The ButtonPad in the calculator tutorial uses 5 HStacks in a singular VStack to create the grid of buttons displayed on the UI. The app displays 19 buttons and utilizes enums to differentiate one button from another, get its corresponding button text, get its corresponding foreground color, and get its corresponding background color. Using enums allows us to create a set of named values instead of us having to code 19 unique buttons with custom titles and UI features. Enums are an important aspect of SwiftUI which are often used to represent a finite set of options or states, such as different UI elements or different modes of an app. In this case, it’s used to represent the buttons on the button pad. In general, in swift, you can create an enum by using the "enum" keyword, followed by the name, and then a list of the possible values that it can have. For example…

enum Weekday {

case monday

case tuesday

case wednesday

case thursday

case friday

}

This example sets a case for each day of the week rather than using custom vars. The calculator sets it’s button types in the same way. Like…

enum ButtonType {

case digit(\_ digit: Digit)

case operation(\_ operation: ArithmeticOperation)

case negative

case percent

case decimal

case equals

case allClear

case clear

}

This sets a case for each digit, operation, and other buttons on the calculator. Enums can actually have enums within enums which allows for more values to be enclosed in a singular enum.