

Tip Calculator

Installation and User Manual

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[https://github.com/TeamPracticalProjects/Tip_Calculator/Terms of Use License and Disclaimer.pdf](https://github.com/TeamPracticalProjects/Tip_Calculator/Terms_of_Use_License_and_Disclaimer.pdf)

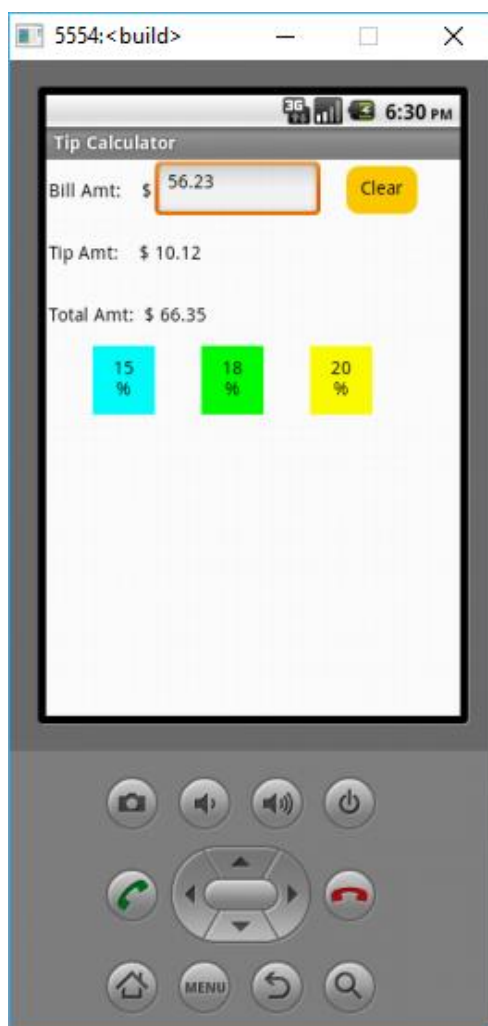


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1. Introduction.

The *Tip Calculator* is a simple app for computing restaurant tips and totals (tip + bill amount). The app allows you to calculate tips and totals for 15%, 18% and 20% tip amounts at the tap of a button. This document provides you with instructions to install the app on your Android device and further instructions about using the app.

The *Tip Calculator* is only available for Android devices at this time. We hope to release iOS (iPhone, iPad) versions later this year.

The *Tip Calculator* only supports US dollar currency at this time. Source code is available for those who may wish to alter the app to compute and display other currencies.

The *Tip Calculator* app is an open source project. You do not need source code to install and use this app. However, source code (“Tip_Calculator.aia”) is provided under an open source, non-commercial license so that you can learn about how the app works and so that you can modify the app under the terms of this license. License information and other terms of use and limitations can be found in the document:

https://github.com/TeamPracticalProjects/Tip_Calculator/blob/master/Terms_of_Use_License_and_Disclaimer.pdf

2. Installing the App on Your Mobile Device.

The installation file for this app is located in this repository under “software > compiled” and is called “TipCalculator.apk”:

https://github.com/TeamPracticalProjects/Tip_Calculator/tree/master/software/compiled

Download this file to your computer in some location that you can find (such as the desktop). Next, you need to transfer this file to your Android mobile device. There are several ways to do this. You can upload the .apk file to an Android device via USB cable from your computer, or you can e-mail the .apk attachment to yourself (and to any other people who will be installing this app on their device). Either way that you do this, each person should place this .apk file on their mobile device in a location that they can find using the *MyFiles* app on their device. For people that have an SD card installed on their device, we recommend placing the .apk file in the root directory of the SD card, i.e. /SDcard. However, the actual file location does not matter, as long as the device user can find it after saving it there.

Each device user must then use *MyFiles* to locate the .apk file on their device and tap on this file. The app will then install on the mobile device. **NOTE:** the Android OS will likely pop-up a message about the app not being “trusted” or from an “unknown source” and some warning about damage that untrusted apps can do to the device. Follow the instructions on this popup message to install the app anyway (it is safe!)¹. The app should install just fine.

After installing the app on each device, each user may wish to create a shortcut to the app on their home screen. Use Android’s app explorer to find the app, *tap and hold* the app icon until a graphic of the home screen appears and drag the app icon to the place on the home screen where the user wants the short cut. This places a shortcut to the app on the home screen; the app is still available via the Android app explorer.

3. Using the App.

Figure 1 shows the *Tip Calculator* app screen and identifies the various components on the screen. Each component is described further, below:

¹ This usually means going to “Settings”, then “Security” and checking the box next to “Unknown Sources”. The details vary slightly with different versions of the Android OS. See <http://appinventor.mit.edu/explore/ai2/share.html> for further details.

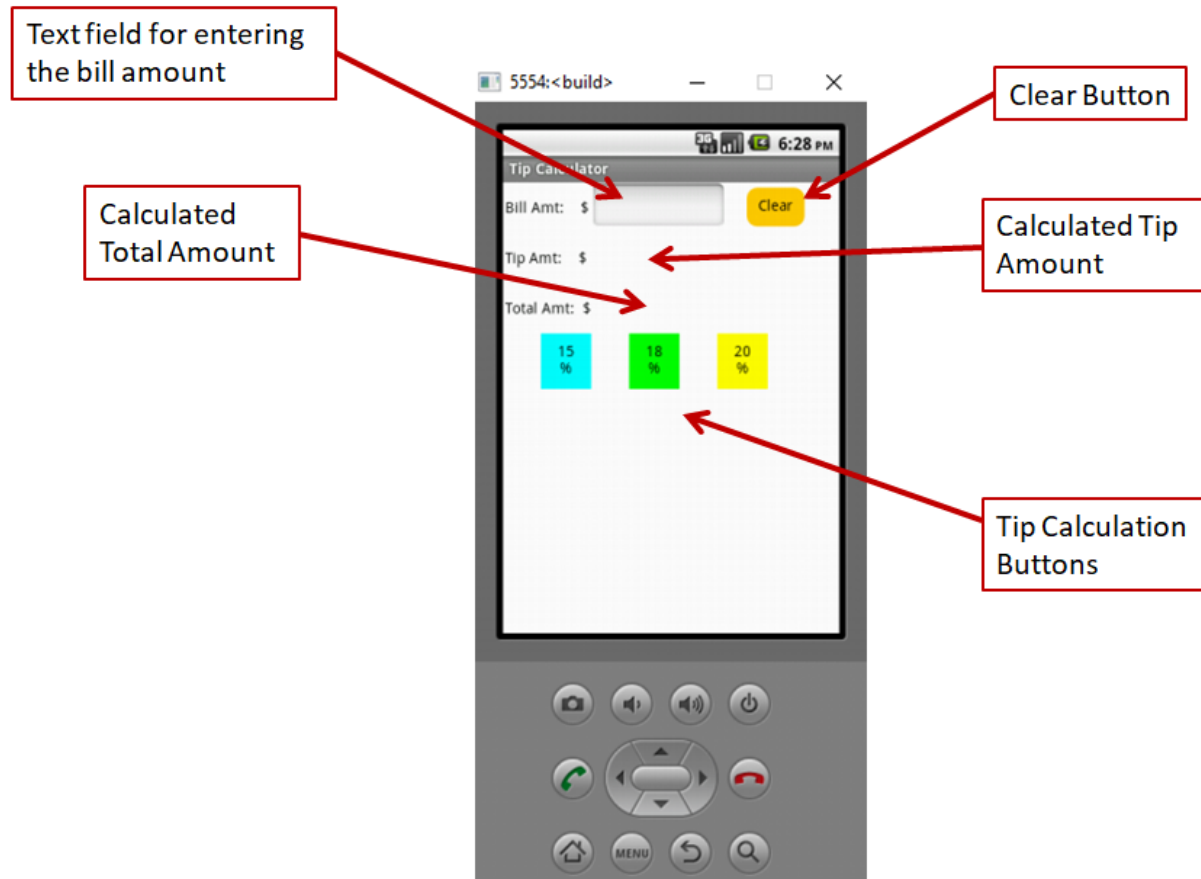


Figure 1. Tip Calculator App Screen

TEXT FIELD: The text field at the top, middle of the screen is where you enter the total bill amount that you want to calculate the tip and total for. Tap in this text field and the numeric keypad will pop up on your mobile device screen. Use this numeric keypad to type in the bill total.

CLEAR button: Tapping on the CLEAR button will clear out the text field. Tap this button if the text field has some amount already in it and you want to quickly clear this out so that you can enter a new amount. The CLEAR button does not clear out any previously calculated tip and total amounts.

TIP Amount: The app will calculate the tip amount when you tap on any of the 15%, 18%, or 20% buttons. The calculated tip amount will appear here, rounded to the nearest penny, so that you can enter this amount directly on to a charge slip.

TOTAL Amount: The app will calculate the total amount to pay, which is the sum of the bill amount and the tip amount. This is the total amount that you enter onto a charge slip or pay with cash.

Tip Buttons: There are three tip buttons: 15%, 18% and 20%. Tapping any of these buttons will calculate the tip amount by multiplying the value in the text field by the appropriate tip percentage and displaying the result rounded to the nearest penny. You can tap on several of these buttons sequentially if you want to see what each tip and total amount will be.

You use this app by entering the bill amount (total on your bill) into the **text field** and then tapping on one of the **Tip buttons**. The tip amount and the total amount are then displayed in their respective locations on the app screen.
