3D-Printing Cost Estimation App

Overview
Through the combined work of researchers at Penn State and Virginia Tech, an app has been created to provide users with a cost and build time analysis for 3D-printable parts. Penn State’s CIMP-3D group seeks feedback on the current mobile app from Penn State Students of all engineering backgrounds. Furthermore, this feedback should be used to create an updated version of the app.

Objectives
• Conduct application feedback testing with students of different levels of 3D-printing experience
• Create an updated version of the application based on the feedback
• Conduct additional testing to provide future recommendations for the the application

Approach
• Describe the approach your team took to solve the problem using a bulleted list of steps - For example, talk about how you gathered the customer needs and/or requirements
• Inquired about the sponsor’s goals and plans for improving the app
• Searched for similar apps on the Google Play Store to compare features and design
• Met with the previous developers of the app to hear their views on the state of the app
• Analyzed and cleaned up the codebase for the app to streamline development
• Conducted multiple classroom tests to gather feedback on the app
• Reviewed feedback, focusing on comments about app usability
• Studied the Google Material Design principles and applied them to updating the user interface

Outcomes
Finally, list the outcomes for this project making sure to clearly convey their implications for the sponsoring company:
• Cleaned up the project, reducing the size by 40%
• Wrote comments on important parts of the code for the convenience of future developers
• Added new features like the calculation history and color wheel to improve usability
• Redesigned the user interface, making the app more visually appealing
• Gathered feedback for future iterations of the app