ScratchWork Tool

Overview
ScratchWork is a company created by Dr. John Stogin during his PhD. candidacy at Princeton University. ScratchWork’s premier application, ScratchWork Tool is a cross-platform whiteboard style application that simplifies writing on a computer. Our goal was to assist in the porting of the website application to the iOS platforms.

Objectives
The main focus of this project was getting the iOS application built and ready for use. We ported classes from the JavaScript codebase to the Swift codebase. Our expectations were to have an app that contains the core features of the ScratchWork website that can be used for demonstration. Having a finished product that can be released to the Apple App Store would be the future goal for this project, which would extend beyond the scope of this semester.

Approach
- Our team had weekly meetings with John over a video conference.
- We learned iOS development course through Udemy.
- We recorded our goals and updated status on Asana
- Scratchwork Tool’s source code is uploaded on Gitlab for version control.
- We used Socket.io for client-server communication.
- We worked on our own branch first and then merged it master.
- We got the chance to meet John Stogin, in person, when he visited Penn State.
- We tested our result by running the app on an iPad and it worked great.
- Our app was able to draw with four different sizes, four colors, and highlighters.
- We achieved John’s expectation of the project.

Outcomes
- Our outcome is an iOS app that provides similar functionality as the ScratchWork Tool web application.
- ScratchWork tool iOS App allows people to draw with four different sizes, four colors, and highlighters on their iOS device.
- Our iOS app is able to connect to a locally hosted server.
- Our project is a new product for ScratchWork.
- The sponsor saved resources, especially time that would have otherwise gone into writing the foundational structure for the iOS app, and in return gave us an opportunity to work on a industry-scale product.