Tip Calculator Udemy Course

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# Part I – Project Creation

* Launching XCode
  + Making sure running latest version
* Creating new project
  + Single View App
  + Product Name (what you want app to say)
  + Team (figure out how it is to new user)
    - Explain developer perks
  + Explain using Storyboard, but new thing called SwiftUI
* Save to a spot you remember

# Part II – Navigating XCode

* Explain Project hierarchy
* App Delegate, Scene Delegate, View Controller and Storyboard
* Assets
* Info.plist

# Part III – Variables, Functions, Control Statements, and Guards

* Show in Playgrounds
* Variables
  + Var vs Let
  + Differences
  + Similarities
  + How to assign, reassign
* Functions
  + Private vs public
  + How to create
  + Returning functions vs Void functions
  + Parameters
  + IB Functions (brief, show in app development)
* Control Statements
  + Switches, loops
  + Creating and assignment
  + How to use
* Guards
  + If else
  + Guard statements
  + How to use
  + When to use
  + Talk about optionals

# Part IV – Storyboard

* What is storyboard
  + How can you use it
  + Why do you use it
  + When do you use it
  + Different elements and objects in storyboard
* Figuring out which objects we need
* Laying objects out
* Running App and showing misalignment
* Explaining Autolayout
* Using autolayout
* Configuring variables to the objects in storyboard
* Example on changing elements data

# Part V – Calculation Method

* Creating an IBAction and explaining what it is
  + Print statement when tapping on it
* Ask them to try it on paper before code given variables
* Creating a calculate method that will run calculation
* Explain returning tuples, show how parameters work again
* Return the value and display in print statement

# Part VI – Displaying Tip and Total

* Building out the segment control function
  + Explain switch again
  + How we assign the value and return at same time
  + Why we’re returning one
* Building out the IBAction function
* Showcasing how to use guard statements with textfield text
* Creating variable to how calculated amount and grabbing tip and total from it
* Creating an extension to string, don’t go to deep into it
* Using extension to assign to our labels

# Part VII – Handling User Error

* Explain how the else part of guard and how it doesn’t do much right now
* How it would be nice to alert user
* Create alert function and talk about it
* Show textfield delegate so it knows how to communicate when asked
* Present the alert and how that’s done
* Assign it in the else part

# Part VIII – Finishing Touches

* Create button roundness and show other methods in there
* Show touchesbegan method and how to get rid of keyboard when not being used
* Sum up everything
* Assign extra challenges
* Thank them