



## **Trung Phan**

Mobile Team Lead

Github: github/viettrungphan

Mail: trungpv@dwarvesv.com

Phone: 076.897.8036





- Innovative Software Development Firm
- Established in 2014, based in Vietnam & Canada
- 50 team members
- Worldwide customers and tech partners:
   UK, US, AU, Singapore
- We Are Hiring: dwarves.careers





# Adaptive Layout on Multiple screen size









## **Agenda**

Adaptive Layout on Multiple screen size

- 1. Brief introduction
- 2. Our problems and solution(s)
- 3. Tips for legacy project
- 4. Q & A



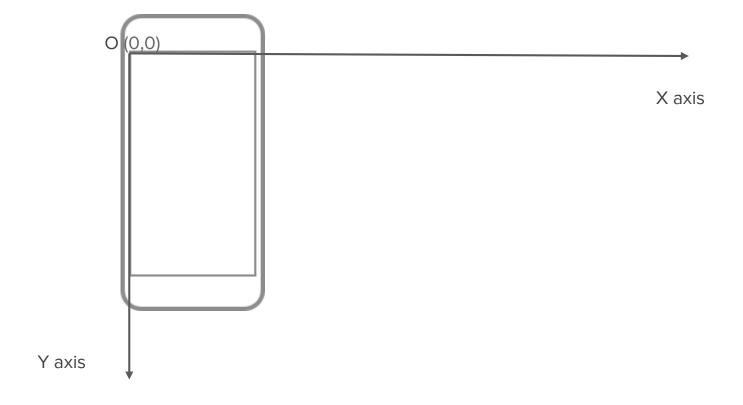




## **Brief Introduction**



Normal Coordinator System



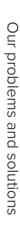
Mobile Coordinator System















## Our problems and solutions







Multiple devices - Portrait Mode - Landscape Mode - Notch



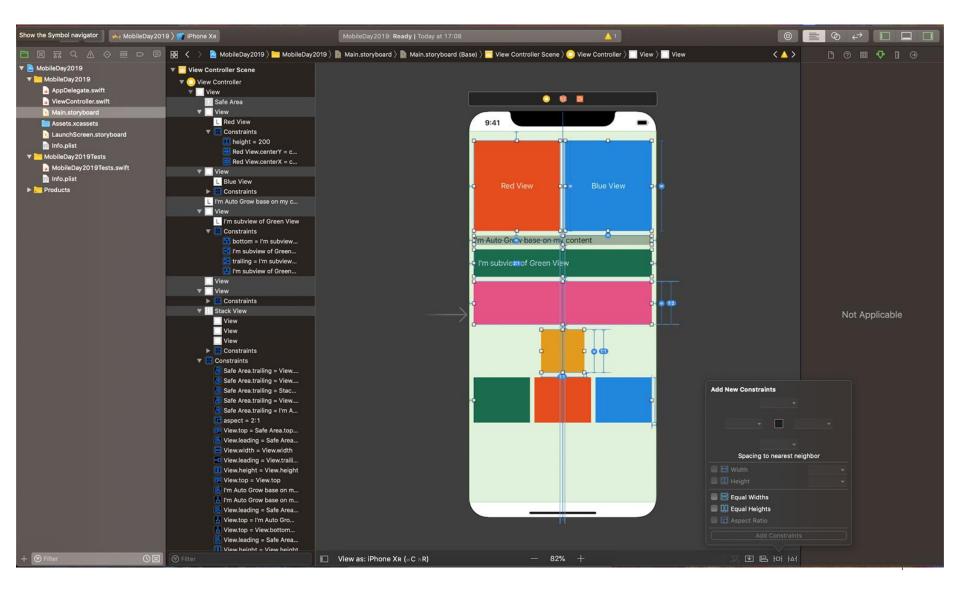


## Meet our not bad Friend: Constraint Layout













### **Constraint Layout**

- Create UI on separate xml file.
- Add subviews, add constraints to view.
- Connect UI to code to get instance of UI part.

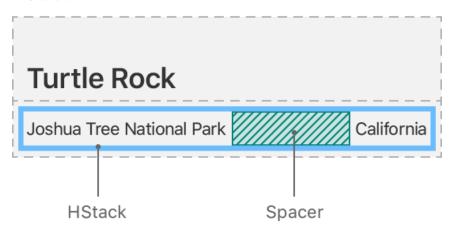




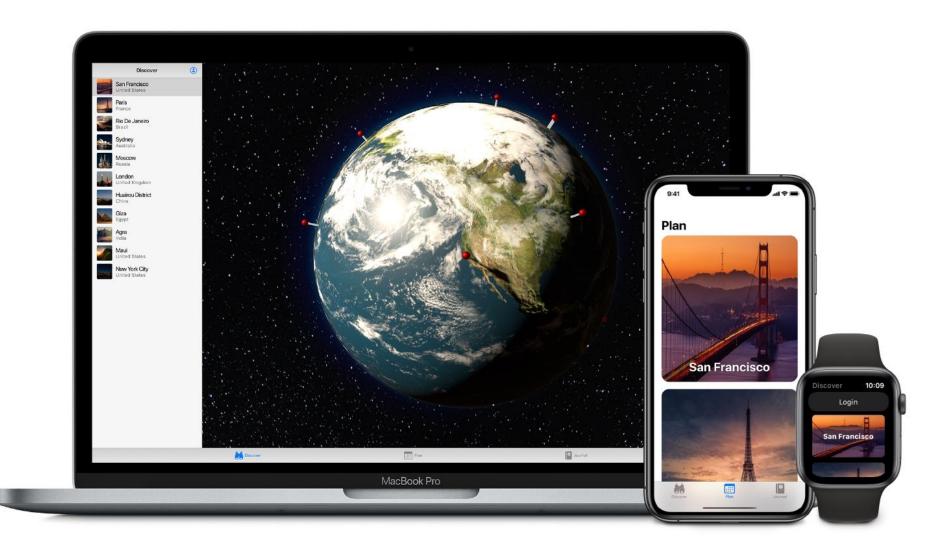
#### **Welcome to Declarative UI**

- Just describe what UI should do.
- Less coding
- Live time rendering
- Composition
- Consistance

#### **VStack**

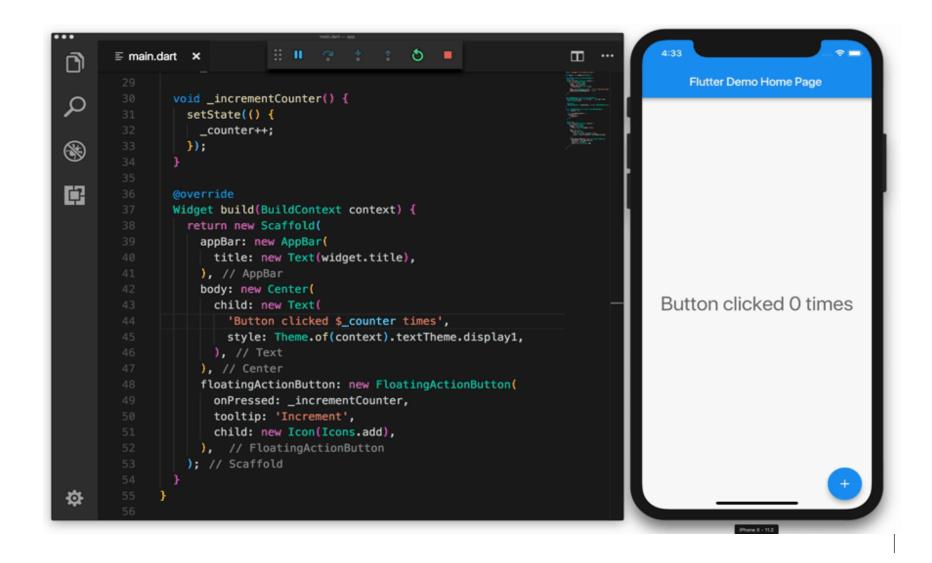


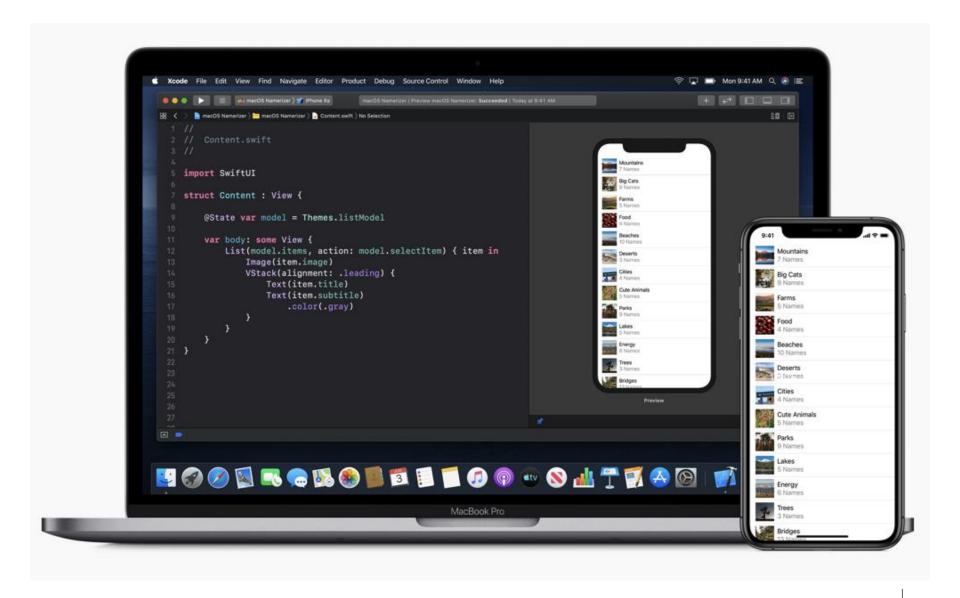
#### import SwiftUI















## Tips for legacy project

- + Embedded ScrollView inside ScrollView.
- Layout Listview from bottom up.

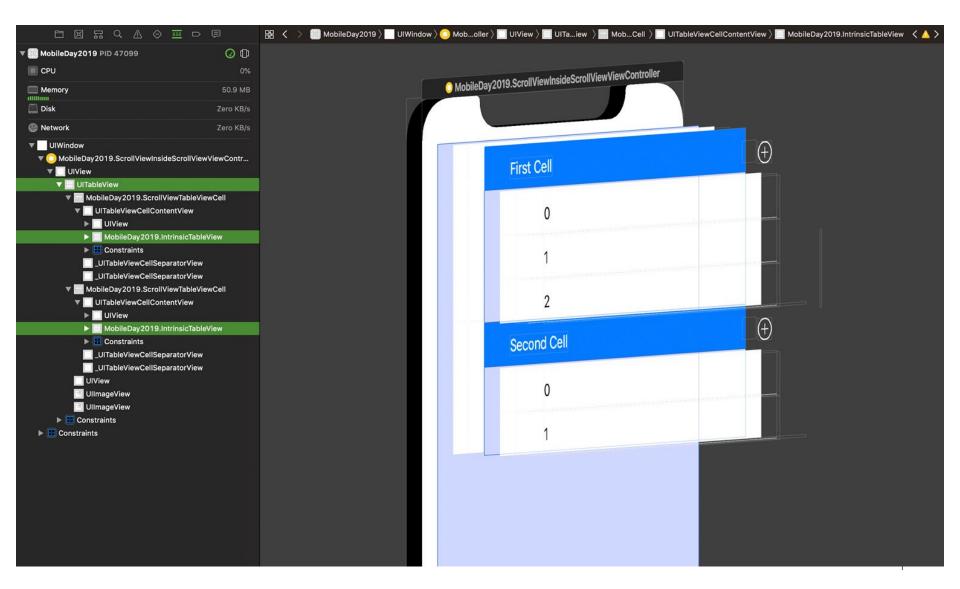












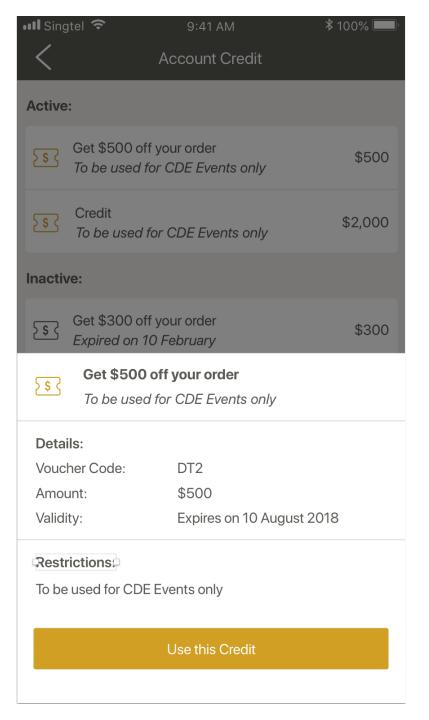
```
class IntrinsicTableView: UITableView {
  var didUpdateHeight: (()->())?
  override var contentSize:CGSize {
     didSet {
       self.invalidateIntrinsicContentSize()
       guard let didUpdateHeight = didUpdateHeight else {return}
       didUpdateHeight()
  override var intrinsicContentSize: CGSize {
    self.layoutlfNeeded()
     return CGSize(width: UIView.noIntrinsicMetric, height: contentSize.height)
```



```
cell.didAddNewItem = { [weak self, weak cell] in
       cellData.data = cellData.data + [String(cellData.data.count)]
       cell?.cellData = cellData
       self?.datasource[indexPath.row] = cellData
cell.didChangeContentHeigh = { [weak self] in
       guard let strongSelf = self else {return}
       strongSelf.tableView.beginUpdates()
       strongSelf.tableView.endUpdates()
```











M Dwarves Foundation





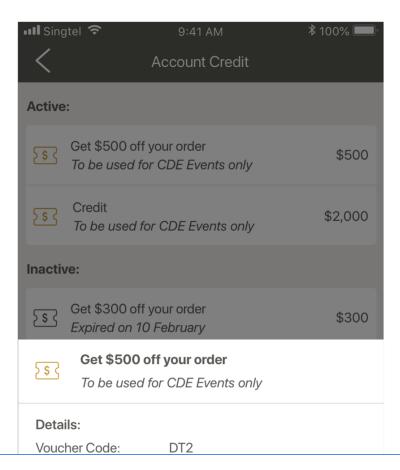
Only you can see this message

X
This story is not part of the metered paywall. Learn more

## An interesting solution to UITableView Layout from Bottom



Here we have a design of a tableview that adds cells from bottom up.





# Thank You Q & A









#### Reference

• <a href="https://github.com/viettrungphan/MobileDay2019">https://github.com/viettrungphan/MobileDay2019</a>

