

# HyperCalc: A Free Multi-Platform Conversion and Calculation Application

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The main problem for the experiment was: Can a conversion and calculation app be created without extraneous units, advertisements, and a need for a constant internet connection? I hypothesized that if an application were programmed in the proper way, without goal for monetary reward, then that application would be able to function in a more efficient way than the current apps available. HyperCalc is a conversion and calculation app created with basic and advanced units, no advertisements, and no requirement for a constant internet or mobile connection. The initial idea was to create this as simply an iDevice app, but this expanded into a multiplatform application for Macs and Windows PCs as well. There was success with this idea, as the software was not only created, but expanded past the original plan. In order to create the application, each individual frame for conversion, then a method of selection, was formed. After connecting all the frames, and coding the conversion rates, the application was compiled for each platform. The testing of the application proved successful, as it performed quickly and efficiently by reaching over 52 frames per second (FPS) during every trial, with nearly 60 FPS for both Windows PCs and Macs. The contributions of this project should allow for many people to be able to convert units quickly and adequately, without the hassle of advertisements or worry of persistent internet needs. This standalone application is independent and customizable as the user wishes, making for a powerful and useful tool.