Posabill, Posable Manikin

Overview
The PSU Open Design Lab required an application to use as a tool to introduce students to designing for human variability. The tool needed to be easy to use, accessible, and be capable of showing physiological correct manikins that could be manipulated within an environment. This application was built as an iPad app.

Objectives
The team’s objective was to create an iPad app that would allow for manikins to be drawn or chosen from a library and placed into an environment. There will also be multiple layers that would allow for manikins to be overlayed to see how they interact with the environment differently.

Approach
• Gather customer requirements and needs to decide exactly what is necessary
• Generate concepts that include multiple platforms and coding in different languages
• Search the market for existing applications that could possibly fulfil the customer needs
• Met with sponsor to better understand the background of the manikins and their expectations of us
• Settled upon developing for the apple iPad because it will fulfil the customer needs best
• Developed a simple prototype to show that the project was possible
• Further developed the application to meet all of the customer’s needs
• Performed usability testing as well as unit testing to verify the app meets requirements
• Fine tuned the application from the results of the testing
• Produced a final product to turn over to the PSU Open Design Lab for publishing

Outcomes
The application allows the following:
• Exploration of the basics of engineering for human variability
• Creation of anatomically correct manikins in environments which are realistic and adjustable
• Manipulate manikins and observe how they interact with the environment
• Compare multiple manikins using layers to see how they interact differently with the environment
• Export screen captures of creations to the iPad camera roll
• Easily obtainable from the Apple App Store for free