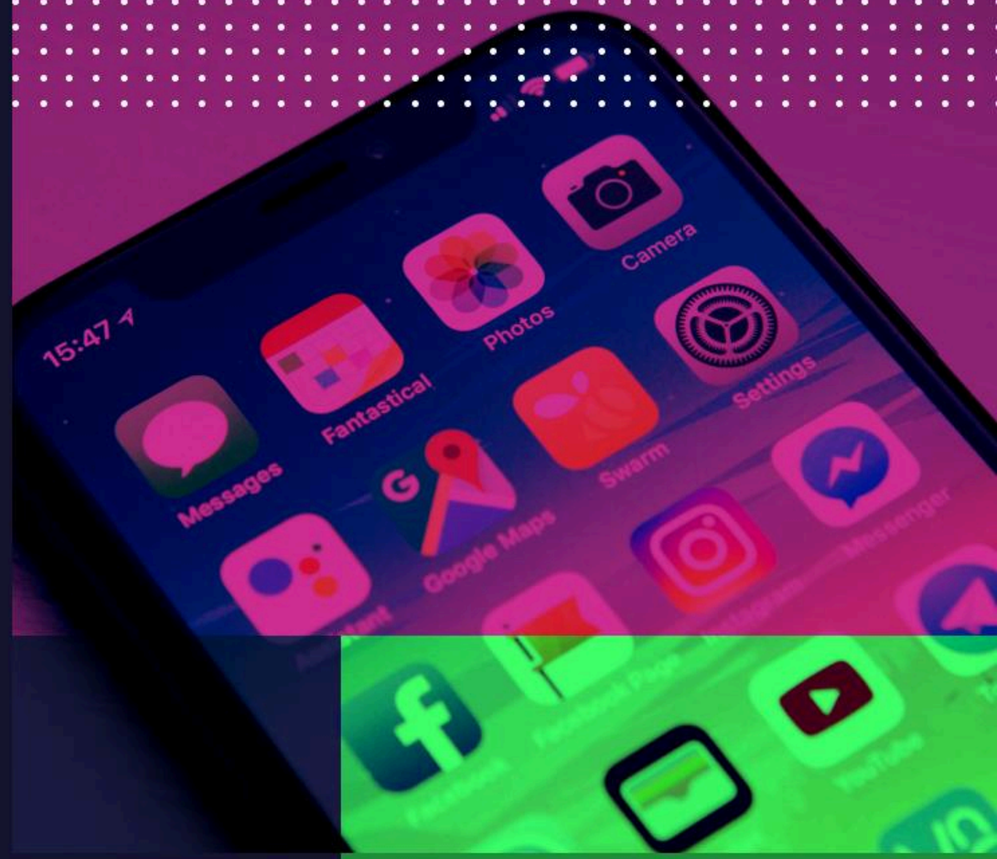
Riga TechGirls

WORKSHOP

How to build an iOS app completely from scratch



Kristaps

- Co-founder, Swift developer at Qminder
- Speaker and mentor
- Open source and inclusivity

Alina

- Swift developer at Mapon
- Open-minded
- Explorer

Kārlis

- Mobile developer at Accenture
- iOS guest lecturer at Vidzeme University
- Good guy

Mr. Byte

Plan

What is iOS development? 📱

Lunch 🍕

Build an app 📲

January 9, 2007

2.2 billion

2.2 million

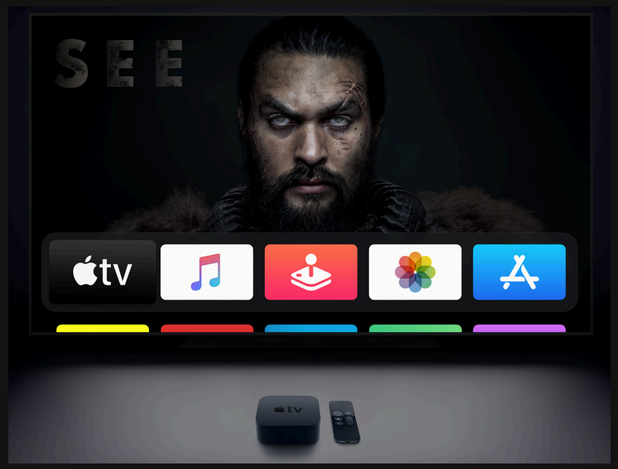
120$ billion

Mac

iPad

iPhone

Apple Watch



Apple TV

Swift

June 2, 2014 / December 3, 2015

Developed by Apple

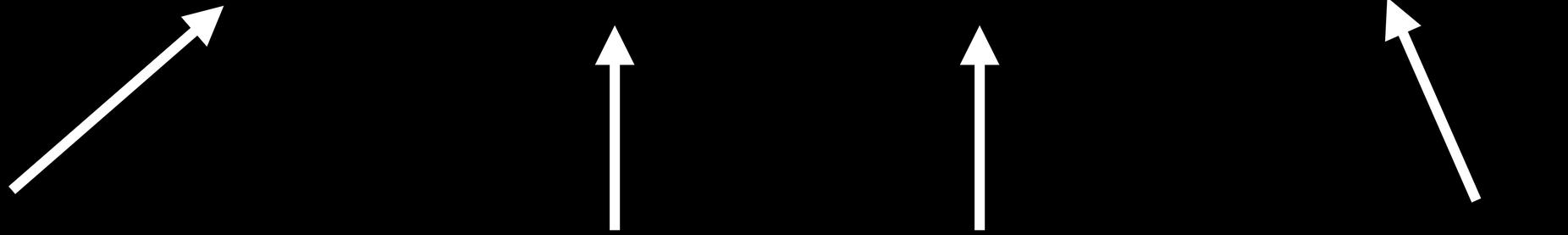
General purpose language

*“A **programming** language is a vocabulary and set of grammatical rules for instructing a computer or computing device to perform specific tasks.”*

Programming ABC

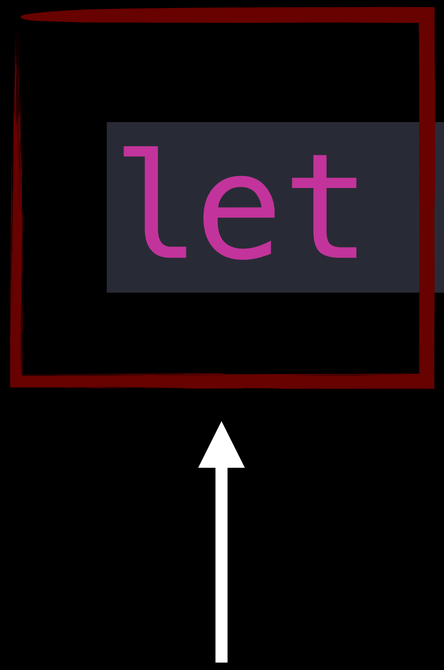
Variables

```
var x: Int = 1
```



Constants

```
let pi: Double = 3.14
```



keyword

Different variables

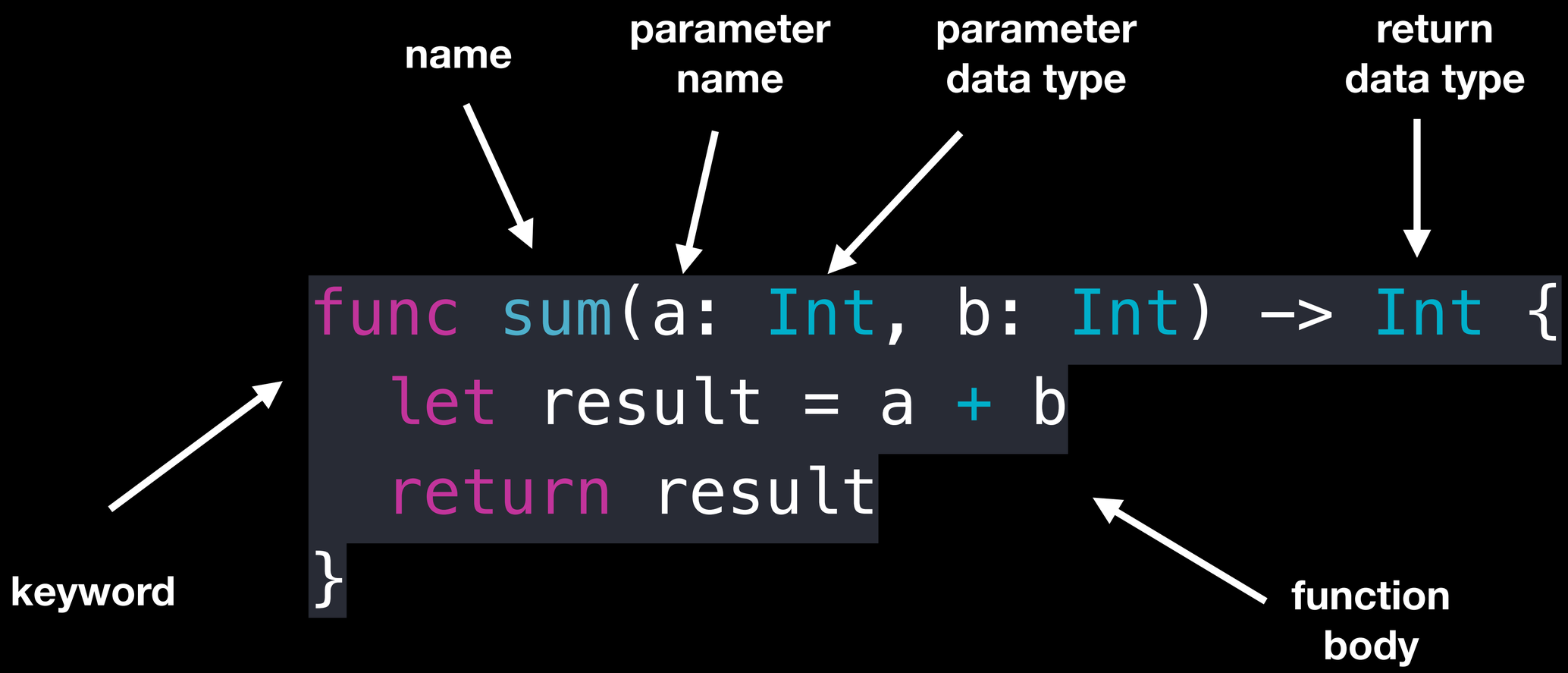
```
var number: Int = 13
var decimal: Float = 2.76
var name: String = “RigaTechGirls 👩‍💻"
var isItSpringNow: Bool = false
```

Optional variables

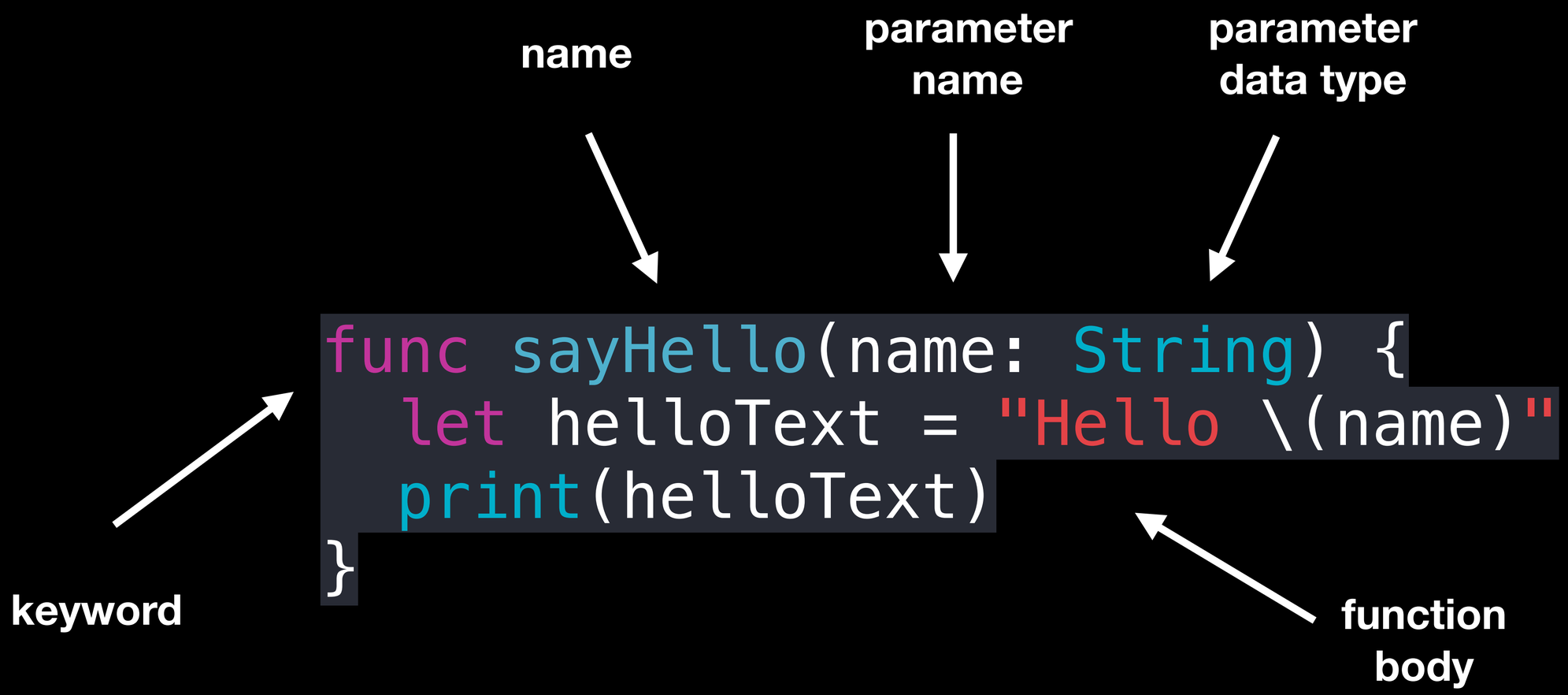
```
var myOptional: Int? = 4
```

```
var myOptional: Int? = nil
```

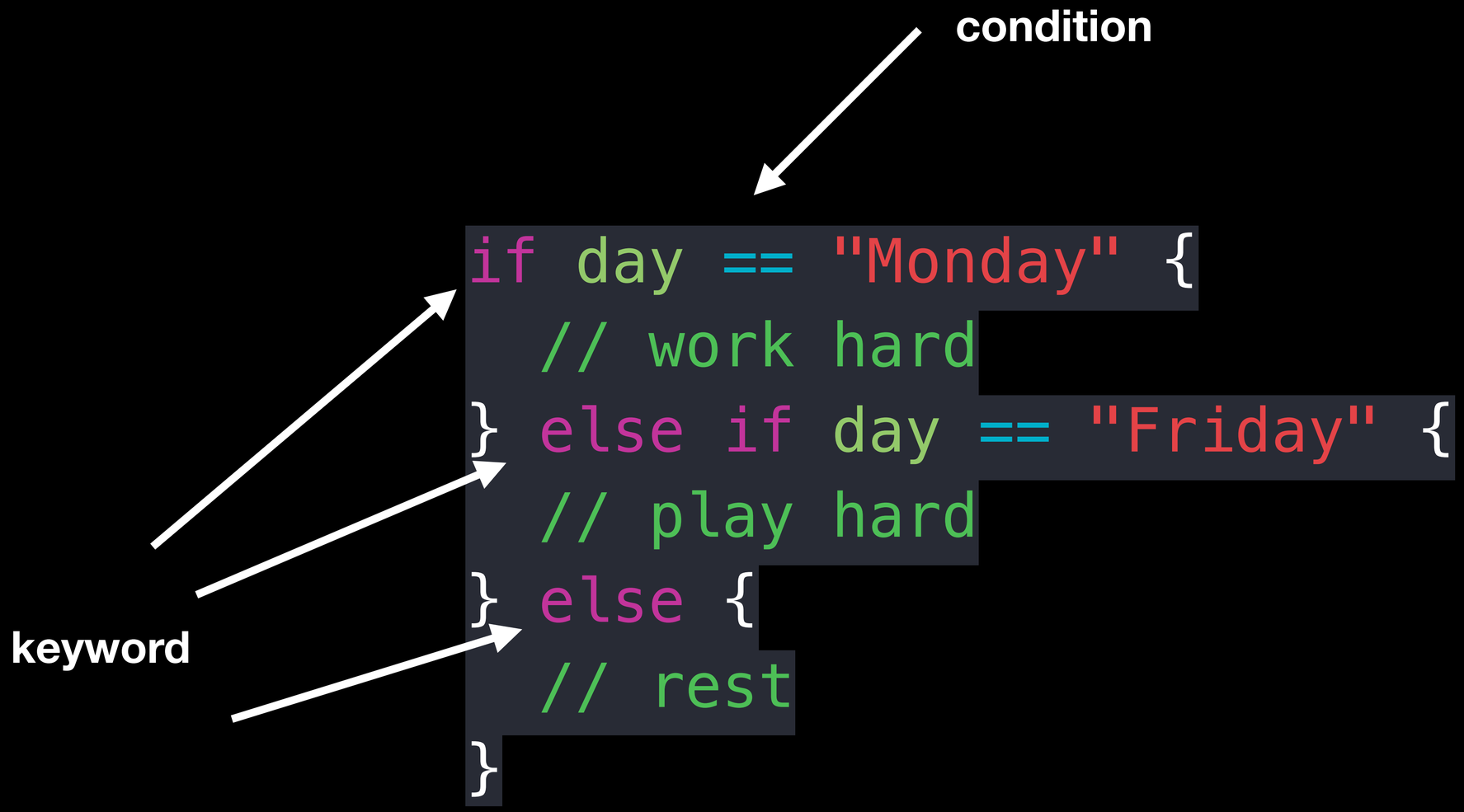
Functions


name
parameter name
parameter data type
return data type
func sum(a: Int, b: Int) -> Int {
let result = a + b
return result
}
keyword
function body

Functions

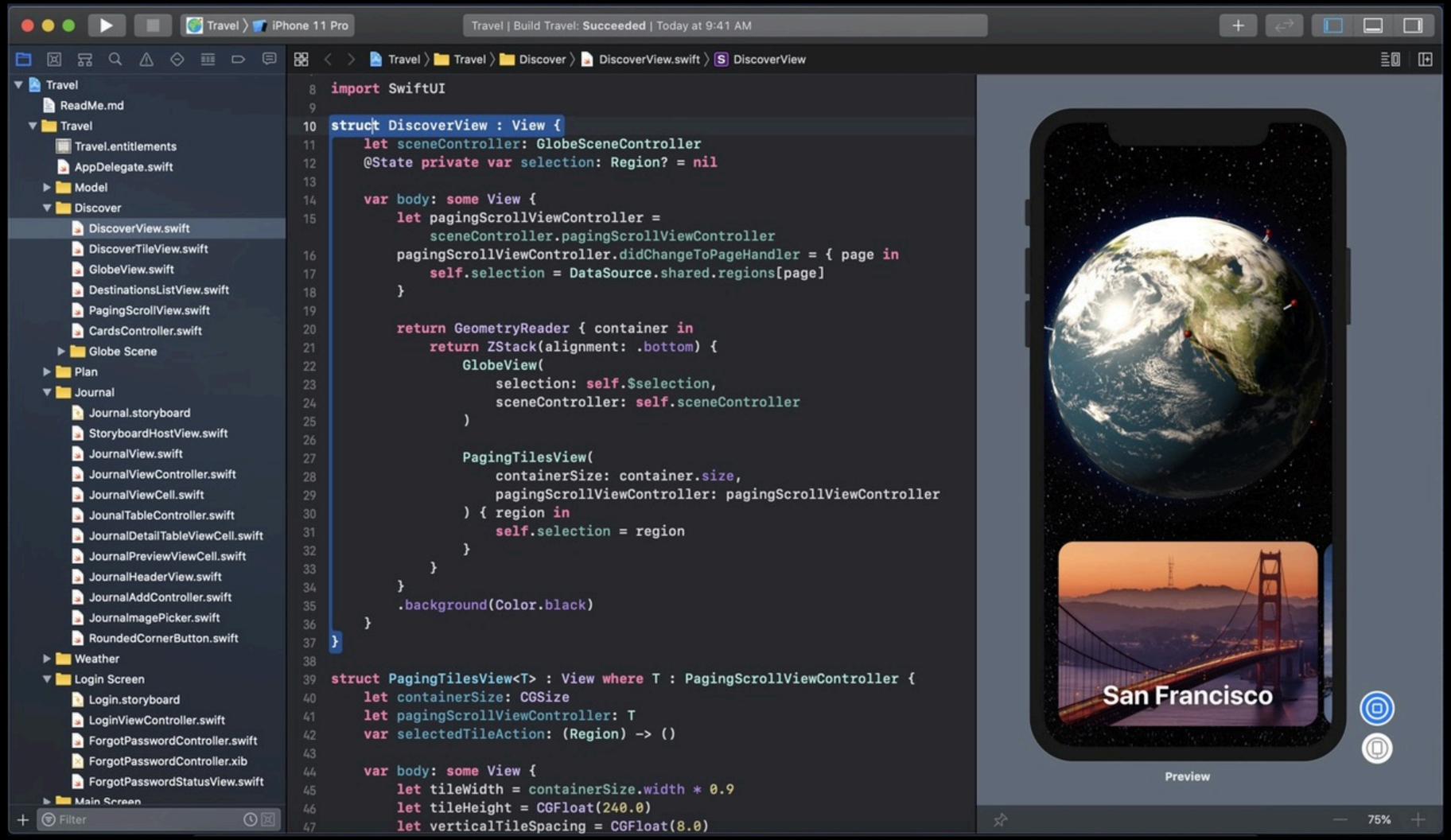

name
parameter name
parameter data type
func sayHello(name: String) {
let helloText = "Hello \(name)"
print(helloText)
}
keyword
function body

Conditionals

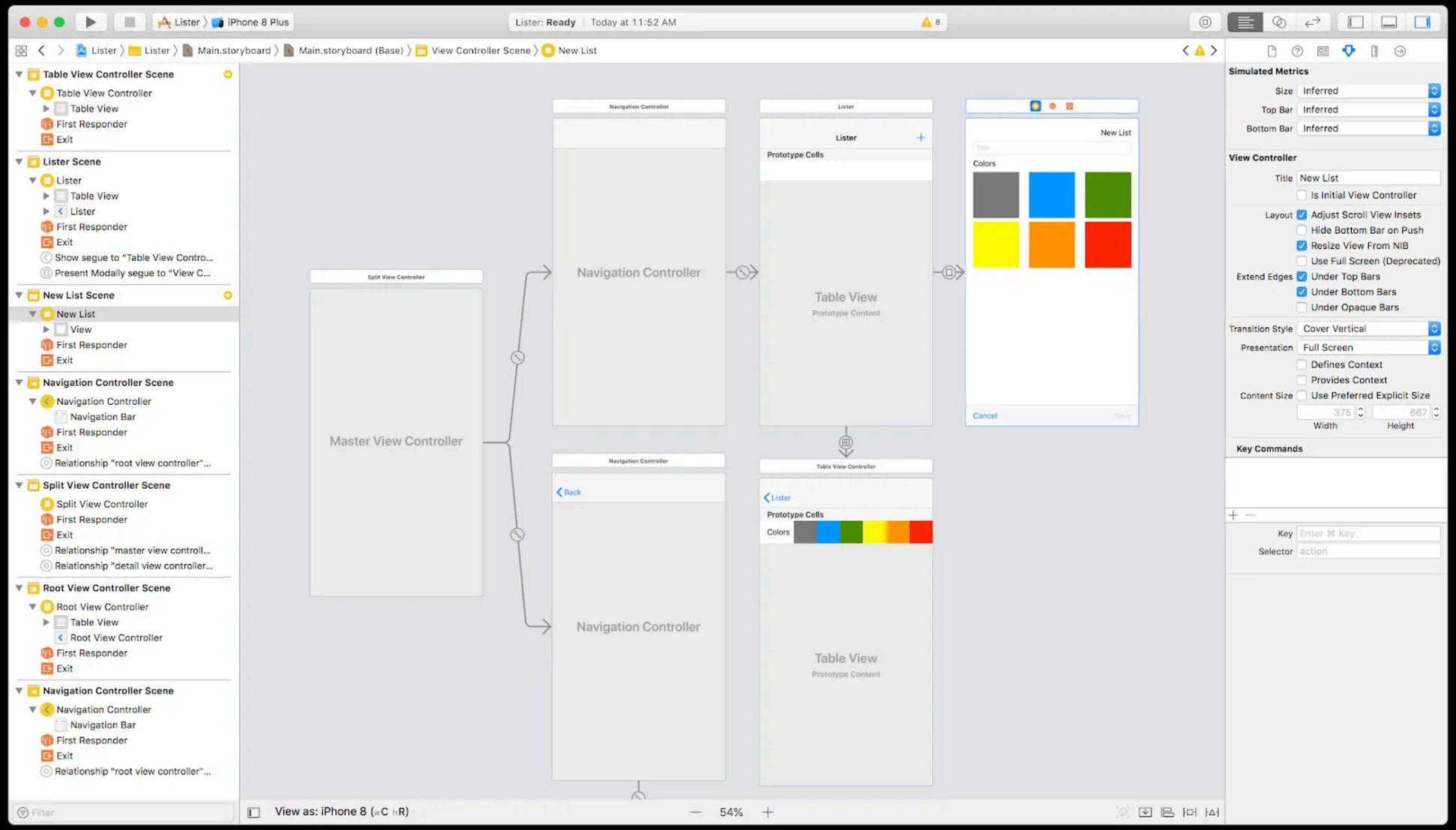


Tools

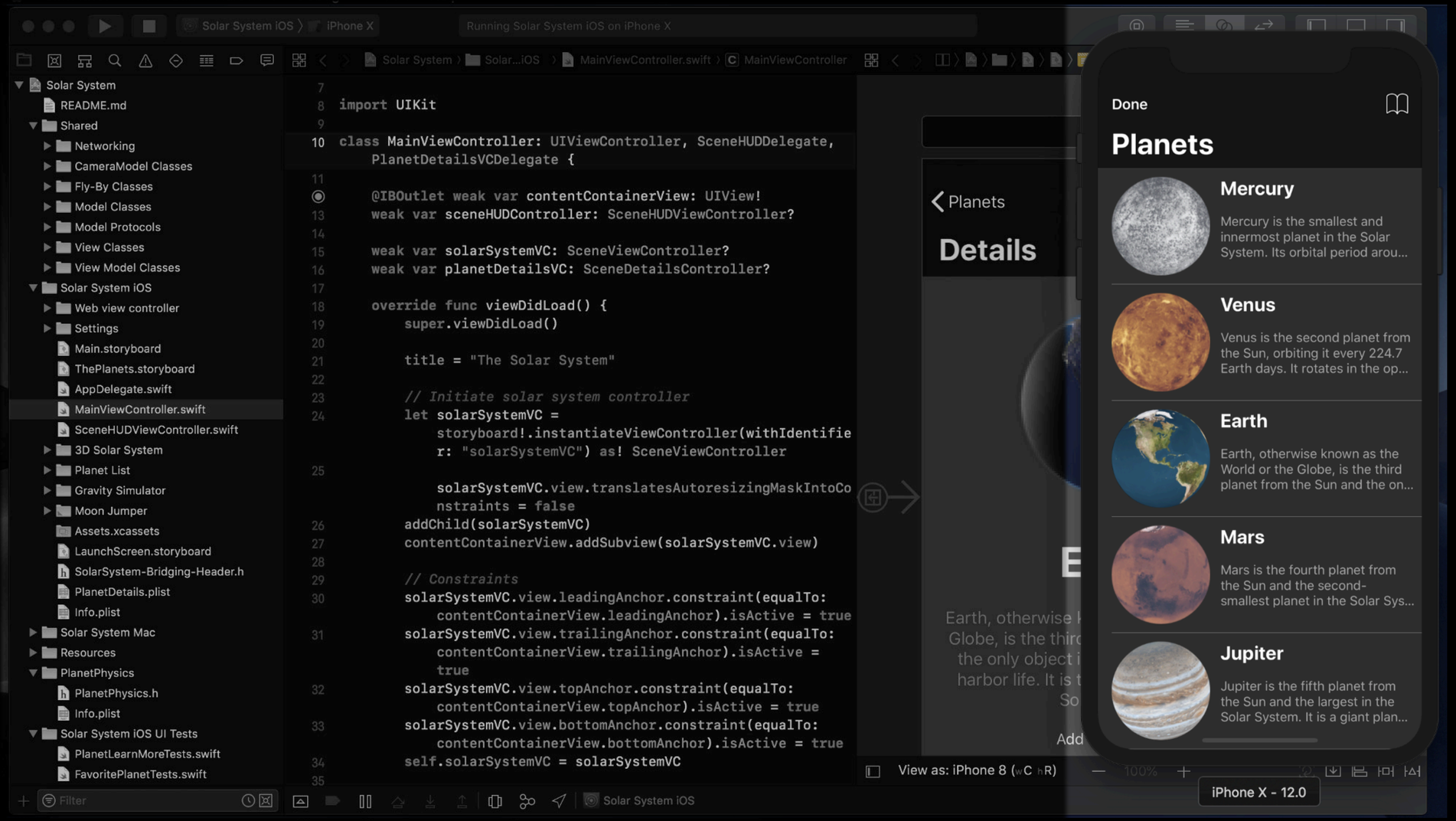
Xcode


Travel 〉 iPhone 11 Pro
Travel | Build Travel: Succeeded | Today at 9:41 AM
Travel 〉 Travel 〉 Discover 〉 DiscoverView.swift 〉 DiscoverView
Travel
ReadMe.md
Travel
Travel.entitlements
AppDelegate.swift
Model
Discover
DiscoverView.swift
DiscoverTileView.swift
GlobeView.swift
DestinationsListView.swift
PagingScrollView.swift
CardsController.swift
Globe Scene
Plan
Journal
Journal.storyboard
StoryboardHostView.swift
JournalView.swift
JournalViewController.swift
JournalViewCell.swift
JounalTableController.swift
JournalDetailTableViewCell.swift
JournalPreviewViewCell.swift
JournalHeaderView.swift
JournalAddController.swift
JournalImagePicker.swift
RoundedCornerButton.swift
Weather
Login Screen
Login.storyboard
LoginViewController.swift
ForgotPasswordController.swift
ForgotPasswordController.xib
ForgotPasswordStatusView.swift
Filter
8 import SwiftUI
9
10 struct DiscoverView : View {
11 let sceneController: GlobeSceneController
12 @State private var selection: Region? = nil
13
14 var body: some View {
15 let pagingScrollViewController =
sceneController.pagingScrollViewController
16 pagingScrollViewController.didChangeToPageHandler = { page in
17 self.selection = DataSource.shared.regions[page]
18 }
19
20 return GeometryReader { container in
21 return ZStack(alignment: .bottom) {
22 GlobeView(
23 selection: self.$selection,
24 sceneController: self.sceneController
25)
26
27 PagingTilesView(
28 containerSize: container.size,
29 pagingScrollViewController: pagingScrollViewController
30) { region in
31 self.selection = region
32 }
33 }
34 }
35 .background(Color.black)
36 }
37 }
38
39 struct PagingTilesView<T> : View where T : PagingScrollViewController {
40 let containerSize: CGSize
41 let pagingScrollViewController: T
42 var selectedTileAction: (Region) -> ()
43
44 var body: some View {
45 let tileWidth = containerSize.width * 0.9
46 let tileHeight = CGFloat(240.0)
47 let verticalTileSpacing = CGFloat(8.0)
San Francisco
Preview
75%

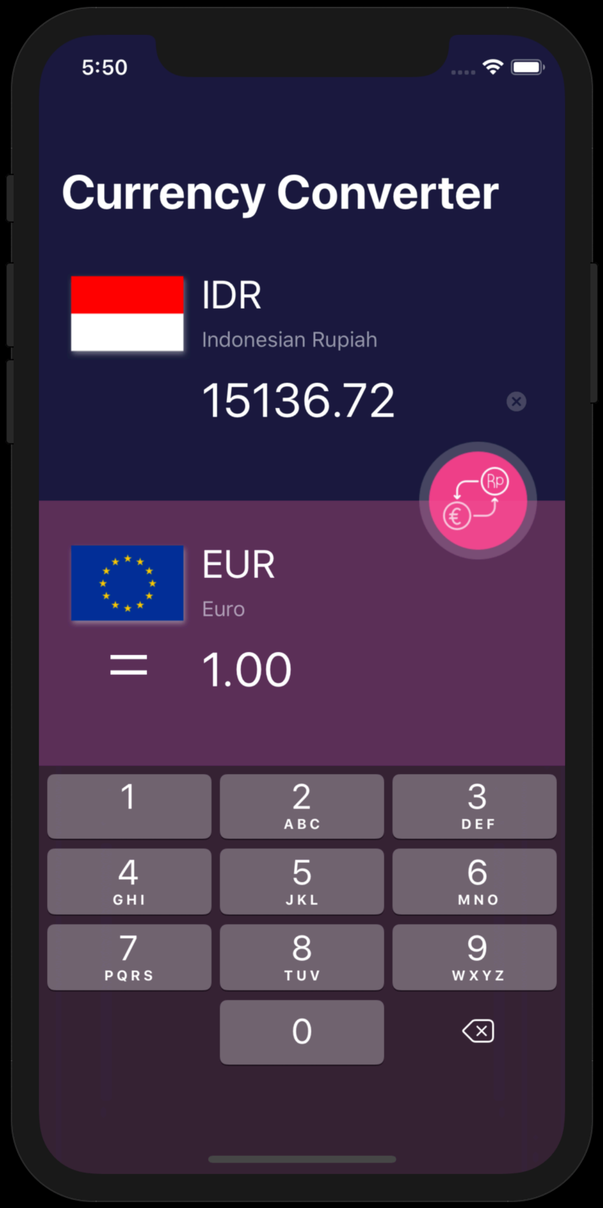
User Interface



iOS Simulator



Let’s build an app


5:50
Currency Converter
IDR
Indonesian Rupiah
15136.72
EUR
Euro
=
1.00
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
0

Step 1 - Create project

New Xcode project

Select iOS Simulator

Run empty app

Step 2 - Assets

Download assets

Add to Asset Catalog

Dark mode

Step 3 - User Interface

Text labels

Inputs

Flags

Buttons

Step 4 - Layout elements

Put elements on the screen

Constraints

Screen resolutions

Step 5 - Programming

Convert function from IDR to EUR

Format number

Step 6 - Connect UI

IBOutlets

IBActions

Connect interface to code

Step 7 - Advanced I

Convert automatically

Step 8 - Advanced II

Convert vice versa

Step 9 - Extra

Build currency selection

VDN has more crazy rate

What's next?

Treehouse

Hacking with Swift

Just start building

fassko

www.**kristaps**.me