**Tip Calculator**

In this project you will create a tip calculator using some new types of controls, Stack Views, and Autolayout / constraints to make it adapt to any display size.

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| Graphical user interface, text, application  Description automatically generated | 1. Create the 'title bar' (a UILabel, not a "real" title / navigation bar if you're familiar with those), with text "Tip Calculator" at the top of the screen.    1. Use Autolayout / constraints to fully constrain it, resolving any constraint issues before moving on. 2. Create a Stack View for the bill amount input.    1. Inside this should be a label and a text field. 3. Create a Stack View for the tip amount input.    1. Inside this should be a label and a segmented display (a UISegmentedControl object), with 3-4 segments for the tip amounts (e.g. 15% / 18% / 20%). 4. Embed the previous two Stack Views inside a Stack View. Constrain it as you see fit; resolve any constraint issues before continuing. 5. Create a Stack View for the calculated tip amount labels. 6. Create a Stack View for the calculated total bill amount labels. 7. Embed the previous two Stack Views inside a Stack View. Constrain it below the inputs view. 8. Embed the inputs stack and the outputs (calculated amounts) stack into a Stack View. Constrain. 9. Ensure that your UI works on any size phone display. Fix any issues you have before proceeding. 10. Add a Reset button at the bottom that should reset the calculator to its initial state. Constrain. 11. Add the outlets / responder functions / code to make it operate. Some tips in no particular order:     1. Use String(format: "%.2f", amount) to format a floating point value to two decimal places.     2. UISegmentedControl objects have a selectedSegmentIndex property that gives the index of the currently selected segment. |

**Extension Ideas**

* Add a color scheme.
* Add a dark mode option.
  + For example, you could have a switch at the top right corner of the app that will toggle dark mode on and off.
* Add an option 'Other' to the segmented control. If selected, your app should allow the user to specify the tip amount in some fashion (e.g. text field input, slider, etc.).
* Make a currency exchange calculator.
  + For example, your app could convert from US dollars to Yen, Pesos, Rupees, Bitcoin, etc.