**Tip Calculator FAQ**

1. **How do I add "placeholder" text to a text field?**

One way is to select the object and change the Placeholder value via Attributes Inspector.

1. **How do I make text smaller if necessary (to fit inside a view)?**

Google 'swift autoshrink text'. Be careful about the time period of the results you view.

1. **Why do I get error "Unexpectedly found** nil **while unwrapping an Optional value: \_\_\_"?**

This can happen when you *force unwrap* an Optional (an Optional is a wrapper around an object that may or may not be present) with the ! operator. If the optional value ISN'T present, it will be nil, and your program will crash.

There are MANY places optionals could exist in this program, but in my program it happened when the user entered a bill amount in the appropriate text field then *modified* the bill amount (rather than deleting it entirely). The problem was the new bill amount contained a "$" character (that I added programmatically for display purposes), causing the attempt to parse the text as a Double to fail (thus the optional was nil). I fixed this problem by removing all non-numeric characters from the String (google it) before parsing it. This specific problem may not happen to you, but the way you go about fixing it is similar (ensure the component causing the crash is not nil for another reason).

1. **Can I add other tip amounts?**

Sure, you cheapskate.