PA1_AndrApp (Conversion Calculator)

This app allows the user to choose a unit to convert from to another unit, and has the option to compute reverse unit conversions from their initial choice. Many versions of unit conversions are available and reverse-compatible (preferably this would be working and available in the complete and finished version of the application). I wrote this application because I thought it would be neat, fun, and fairly interesting to learn how to program this Android application in C#. I thought it would be a solid beginner app to start learning the basics of Android development and starting programming in C#. The purpose of this app was to provide useful and convenient conversions for users who desired a quick solution to unit conversion without having to compute it themselves. I would have liked to have added binary/hexadecimal/decimal conversions as well as unit prefixes from the metric system.

System Design

The system requirements for this app requires Android 7.1.1 (Nougat) at least, and an Android smartphone with moderate memory. The user may use this application in any scenario deemed necessary, for instance, scientific and computational assignments and formulas. The user can input a decimal value in the first text field and choose a unit from the neighboring dropdown box. The user can also choose the unit they want to convert to in the second text field; the user can input these decimal values in the text fields by utilizing the pop-up keyboard integrated into the application. There is also a ScrollView that logs and saves previous inputted unit conversions from the user. A compute button is provided to compute the inputted unit conversion, which is then displayed in the second text field.

Usage

To use this application:
1. Deploy the app by tapping on the app icon.
2. In the blue section reading "Unit count of:" with the underline, insert the unit amount in a numerical value, and choose the unit type in the drop down box.
3. In the green section reading "Converts to:" also with the underline, simply choose the unit type only.
4. Once you have the unit amount and type set in the blue section, and the unit type in the green section set, press the grey button reading "COMPUTE" in order to compute the unit conversion.
5. The result will display in the underlined section in the green section next to "Converts to:".

6. You may input another conversion if you wish following the same steps, and your previous conversion will be saved and displayed under the Past Conversions section under the COMPUTE button.