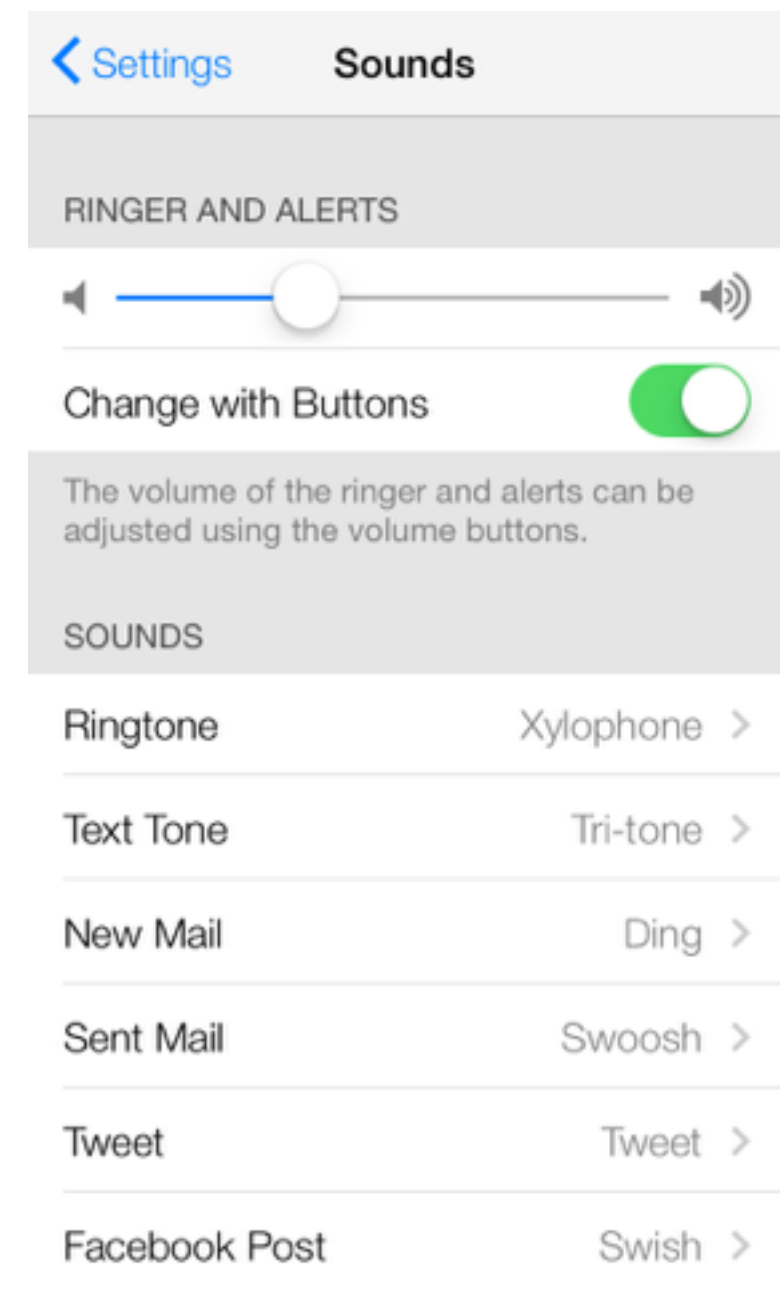
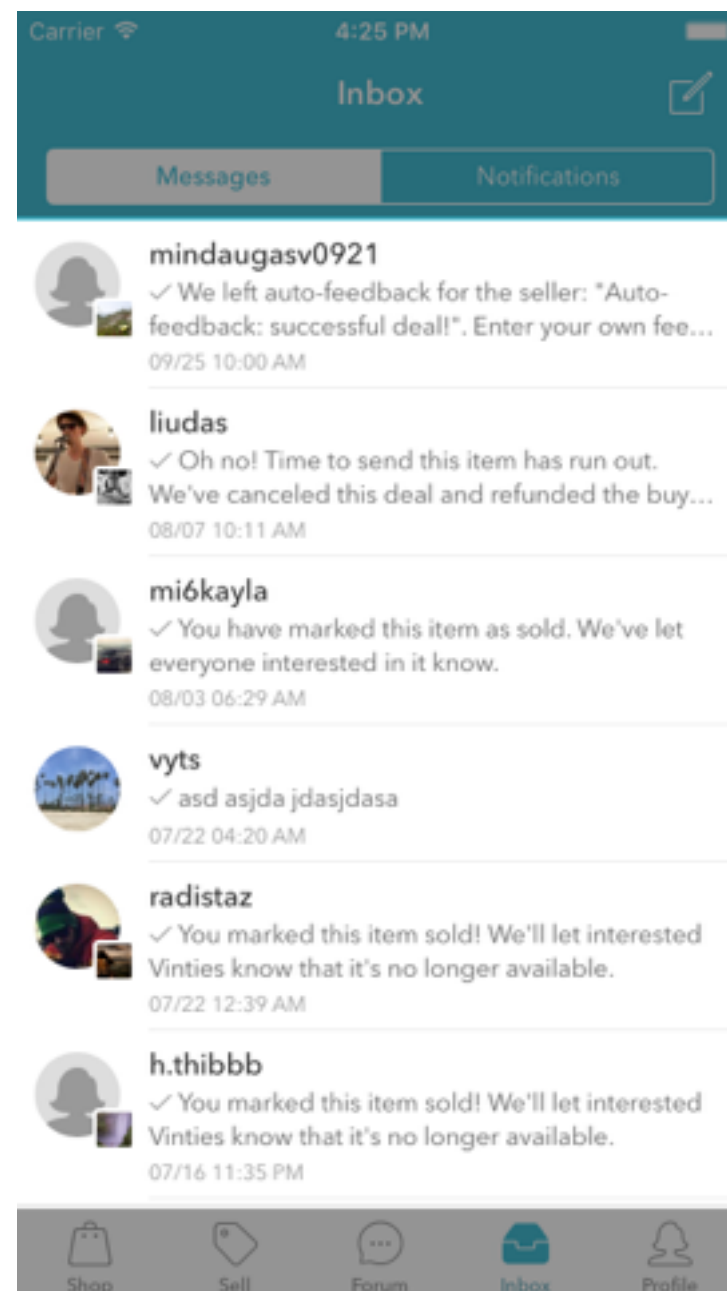


UITableView

# UITableView

- Navigate through hierarchically structured data
- View an indexed list of items
- See detail information and controls in visually distinct groupings
- Interact with a selectable list of options

# UITableView



# UITableView

In Code

```
let tableView = UITableView(frame: view.bounds);  
view.addSubview(tableView);
```

# UITableView

## In Storyboard



**Table View Controller** - A controller that manages a table view.



**Table View** - Displays data in a list of plain, sectioned, or grouped rows.



**Table View Cell** - Defines the attributes and behavior of cells (rows) in a table view.

# UITableView

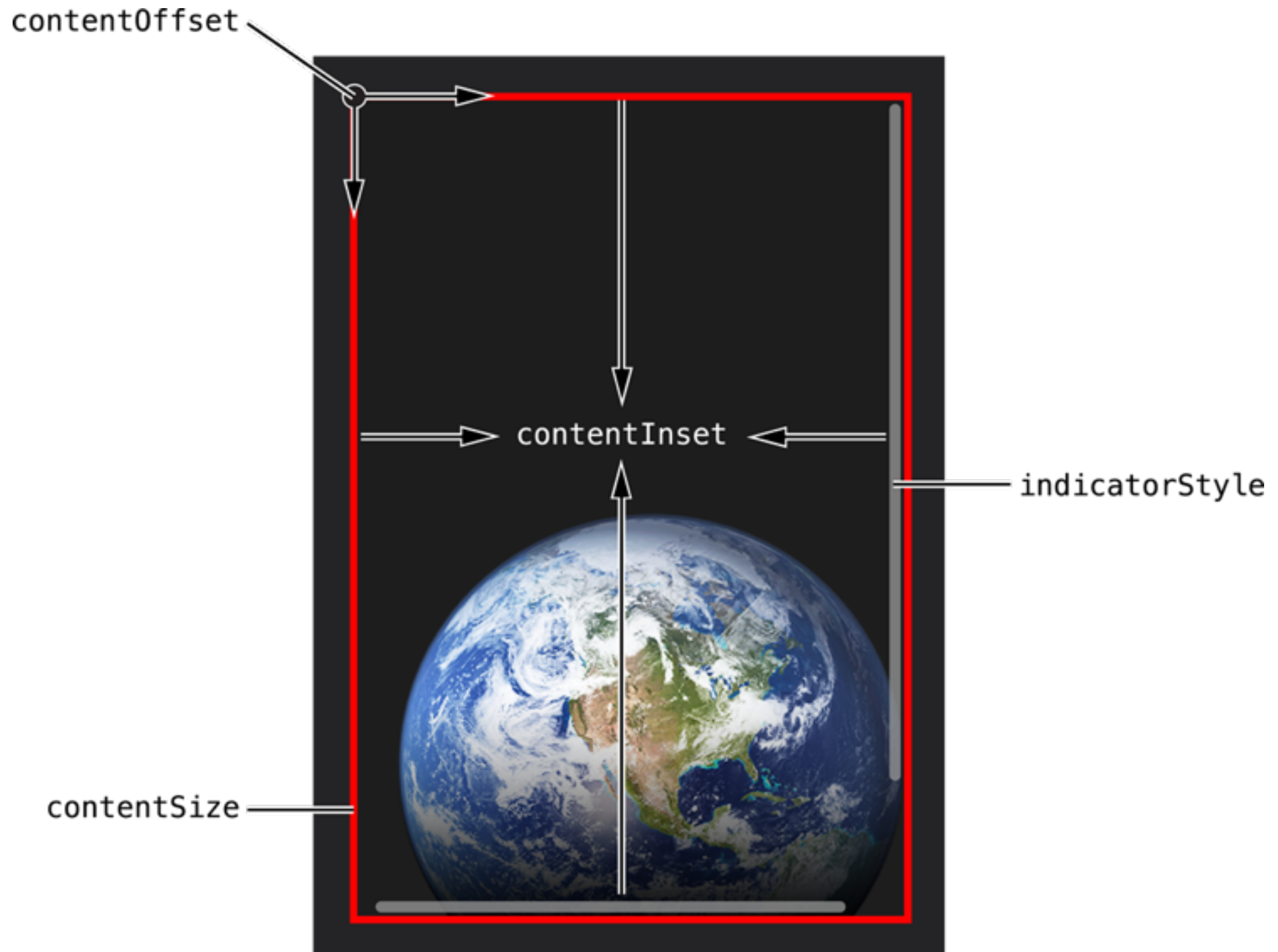
In Storyboard

```
@IBOutlet weak var tableView: UITableView!
```

# UIScrollView

- Used to represent more content than fits to the screen.
- Table View content can be bigger than screen size.

# UIScrollView

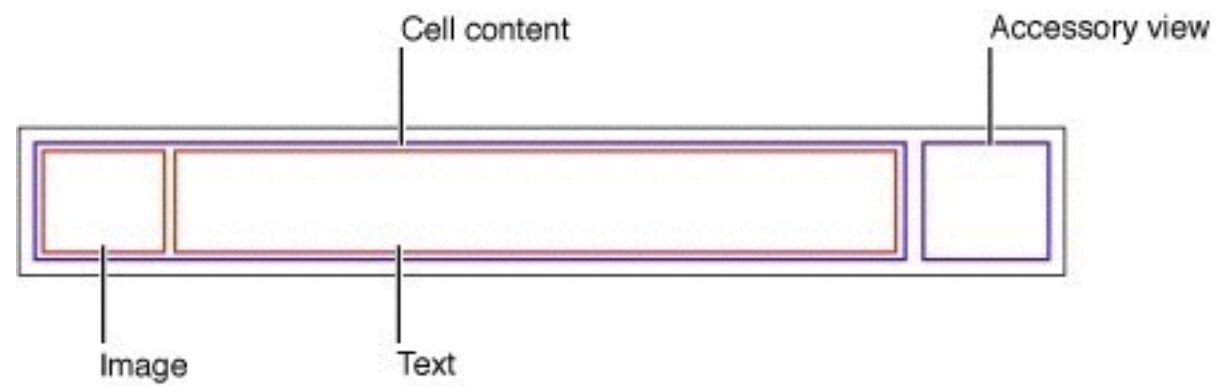




# ContentView in UITableView

- You provide all the info needed to calculate the contents of *UITableView*
- *UITableViewCell*, *UITableViewHeaderFooterView* are the main contents of *UITableView*
- *UITableView* also has *headerView* and *footerView* properties

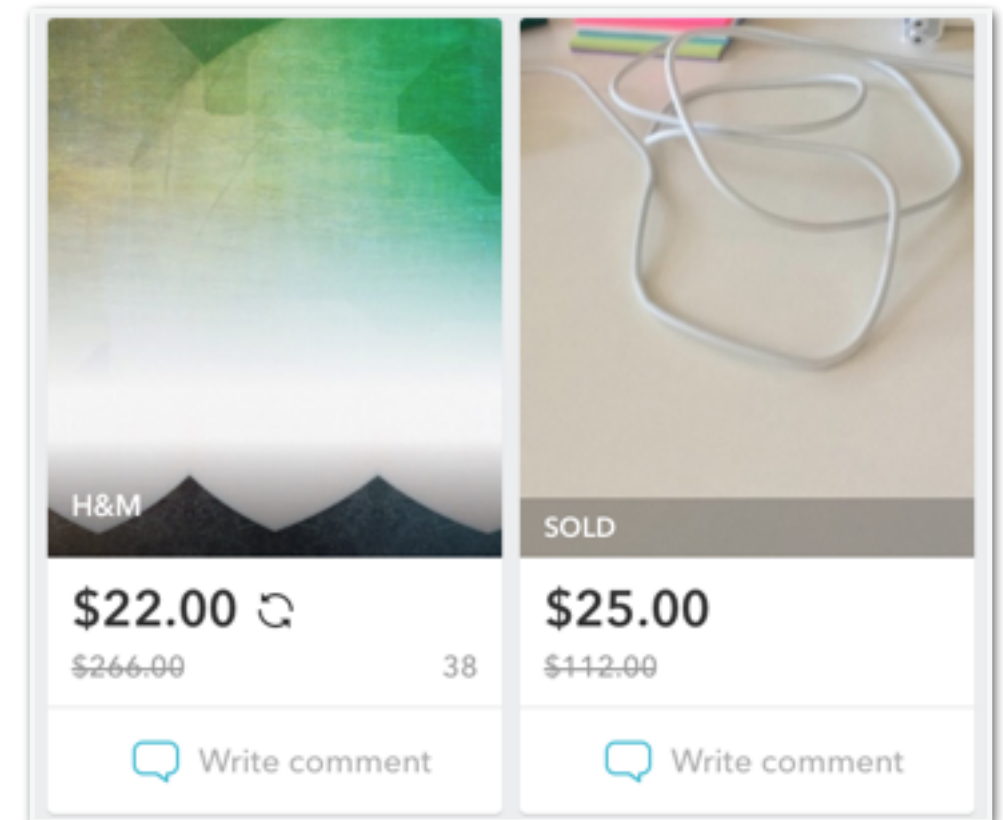
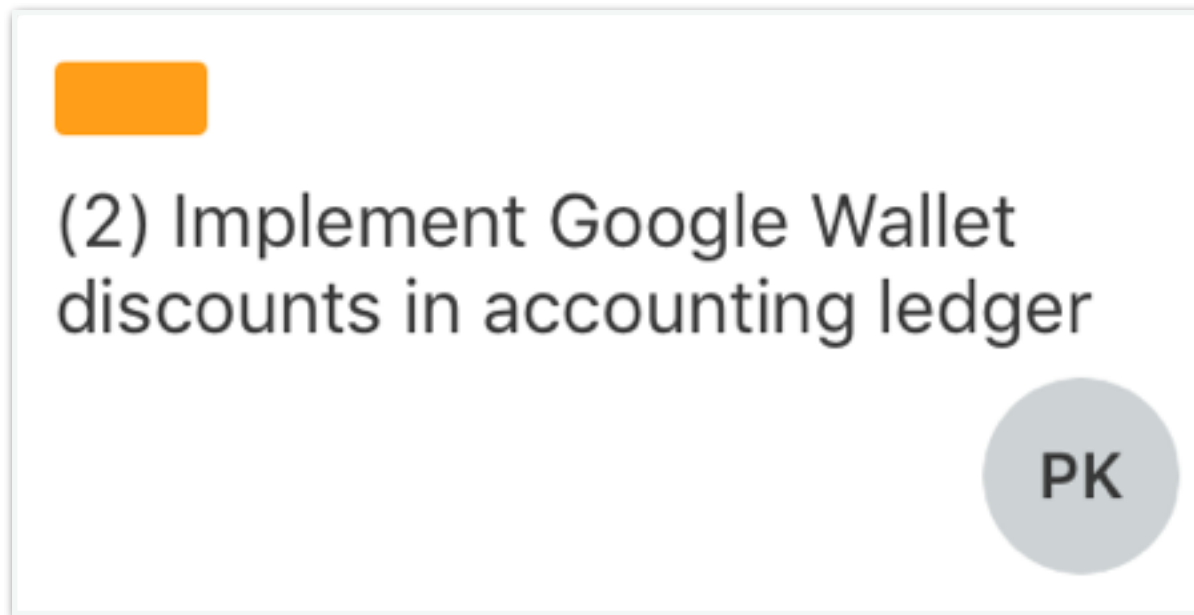
# UITableViewCell



# Default UITableViewCells

```
public enum UITableViewCellStyle : Int {  
    case Default // Simple cell with text label and optional  
image view (behavior of UITableViewCell in iPhoneOS 2.x)  
    case Value1 // Left aligned label on left and right  
aligned label on right with blue text (Used in Settings)  
    case Value2 // Right aligned label on left with blue  
text and left aligned label on right (Used in Phone/  
Contacts)  
    case Subtitle // Left aligned label on top and left  
aligned label on bottom with gray text (Used in iPod).  
}
```

# Custom TableViewCells



# Filling UITableView with data

- You have to set UITableView instance dataSource property with object implement UITableViewDataSource protocol
- That object provides all the needed data for table view

# UITableViewDataSource

```
public protocol UITableViewDataSource : NSObjectProtocol {  
  
    public func tableView(tableView: UITableView,  
numberOfRowsInSection section: Int) -> Int  
  
    public func tableView(tableView: UITableView,  
cellForRowAtIndexPath indexPath: NSIndexPath) -> UITableViewCell  
  
    optional public func numberOfSectionsInTableView(tableView:  
UITableView) -> Int  
  
    ...  
}
```

# Sections

# numberOfSectionsInTableView(\_:)

```
func numberOfSectionsInTableView(tableView: UITableView) -> Int {  
    return 2;  
}
```



# tableView(\_:numberOfRowsInSection:)

```
func tableView(tableView: UITableView, numberOfRowsInSectionSection: Int) -> Int {  
    switch section {  
    case 0:  
        return allTitles.count  
    case 1:  
        return allNames.count  
    }  
}
```

# tableView(\_:cellForRowAtIndexPath:)

```
func tableView(tableView: UITableView, cellForRowAtIndexPath
indexPath: NSIndexPath) -> UITableViewCell {
    let cell =
tableView.dequeueReusableCellWithIdentifier("NamesCellIdentifier",
forIndexPath: indexPath)
    switch indexPath.section {
    case 0:
        let name = allTitles[indexPath.row]
        cell.textLabel?.text = name as? String
    case 1:
        let name = allNames[indexPath.row]
        cell.textLabel?.text = name as? String
    default:
        break
    }
    return cell
}
```

# Dequeuing

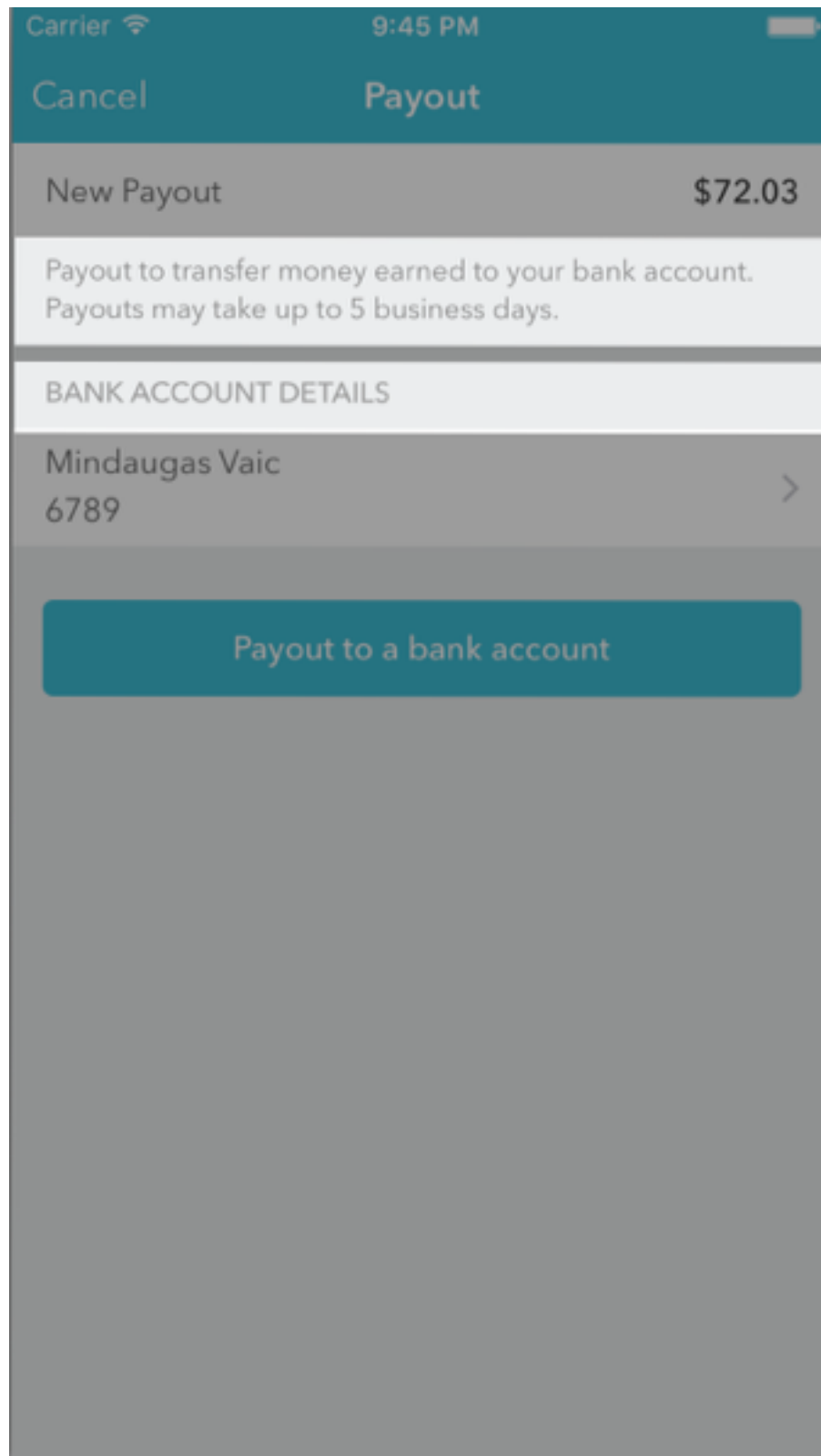
- *UITableView* tries to not create more cells than it is needed
- Each created cell can be reused for another data to represent
- *prepareForReuse()* is called when cell will be reused
- *reuseIdentifier* is used to identify cells for reuse

# Register Cells

```
public func registerNib(nib: UINib?, forCellReuseIdentifier  
identifier: String)
```

```
public func registerClass(cellClass: AnyClass?,  
forCellReuseIdentifier identifier: String)
```

# Section Footer and Header views



- Same as UITableViewCell
- Dequeued with reuse identifiers
- Can be created custom or just passed titles for them
- Each section can have different one or none

# Register Section Footer and Header Views

```
public func registerNib(nib: UINib?,  
forHeaderFooterViewReuseIdentifier identifier: String)
```

```
public func registerClass(aClass: AnyClass?,  
forHeaderFooterViewReuseIdentifier identifier: String)
```

# Table Footer and Header views

- *UITableView*'s can have footer and header views
- They are shown above or below table content
- Any *UIView* can be assigned to *tableHeaderView* and *tableFooterView*

# Static table view content

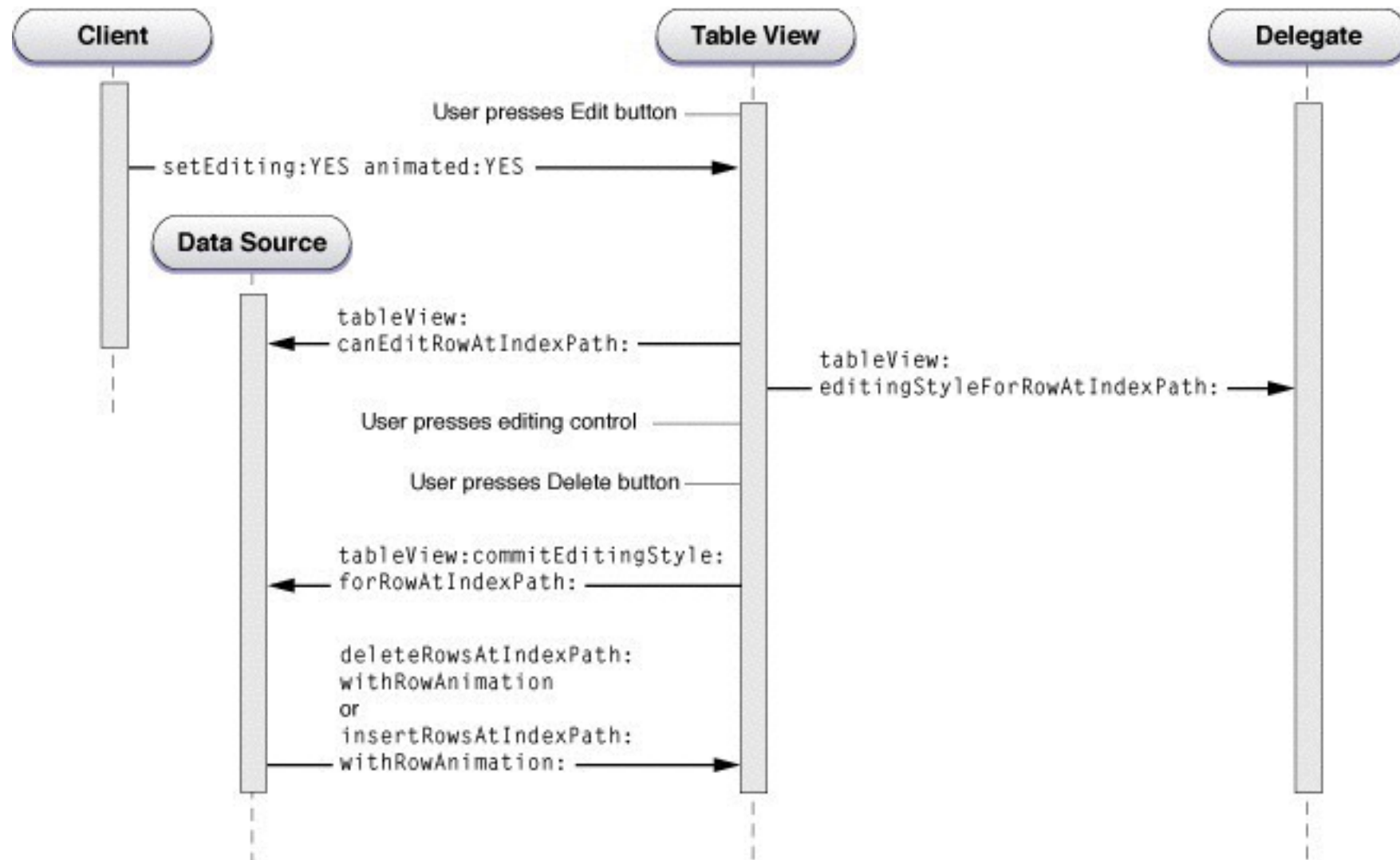
- Everything is configured in Interface builder
- You can link outlets directly from cells



# Reacting to events in UITableView

- All actions to which we can respond are sent to *UITableViewDelegate*
- Mainly we handle *didSelect* action

# Edit mode



# UITableViewController

- UITableView can be created in UIViewController or in UITableViewController.
- In UITableViewController view is UITableView.
- UITableViewController allows more possibilities in Interface builder and gives less setup out of the box.

[https://github.com/MindaugasV/  
UITableViewExample](https://github.com/MindaugasV/UITableViewExample)

[https://github.com/MindaugasV/  
UITableViewExample/blob/master/  
iOS\\_tableview.pdf](https://github.com/MindaugasV/UITableViewExample/blob/master/iOS_tableview.pdf)

# Praktine uzduotis

- Sukurti kokia nors klase realaus pasaulio objekto, pagal savo pasirinkta tema. Cia naudosis Zmogaus pavyzdi.
- Sukurti view'a tos klases objekto duomeniu atvaizdavimui ir redagavimui (pvz. Nuotrauka - UIImageView, Vardas, Pavarde - text fieldai, Amzius - UISlider+UILabel, Ar susituokes - UISwitch, Lytis - UISegmentedControl, ir t.t.)
- Patobulinti App'sa galimybe perrinkti visa eile objektu (t.y. perziureti zmoniu sarasa) - prideti du Button'us (pimyn >, atgal < ) kurie pereitu prie sekancio zmogaus is Zmoniu masyvo, kai prienama iki pabaigos ar pradzios saraso, atitinkamas mygtukas turi buti disable'intas.
- Siai uzduociai pradinia duomenys gali buti sukurti kode tiesiog UIViewController'yje.
- Toliau sia uzduoti galima bus pildyt - kad atsirastu galimybe kurti naujus objektus (t.y. prideti prie saraso, trinti is saraso), ir redaguoti atidarant nauja View'a, perdaryti kad sarasas butu rodomas su Table View'u, prideti Settings'u Tab'a - kuriame galima butu riboti max. sukuriamu objektu skaiciu, ijungt/isjungt advanced mode - kuris pvz. dadetu/isimtu kokius nors laukus is objekto savybiu, ir t.t.