Github with shape: use an online collaboration platform to implement version control to assist students in collaborative design

AUTHOR
Qiao Zhang

COMMITTEE MEMBER
Eddy Man Kim, Daniel Cardoso Llach, Daragh Byrne

ABSTRACT
The pandemic has forced a major transition in education: from face-to-face to online education, which poses challenges for students in collaborative design. Currently, the process usually involves copying design files and continuing to make modifications, which lacks effective communication when collaborating asynchronously from different geographic locations and may lead to irreversible changes. This work is to envision a new collaborative design paradigm that adapts to the functions and limitations of digitalization, which will introduce the concept of version control and integrate collaborative design with Web 2.0. This work aims to use an online collaboration platform to implement version control and enable the students to track model changes, identify key decisions, and enhance the efficiency and experience of collaborative design. The research begins with an investigation of online collaborative design tools and practices, followed by the build of the online collaborative platform prototype and its evolution in design and feedback iterations.