Mobile Extension of the SolidWorks Application

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Project Description

A typical SolidWorks user has at least one mobile device, such as a phone or a tablet. The goal of this project was to develop innovative methods to utilize such devices to make users more productive when they are working on a desktop. The team used a human-centered design approach to learn more about SolidWorks users, and then implemented solutions for extending the SolidWorks application into the mobile space in a real production environment.

Industrial Designers

Industrial designers value collaboration and prefer to work together when designing a new product, producing many rapid sketches as they build off of each other's ideas. However, they often have a hard time keeping track of and organizing the many sketches they create. In addition, they find that collaboration becomes difficult when they move from sketching to creating 3D models. At design reviews it is challenging for them to display and maneuver sketches and models.

Figure 1. A typical Industrial Designer workspace.

SketchID   Creativity and Collaboration for the Industrial Designer Network

SketchID is a mobile application developed by the Dassault Systèmes Olin SCOPE team to enhance collaboration among industrial designers themselves and the people they work with. Users will be able to use their smartphones or tablets to sketch, capture, share and collaborate on their ideas with fellow designers, supervisors, and clients.

SketchID Features

Sketching	• Users can create digital sketches on their mobile devices • Useful to capture daily ideas and inspirations • Users can take or import photos for use in sketches as references
Collections	• Users can group their sketches into collections • Facilitates organization by project or other categories • Subcollections within collections for sharing specific sketches and models with others
Annotations	• Others can provide feedback on sketches or models • Users can mark up sketches and write comments with coloring tools • Useful for remote feedback or communication during design reviews
Sharing	• Users can adjust collection permissions to cater to specific individuals • Permissions can be useful in allowing teammates to contribute to a collection while allowing a client to only view and annotate