a summer, I was at Onshape, a company working on CAD software, working on the UX and Product Definition Team. Over the course of 12 weeks, I interacted with a variety of customers, worked with developers on new features, and worked on some open ended design problems.

BELOW. The UI strategy for Onshape has been to keep the workspace as clutter free as possible. This becomes a harder once the number of features increases.



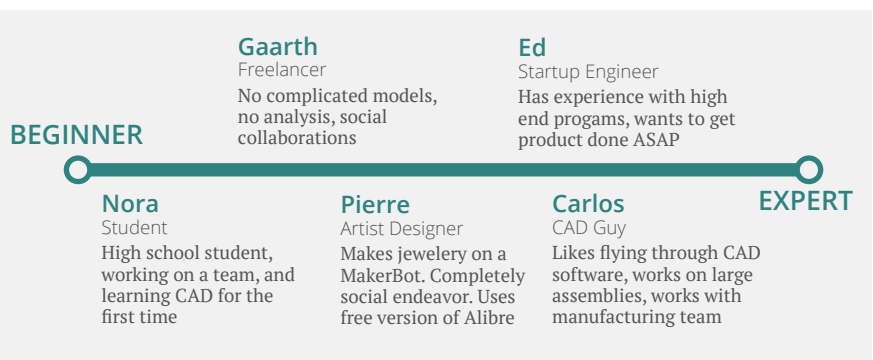
One project I worked on while at Onshape was designing strategies to manage UI Complexity. CAD software is very feature rich, and as a result, existing software in the space is often has too much clutter. Onshape wanted to keep their UI clean, while still supporting the variety of features their users expected.

The problem I explored was how to manage the UI complexity as the software scaled up to meet the needs the users.

1 THE USERS

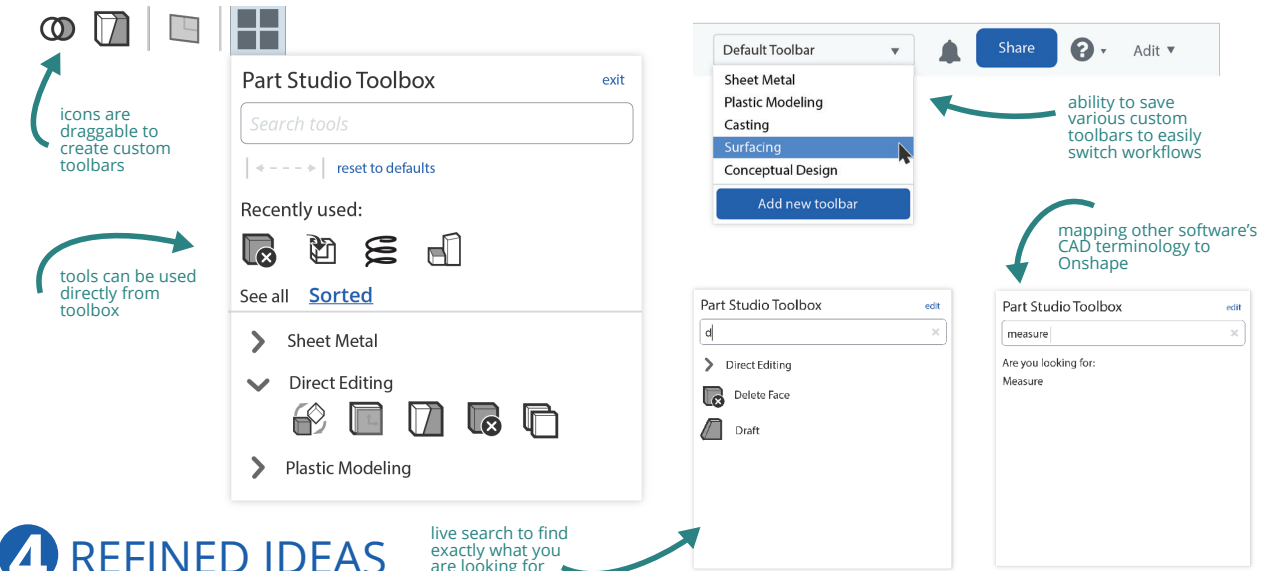
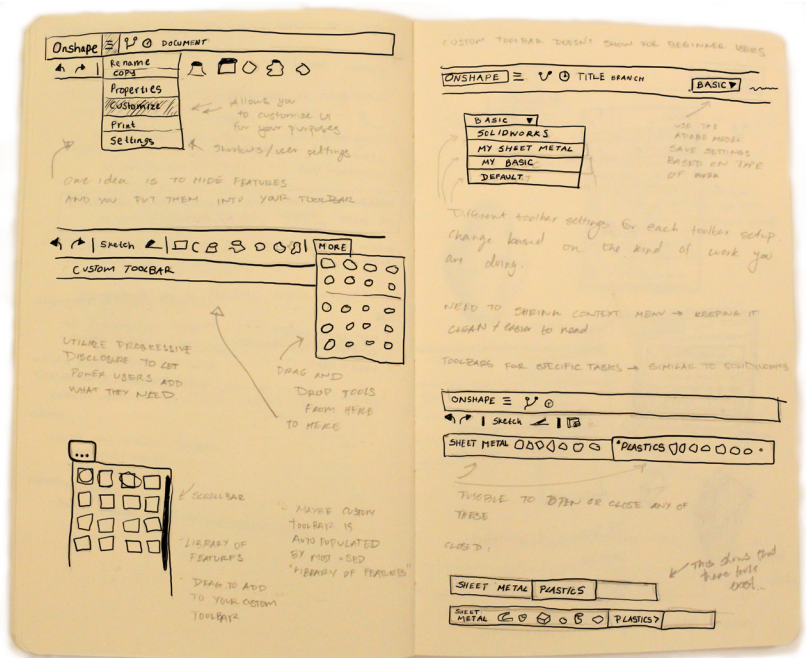
CAD users can generally be mapped to a beginner to expert scale. Each type of user (represented by a persona in the figure) has different needs and values with respect to CAD software that need to be met.

When designing a strategy to manage UI complexity, these personas were key to understand what features could actually help the user.



ABOVE. The key personas mapped to a basic scale of beginner to expert with respect to CAD software

INITIAL SKETCHES 3



4 REFINED IDEAS

The main idea was to create a “toolbox” where all less used tools would exist. From here, the users could use the tools or drag them into their toolbar to create a custom toolbar.