The Search is Over! Quickly Build a Searchable List Filter Using SwiftUI

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Let's Dive Right In What Problem Are We Solving?

- Demo
- Problem: how to build a searchable filter on a list
 - o Do this quickly, easily, and with minimal code
- Can you imagine building this in UIKit?!

The Problems with UIKit More Code, More Problems

- How to build that list without so much code?!
- UITableView, anyone?
- Don't forget delegates like UITableViewDelegate, UITableViewSource, etc
- How to update UI easily when data changes?
- SwiftUI to the rescue!!

Overview

- Demo Part I: Defining the Problem
- How does SwiftUI make solving my problem easier?
- Code Overview
- BONUS: Demo Part II
- Key Highlights in SwiftUI Solution
- Questions?

Code Overview

- UI:
 - ContentView, FilterView, CheckboxView
- Filtering:
 - CheckboxView: toggle()
 - FilterViewModel: checkFilter()
- Update UI:
 - FilterViewModel: @Published filteredListResults
 - ContentViewModel: (listening for changes to & displaying updated)
 filteredListResults
 - 0

BONUS: Demo Part II

- Surprise! 👚
- Your gift for staying until the end: None of the Above filter

Key Highlights in SwiftUI Solution

- A LOT less code to build the UI
- Making use of Set instead of Array to build filter list
- Using Swift functional method filter() makes actual filtering easy!

Key Highlights in SwiftUI Solution

- @Published filteredListResults: list view listens for changes in filtered data and updates itself without messaging list view directly
- @Published noneFilterSelected: filter checkboxes listen for changes in None filter and update themselves without messaging checkboxes directly
- NO completion handlers or delegates needed!!
- SwiftUI FTW! 6 2

Resources

- Source code for project:
 https://github.com/vuinguyen/SearchIsOver
- Checkbox code:
 https://makeapppie.com/2019/10/16/checkboxes-in-swiftui/

Questions?

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