SUMMARY OF LEARNINGS

FEBRUARY 7-14, 2023

CONCEPTS DISCUSSED

Destini App

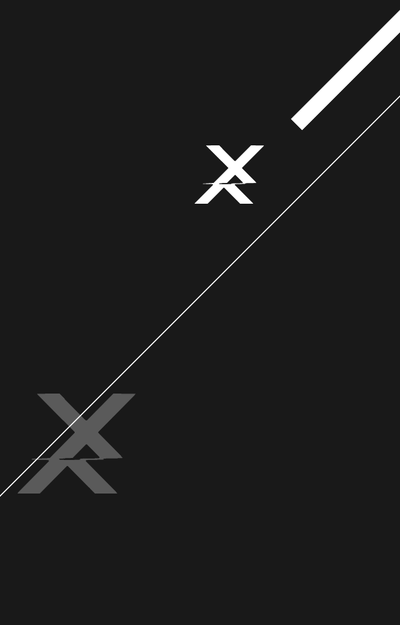
- Implementation of MVC design pattern

BMI Calculator App

- UI sliders
- Swift classes, structs
- Creating UI programmatically without Storyboard
- Multi-screen apps using segues
- Advanced features of Optionals
- Color Literals

CHALLENGE

Conversion of numeric values into words



MyPlayground

```swift

import Foundation

// creates new instance of NumberFormatter which converts between numeric values and their textual representations (NSNumber objects)
let formatter = NumberFormatter()
// numberstyle is a property of the class, we set this property to spellout which spells out the numbers
formatter.numberStyle = .spellOut

let number = 1.01
//sets the first to the (whole number) integer portion of the number
let first = Int(number)
//to get the cents portion of the number, we let the first (int number) be subtracted by the first (double number) then multiplied to 100 then rounded and converted to int
let second = Int(round((number - Double(first)) * 100))

// formats first into its spelled-out representation using the fromatter(instance) created. The string(for:) function takes an NSNumber object as its parameter, so we first convert first to an NSNumber using the NSNumber(value:) initializer. The result is a string representation of first in its spelled-out form, which is then assigned to a variable named spelledOutNumber. The exclamation mark at the end of the line is a force-unwrapping operator, which force-unwraps the optional string returned by the string(for:) function.
var spelledOutNumber = formatter.string(for: NSNumber(value: first))!
```

```
if second == 0 {
    spelledOutNumber += " pesos only"
}
else if first == 1 && second == 1{
    spelledOutNumber += " peso and " + formatter.string(for: NSNumber(value: second))! + " cent
        only"
}
else if first == 1 && second != 1{
    spelledOutNumber += " peso and " + formatter.string(for: NSNumber(value: second))! + " cents
        only"
}
else if second == 1 && first != 1{
    spelledOutNumber += " pesos and " + formatter.string(for: NSNumber(value: second))! + " cent
        only"
}
else {
    spelledOutNumber += " pesos and " + formatter.string(for: NSNumber(value: second))! + " cents
        only"
}
print("\(number) spelled out is \(spelledOutNumber).")
print(spelledOutNumber)
```