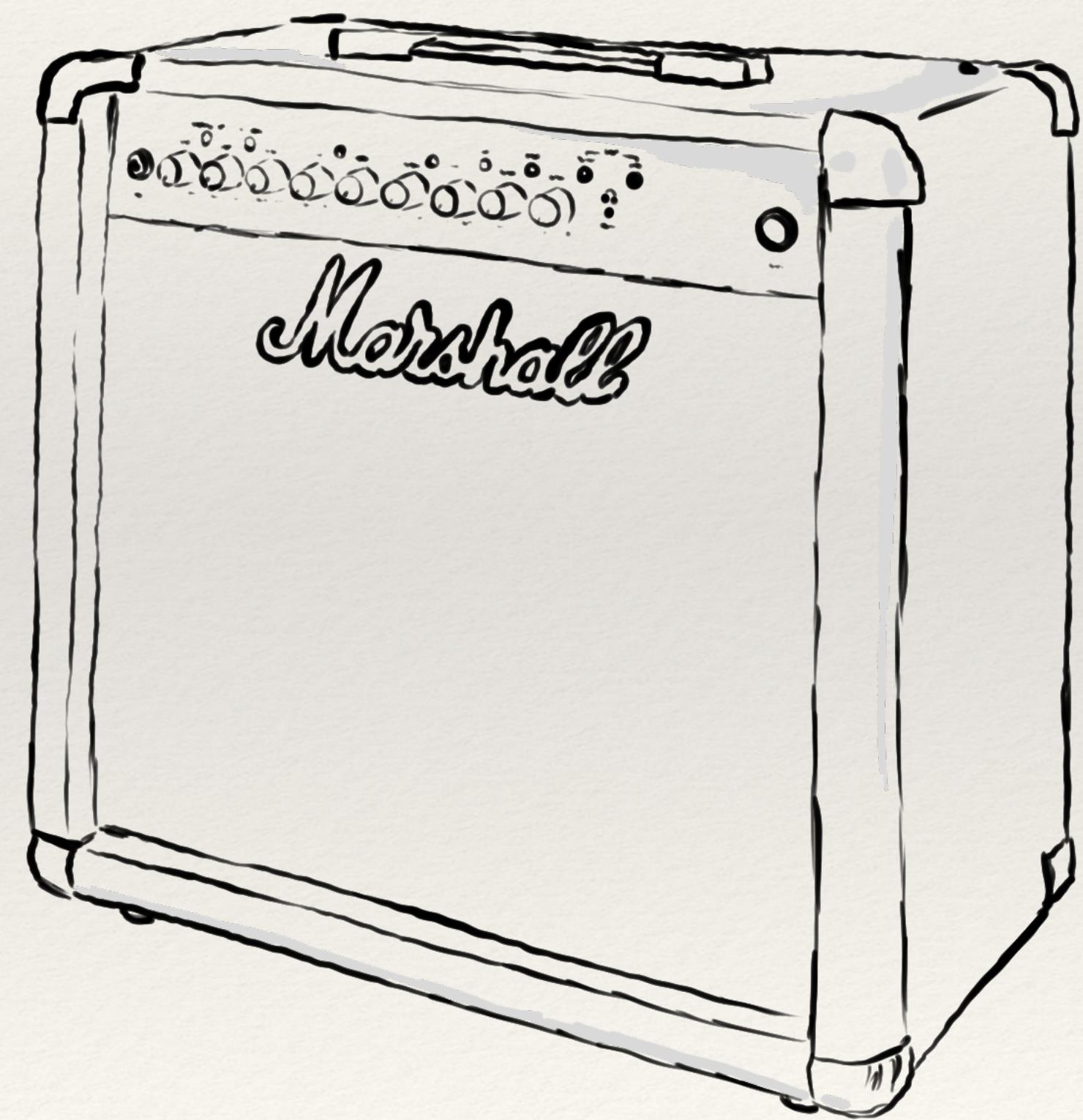


# Accessibility → Up to 11!

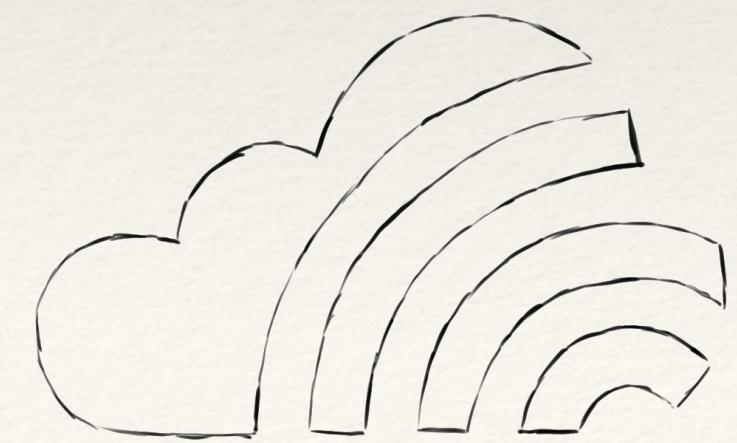
DANI D'EVESA  
@dadederk

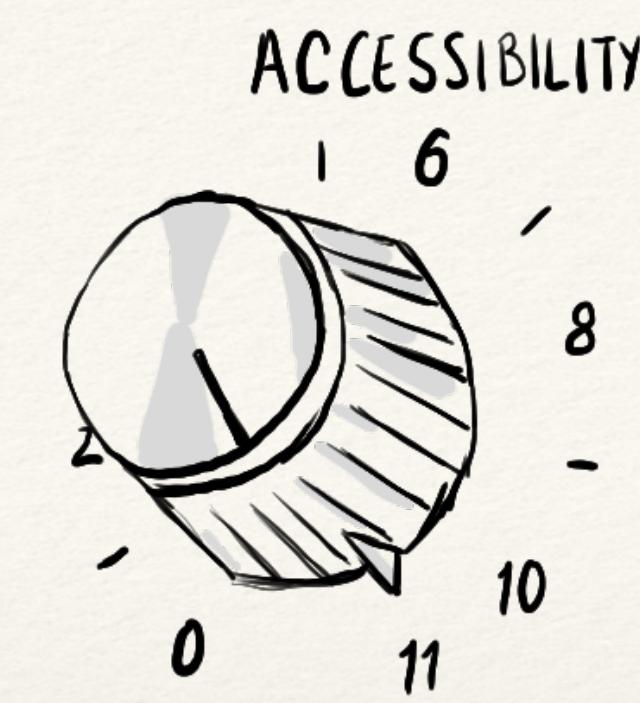
iOS Engineer at  
*skyscanner*



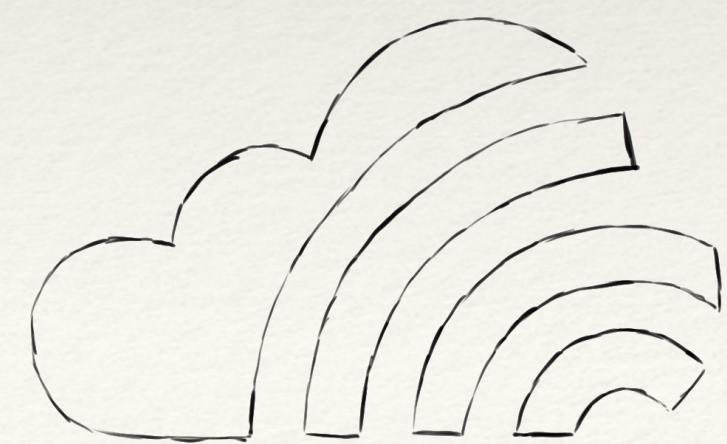


\*SUPERMAN IS A CHARACTER FROM DC.





THE NUMBERS ALL GO UP TO 11!



# 0.- Starting from zero



VoiceOVER

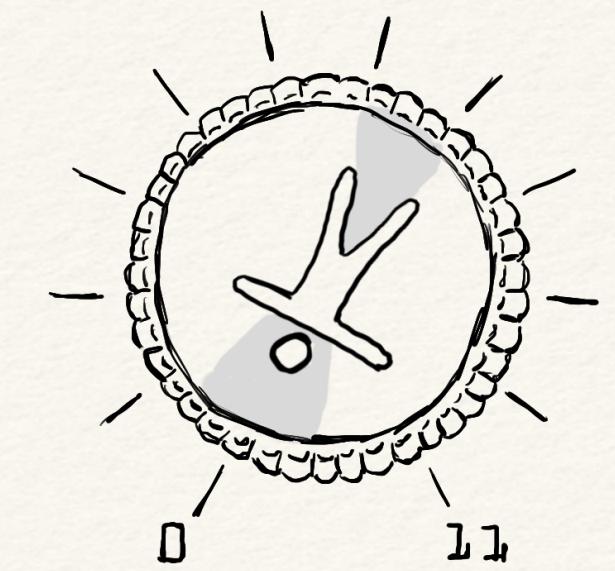
"Conference Name. SwiftFest. Text Field. Double tap to Edit"

Label

Value

Trait

Hint



ACCESSIBILITY

# 0.- Starting from zero



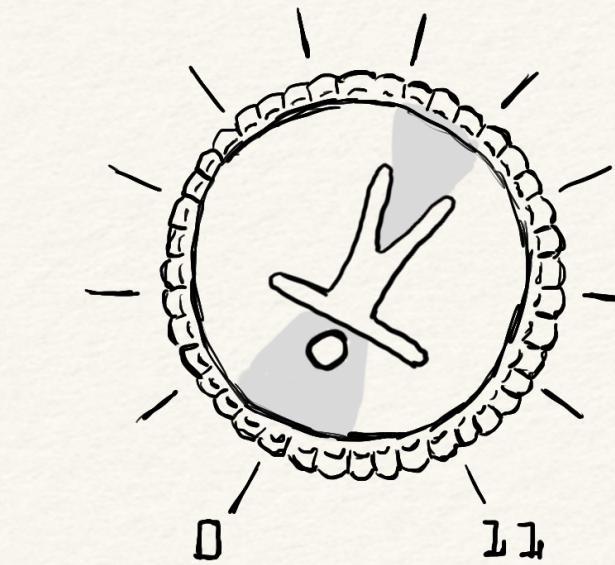
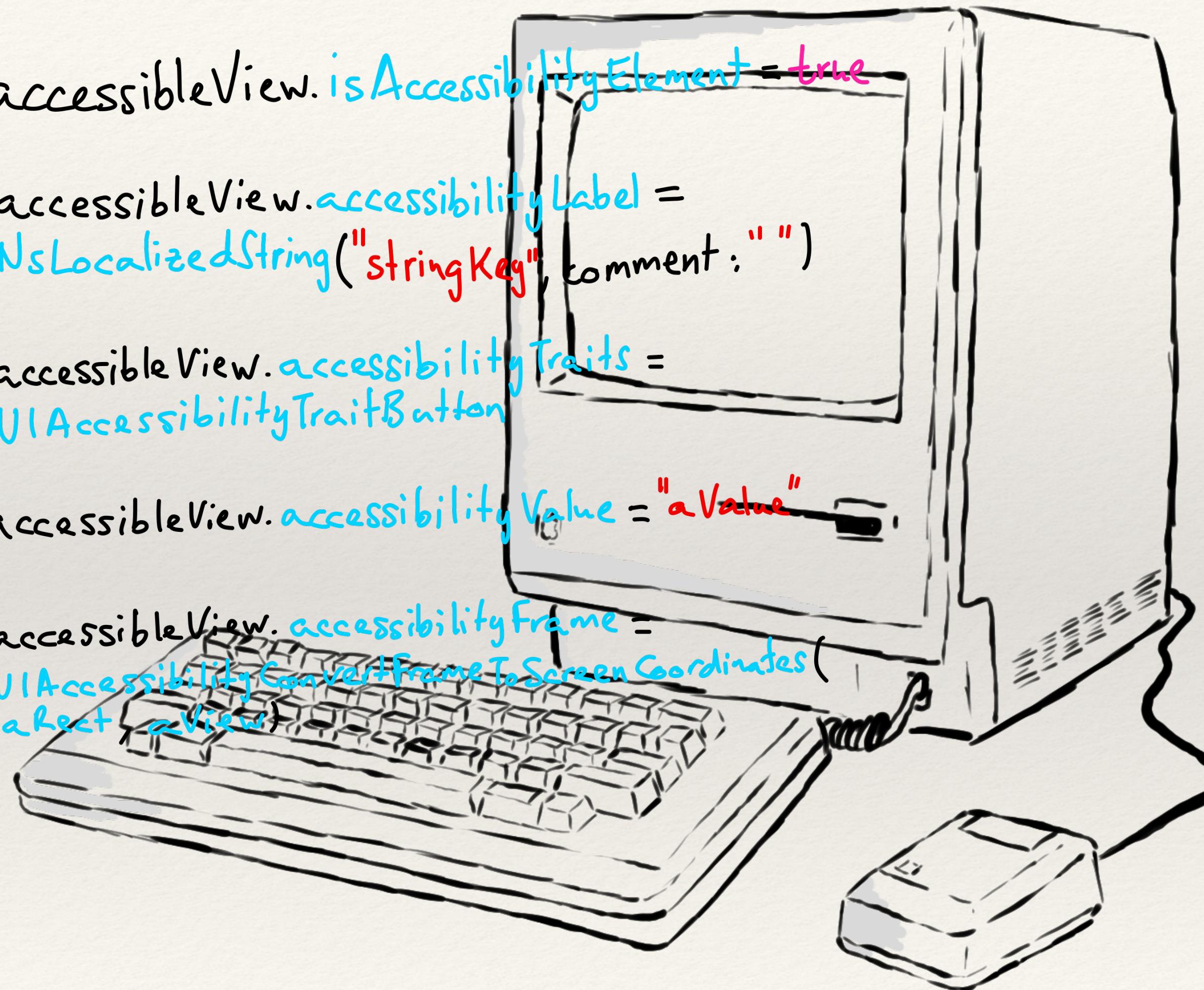
~~accessibleView.isAccessibilityElement = true~~

accessibleView.accessibilityLabel =  
NsLocalizedString("stringKey", comment: "")

accessibleView.accessibilityTraits =  
UIAccessibilityTraitButton

accessibleView.accessibilityValue = "aValue"

accessibleView.accessibilityFrame =  
UIAccessibilityConvertFrameToScreenCoordinates(  
aRect, &view)



ACCESSIBILITY

# 1. Labelling correctly



4d  
"Four d" X

"Four days ago" ✓

3h 24m  
"Three h twenty-four meters" X

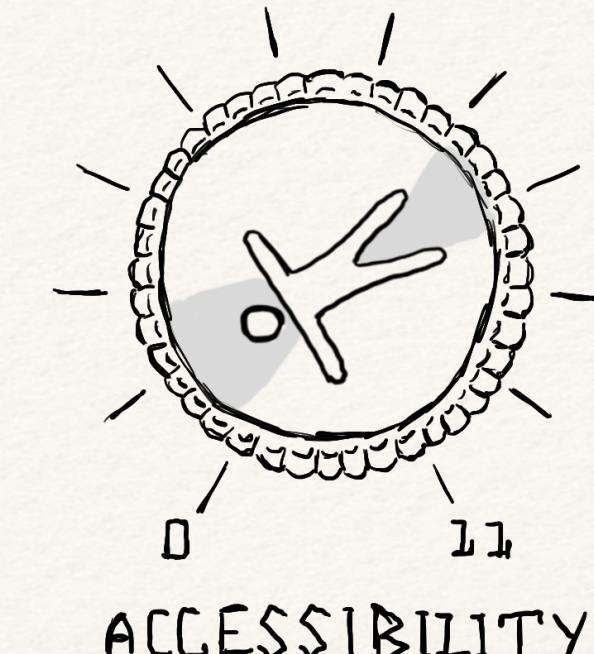
"Three hours and twenty-four minutes" ✓

MON  
"Mon" X

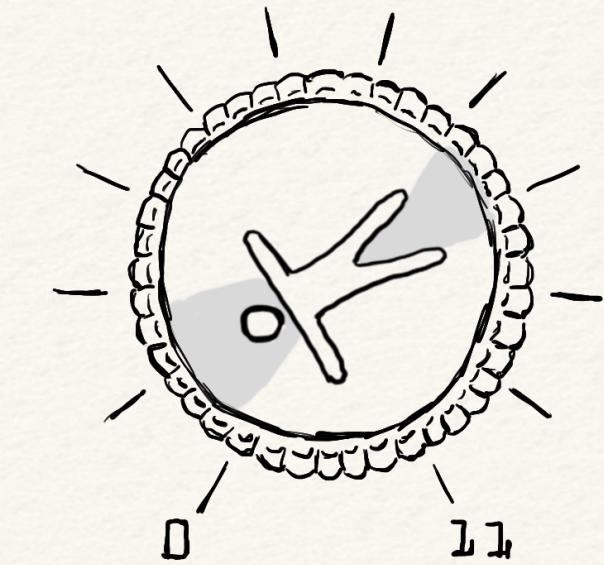
"Monday" ✓

Most read  
"Most read" X

"Most red" ✓



# 1. Labelling correctly



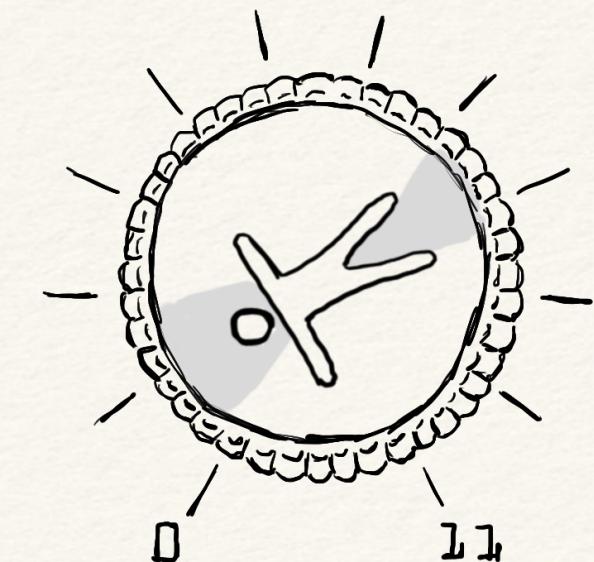
ACCESSIBILITY

```
let attributes: [NsAttributedString.Key : Any] =  
[.accessibilitySpeechRecognitionKey: "Paella"]  
  
recipeTitle.accessibilityAttributedLabel =  
NsAttributedString(string: "Paella",  
attributes: attributes)
```



Paella

# 1. Labelling correctly

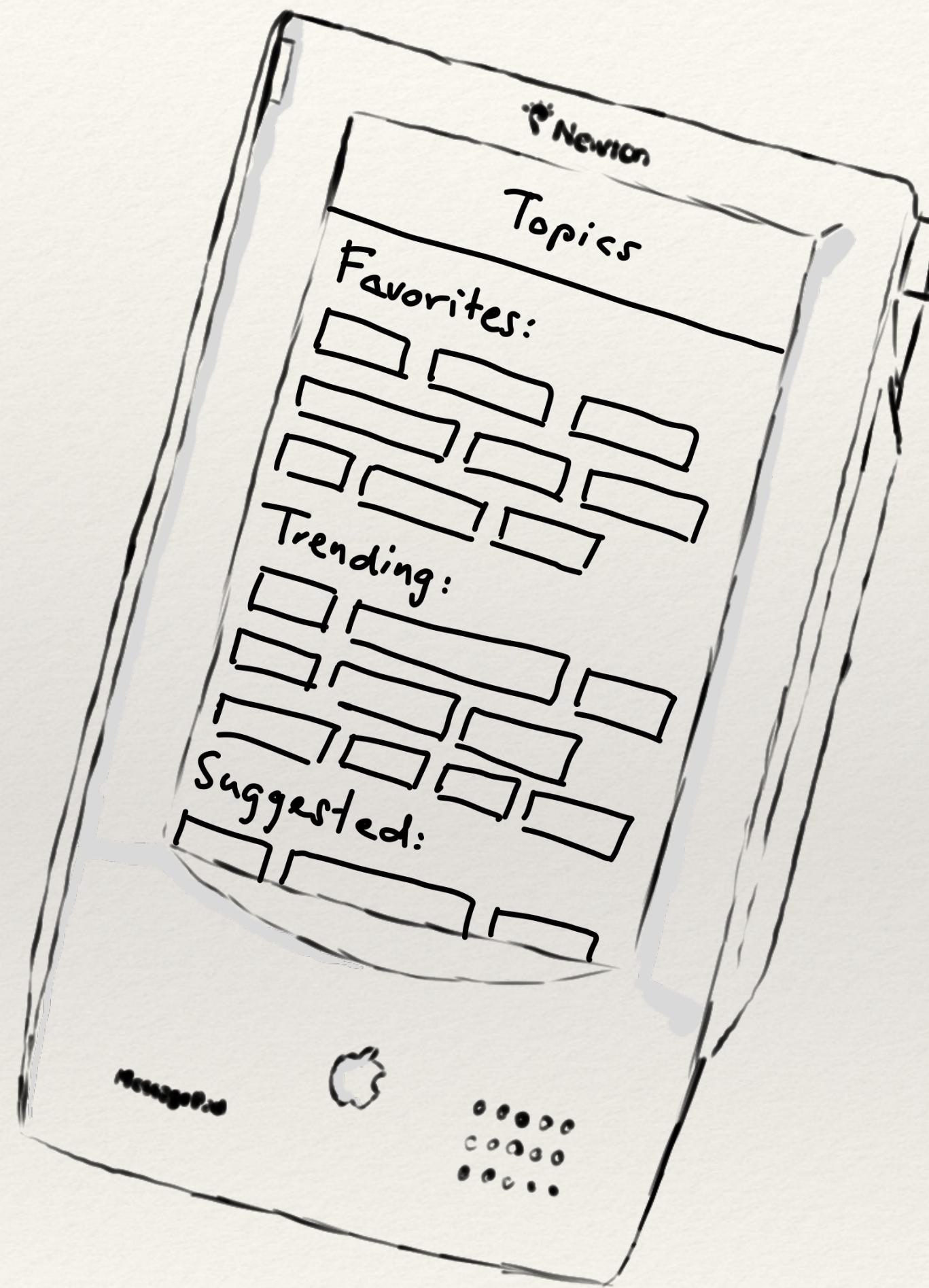


ACCESSIBILITY

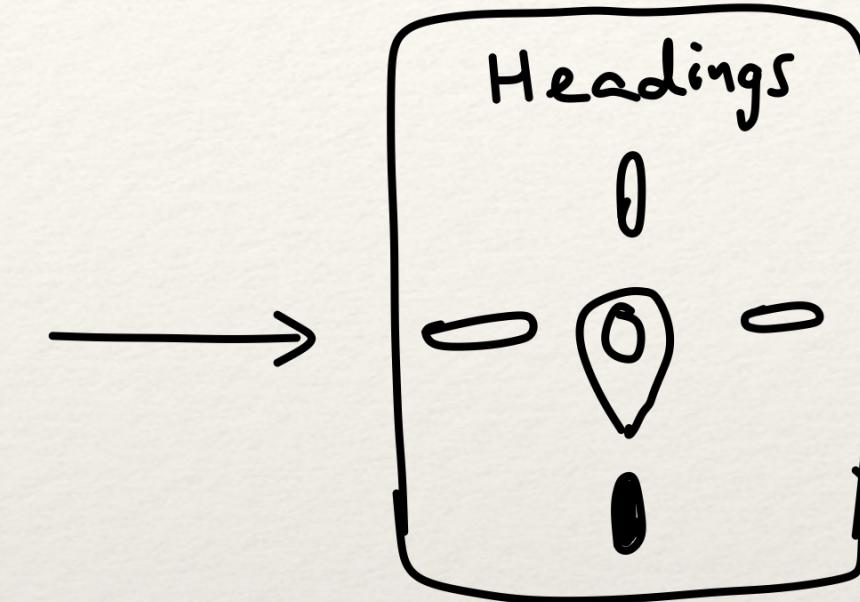
- "Close-icon-@3x" X
- "Close-001-2019" X
- "Close button" X
- "Button" X
- "Close" ✓



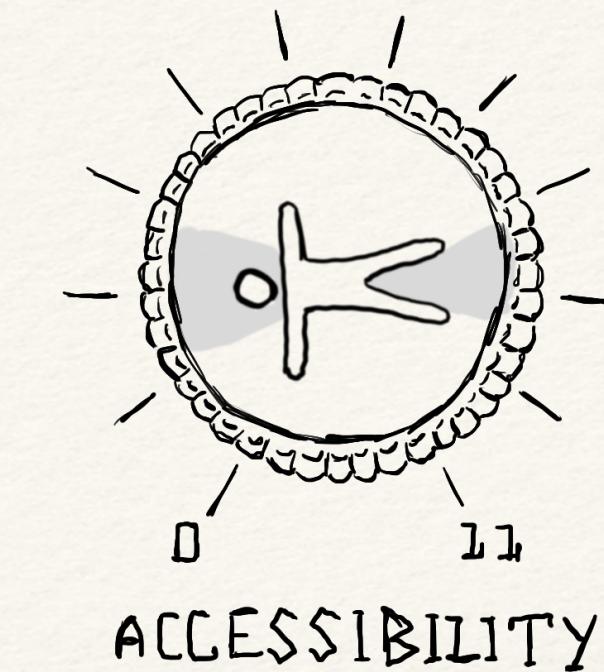
2. Go to section two...



Step 1: Rotor

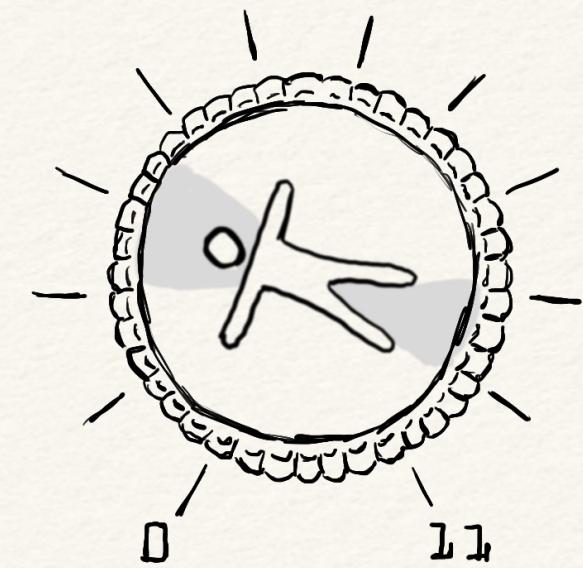
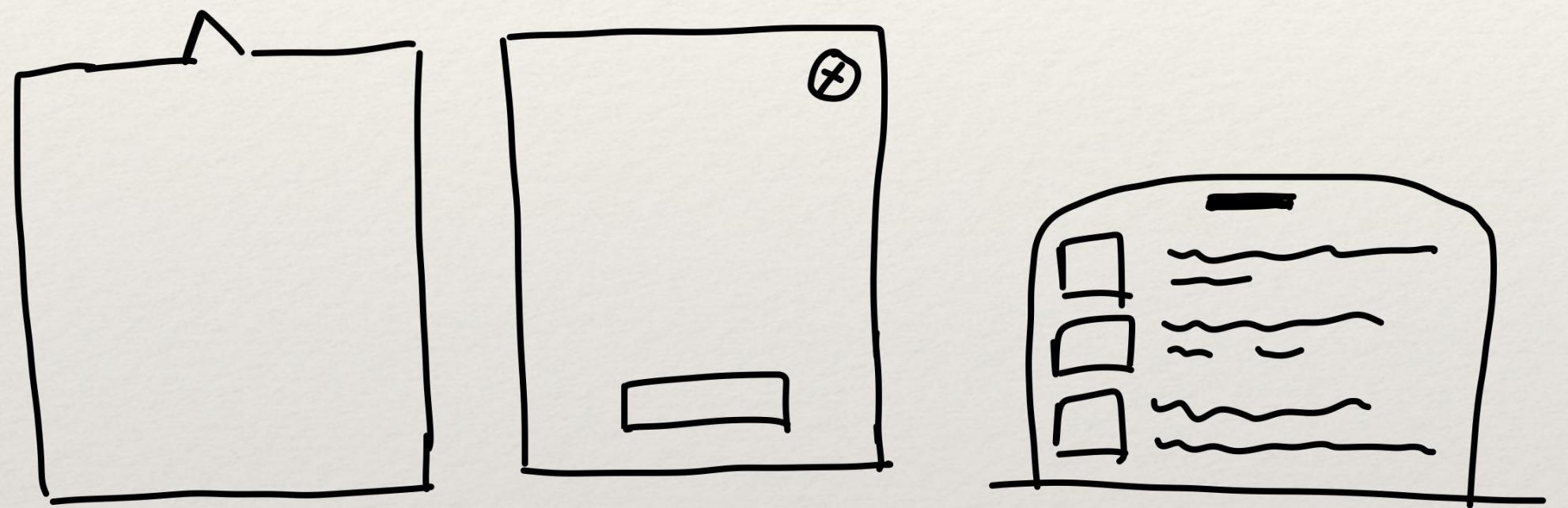


Step 2: Navigate

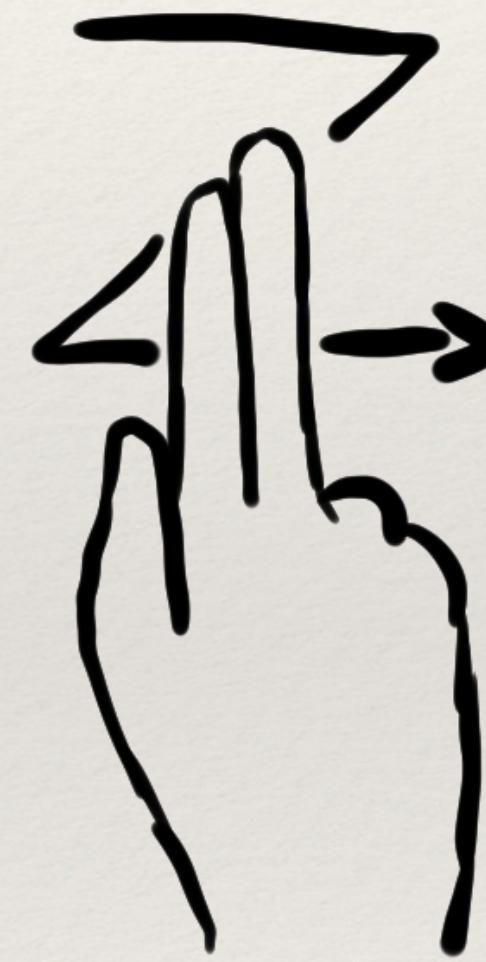


```
headingLabel.accessibilityTraits =  
UIAccessibilityTraits.header
```

### 3.- The escape room

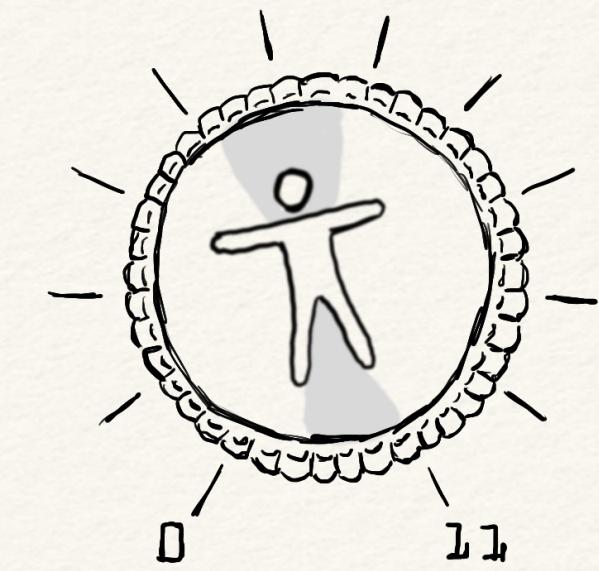
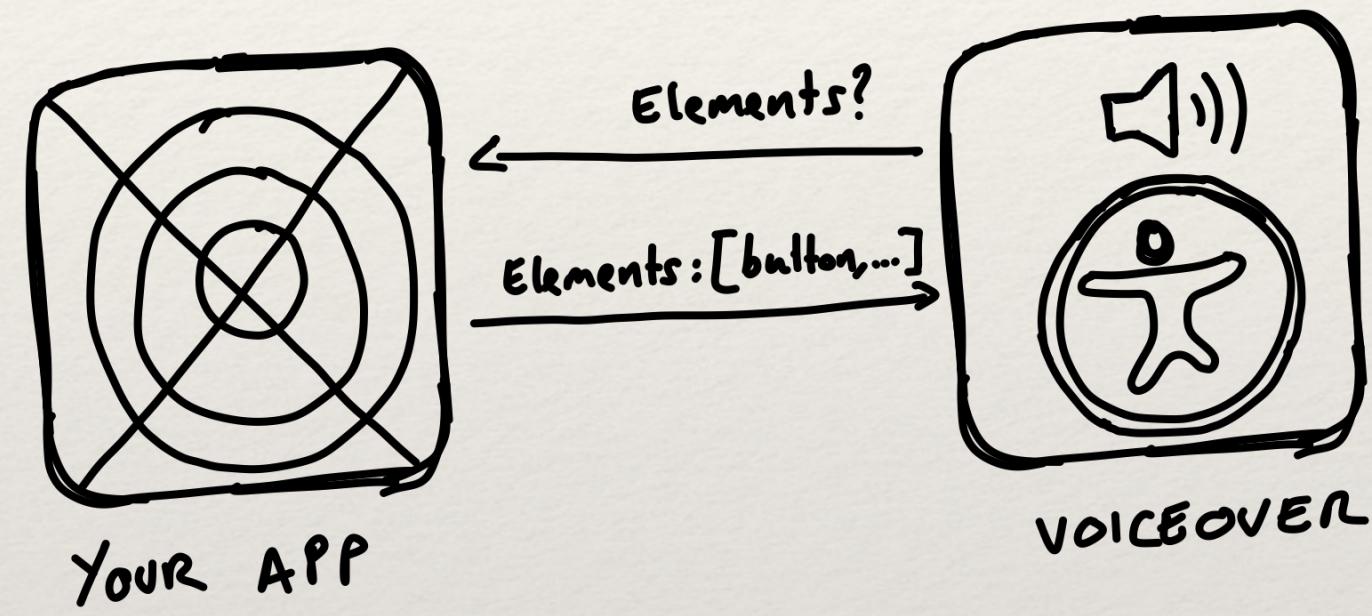
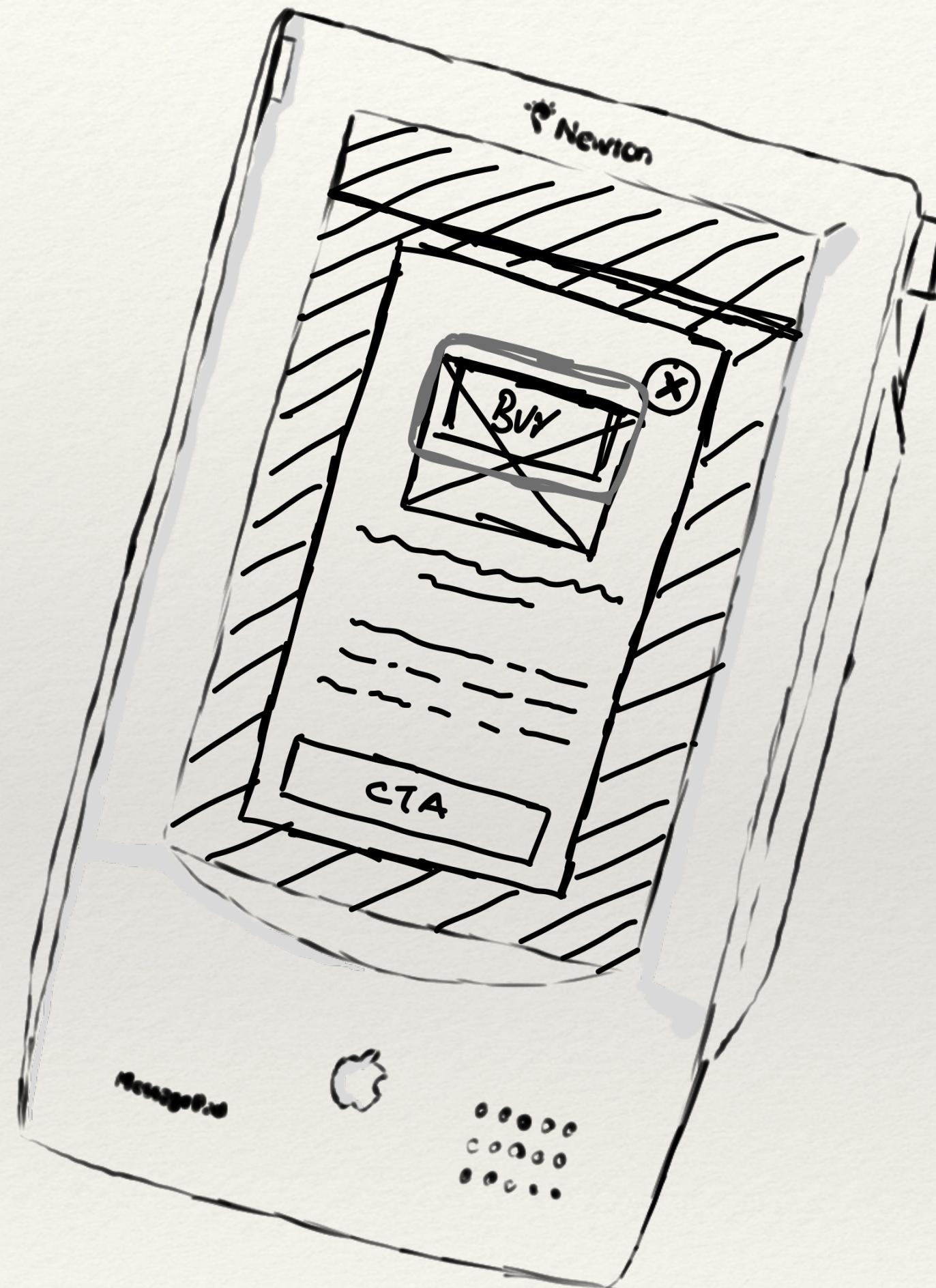


ACCESSIBILITY



```
override func accessibilityPerformEscape() -> Bool {  
    self.dismiss(animated: true, completion: nil)  
    return true  
}
```

# 5- Notifications

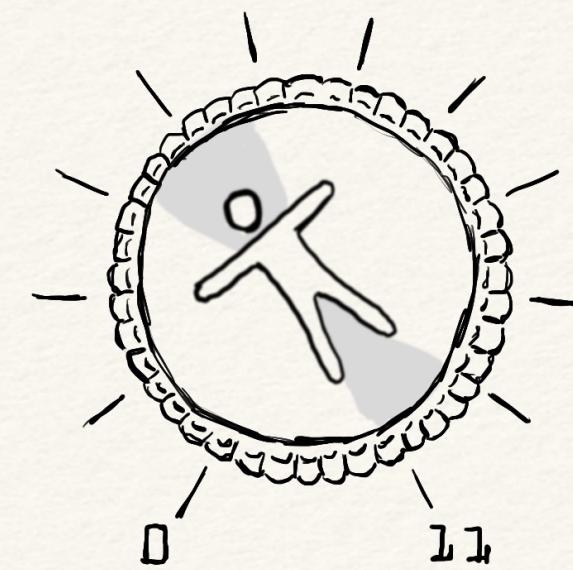
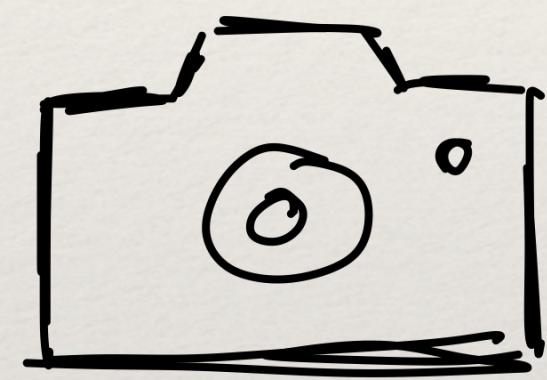
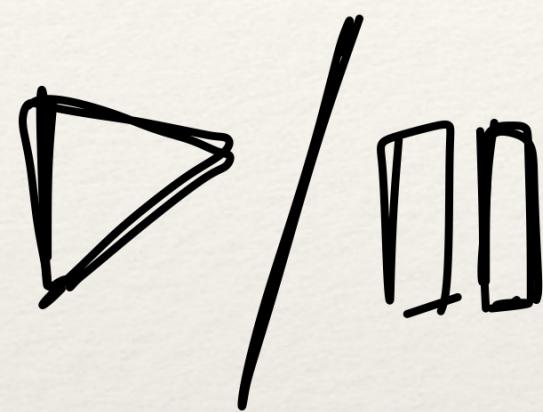


ACCESSIBILITY

```
UIAccessibility.post(notification: .screenChanged  
    argument: customModalView)
```

```
UIAccessibility.post(notification: .layoutChanged  
    argument: extraInfoView)
```

## 4.- It's a kind of magic

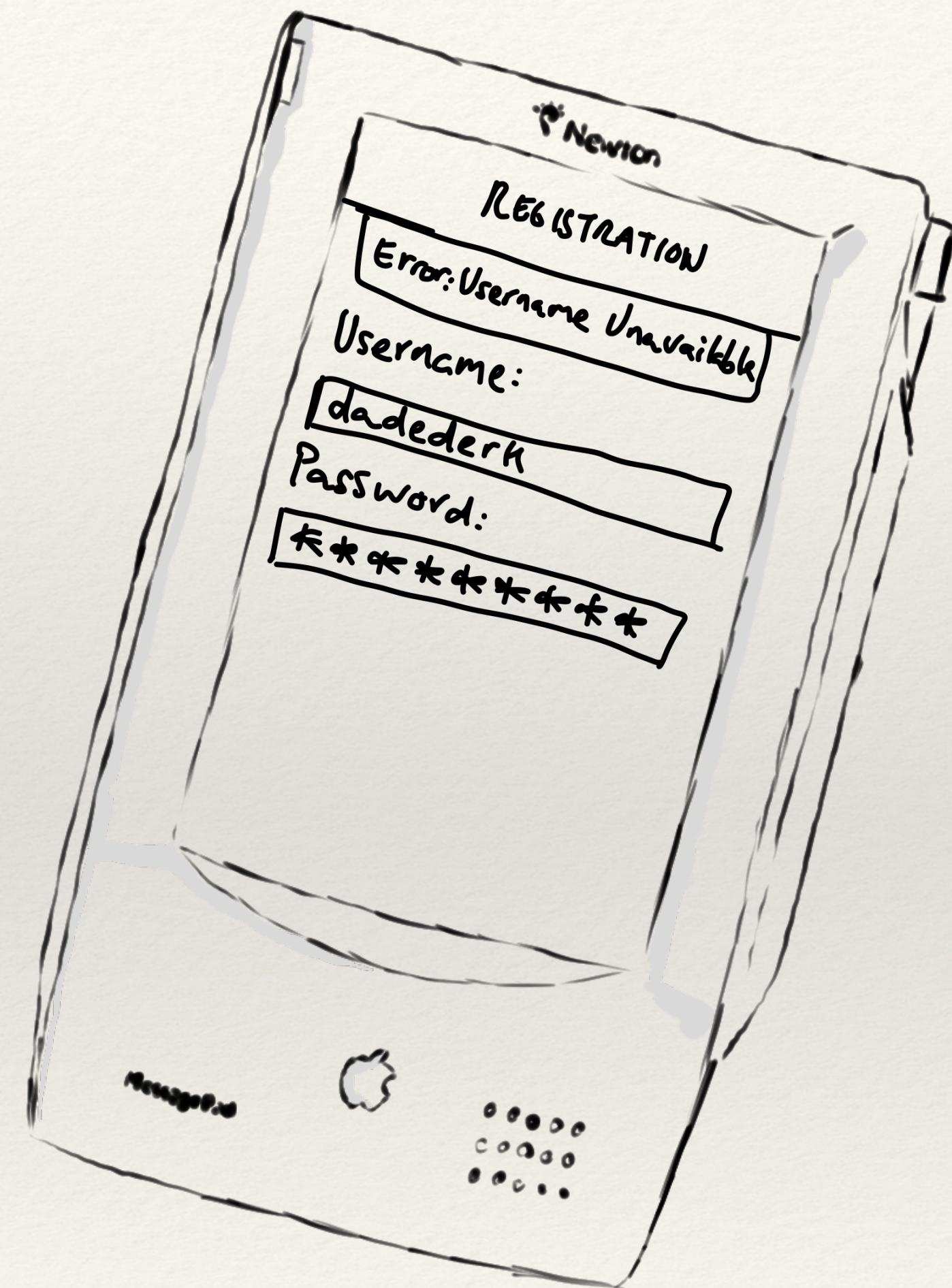


ACCESSIBILITY



```
override func accessibilityPerformMagicTap() -> Bool {  
    if player.isPlaying {  
        player.pause()  
    } else {  
        player.play()  
    }  
    return true  
}
```

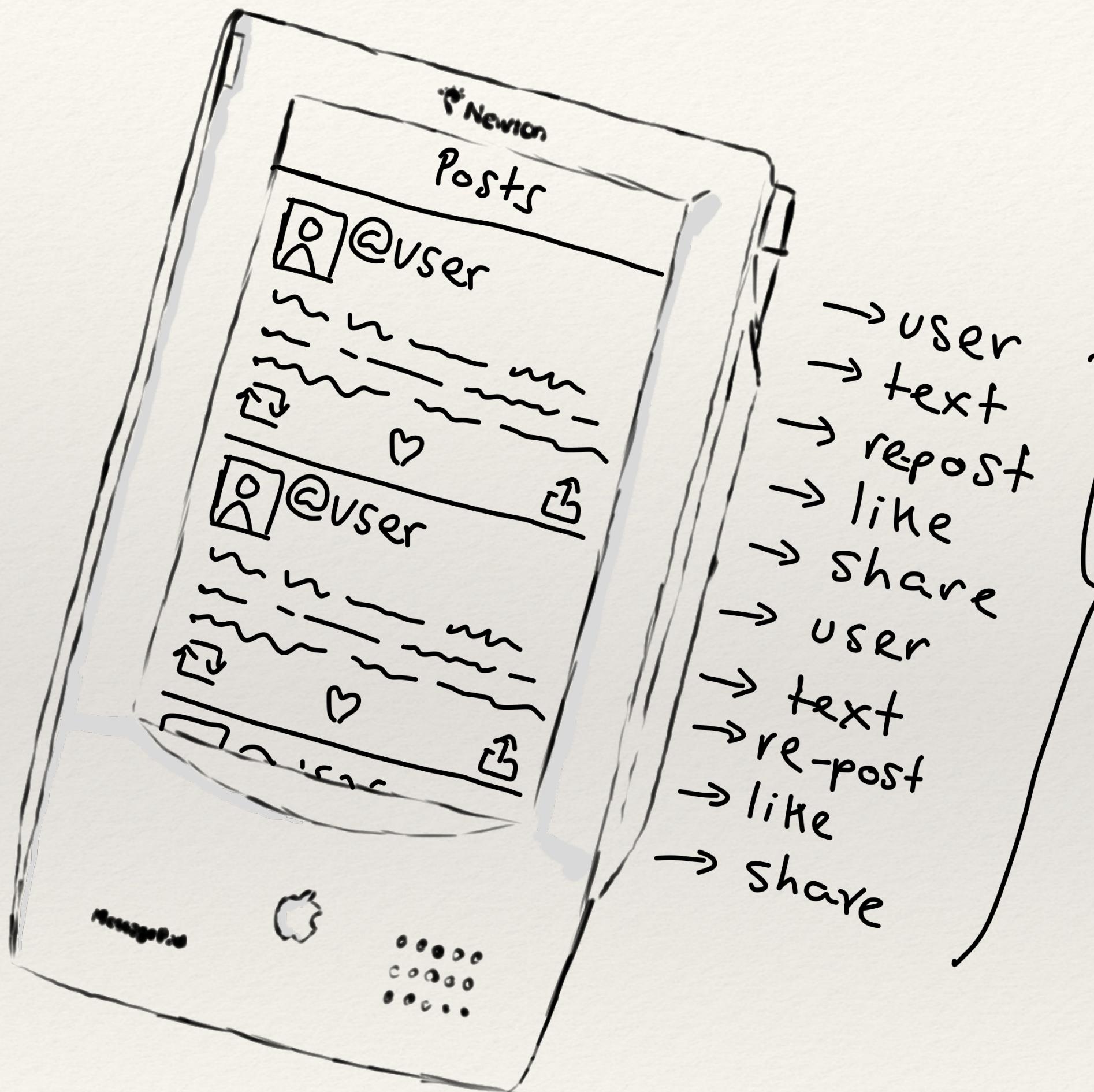
# 6: Announcements



ACCESSIBILITY

```
let announcementAttributes =  
[NSAttributedString.Key.accessibilitySpeechQueueAnnouncement:  
 true]  
  
let announcementString =  
NSAttributedString(string:toastView.accessibilityLabel!,  
 attributes:announcementAttributes)  
  
UIAccessibility.post(notification:announcement  
 argument:announcementString)
```

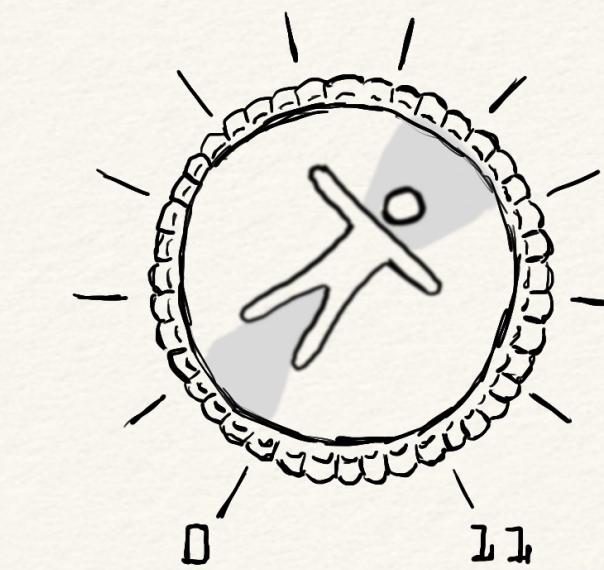
# 7. Custom Actions



→ user + text

⇒ → user + text

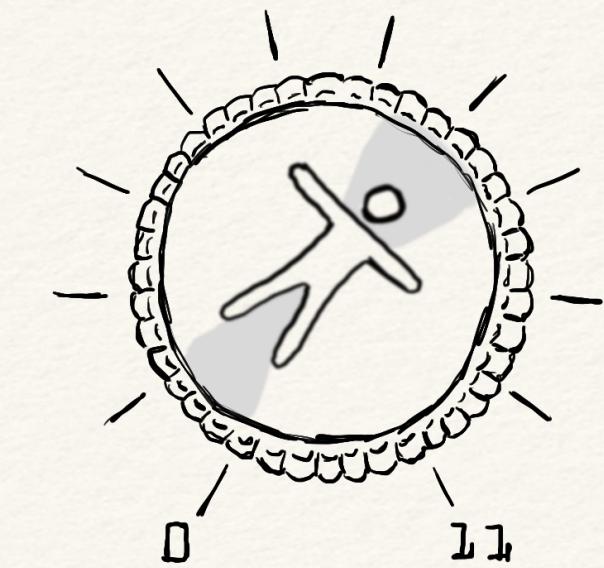
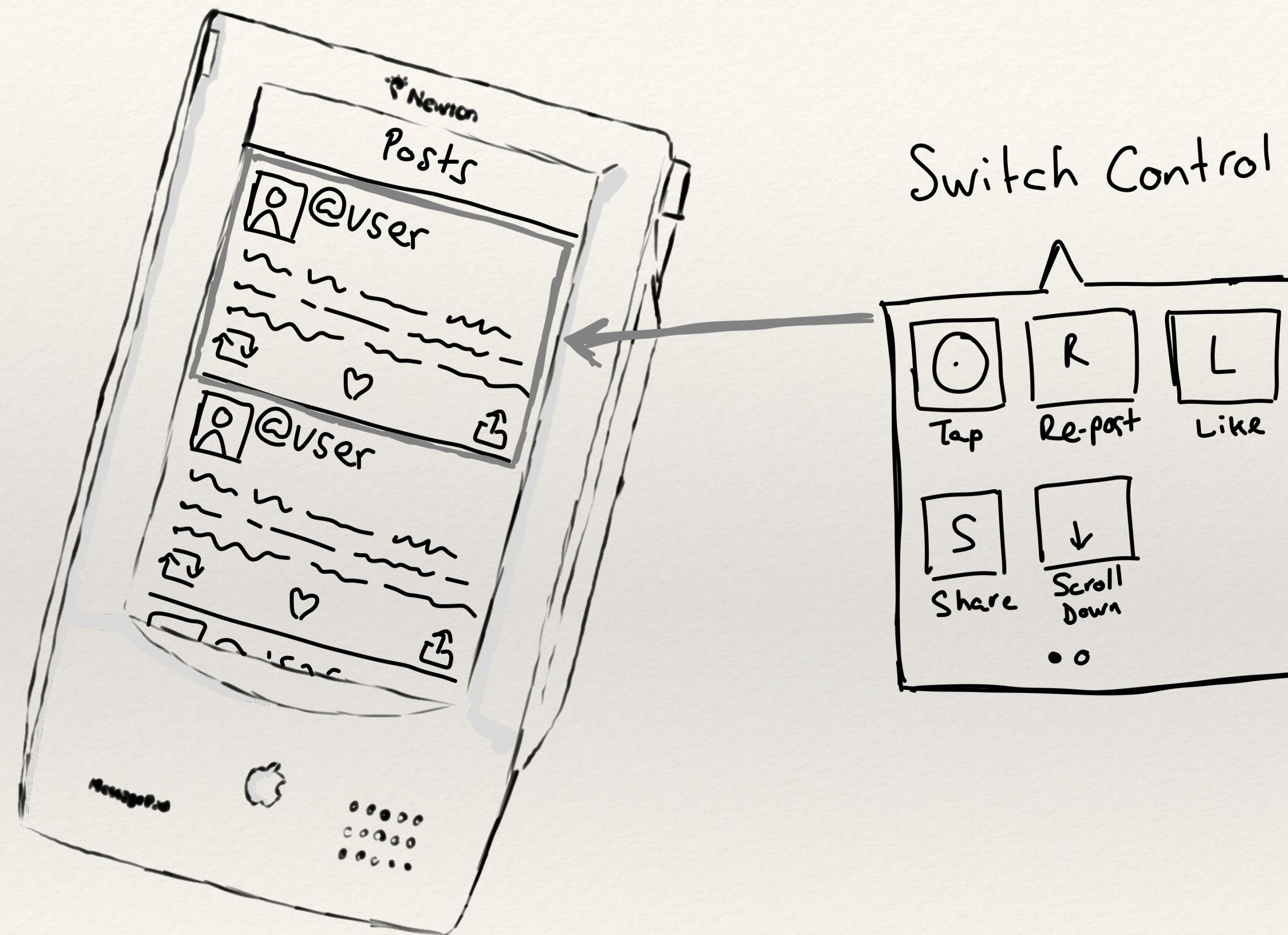
↑ user ↑ repost ↑ like ↑ share



ACCESSIBILITY

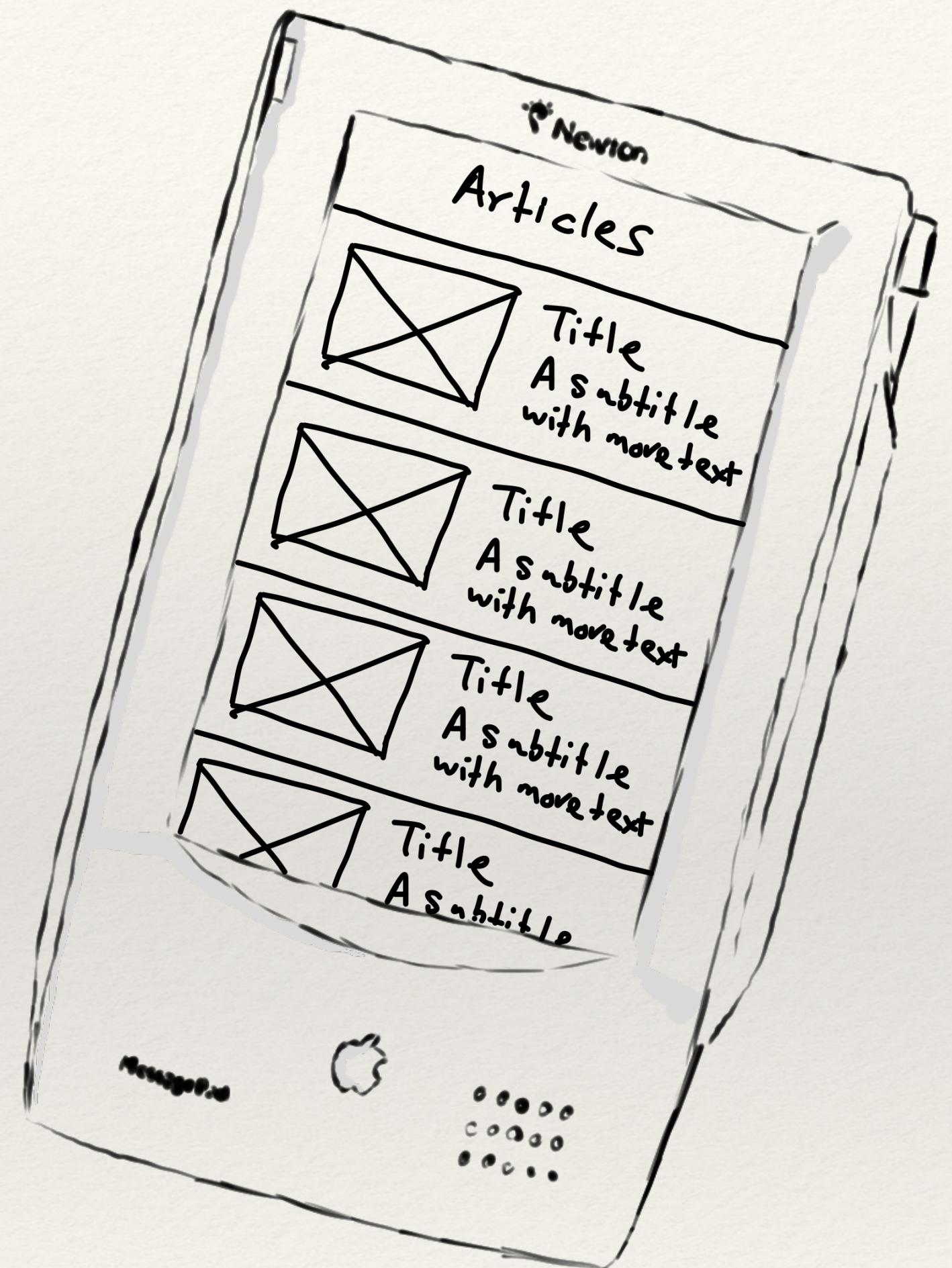
```
accessibilityCustomActions =  
[UIAccessibilityCustomAction(name:like,  
target:self,  
selector:#selector(likeButtonPressed(-:))),  
UIAccessibilityCustomAction(name:share,  
target:self,  
selector:#selector(shareButtonPressed(-:)))]
```

# 7. Custom Actions



ACCESSIBILITY

# 8.- Big



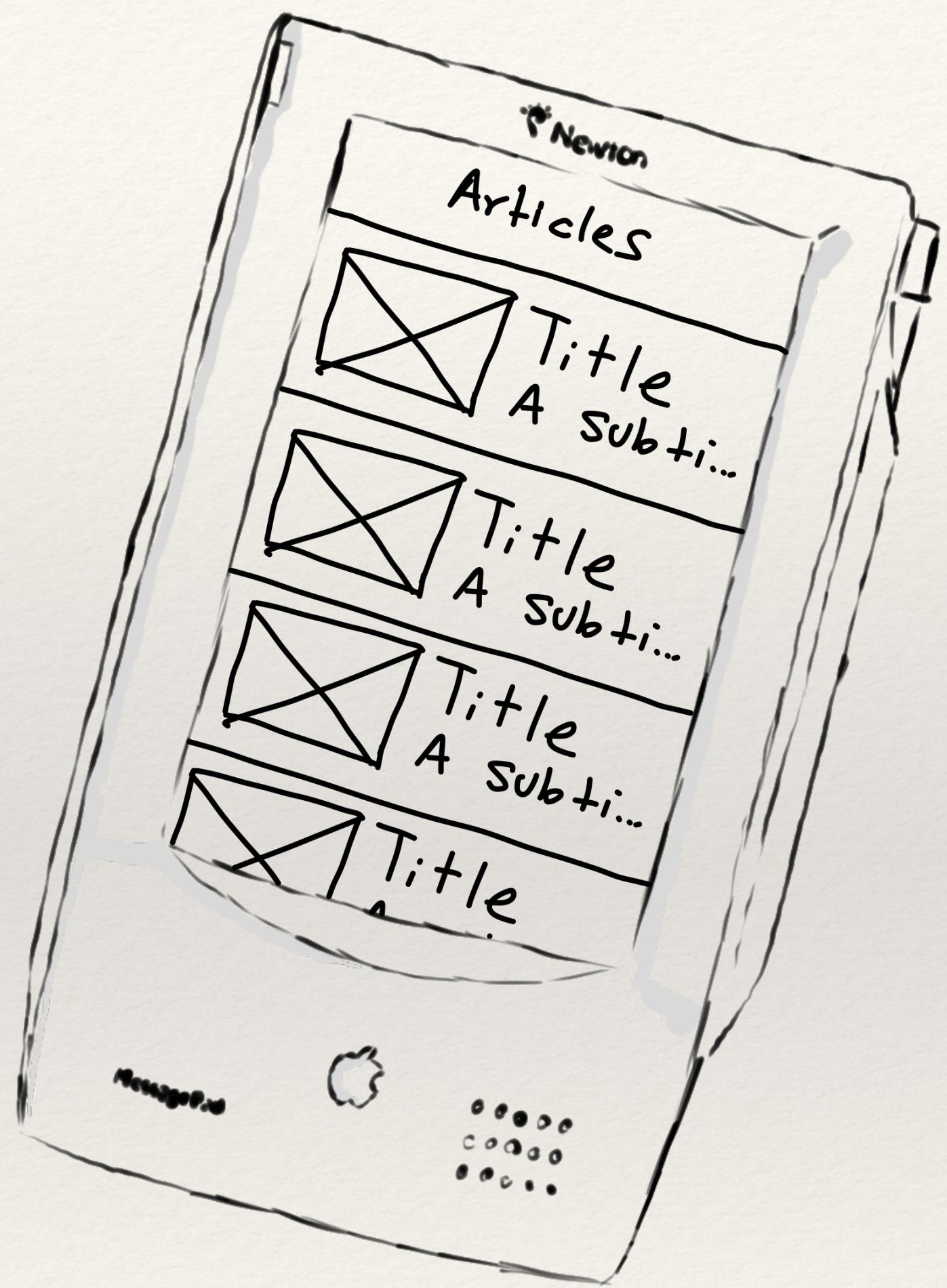
```
subtitleLabel.font =  
UIFont.preferredFont(forTextStyle: .body)
```

```
subtitleLabel.adjustFontForContentSizeCategory = true
```

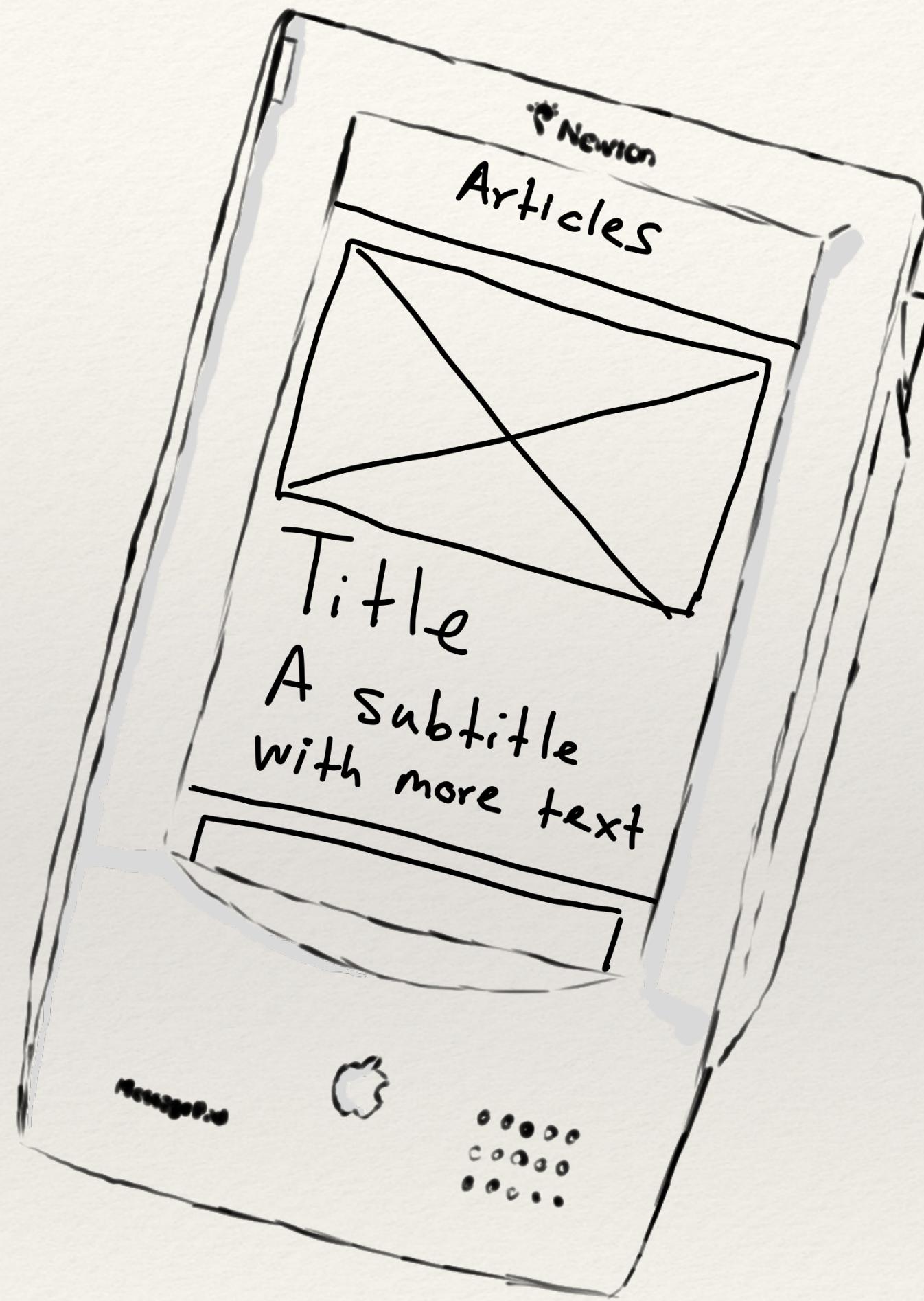
```
subtitleLabel.numberOfLines = 0
```

```
titleLabel.font =  
UIFontMetrics(forTextStyle: .title1).  
scaledFont(for: customFont)
```

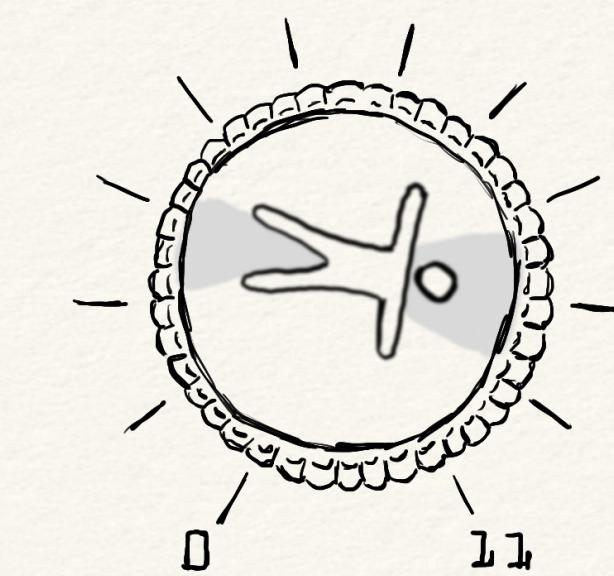
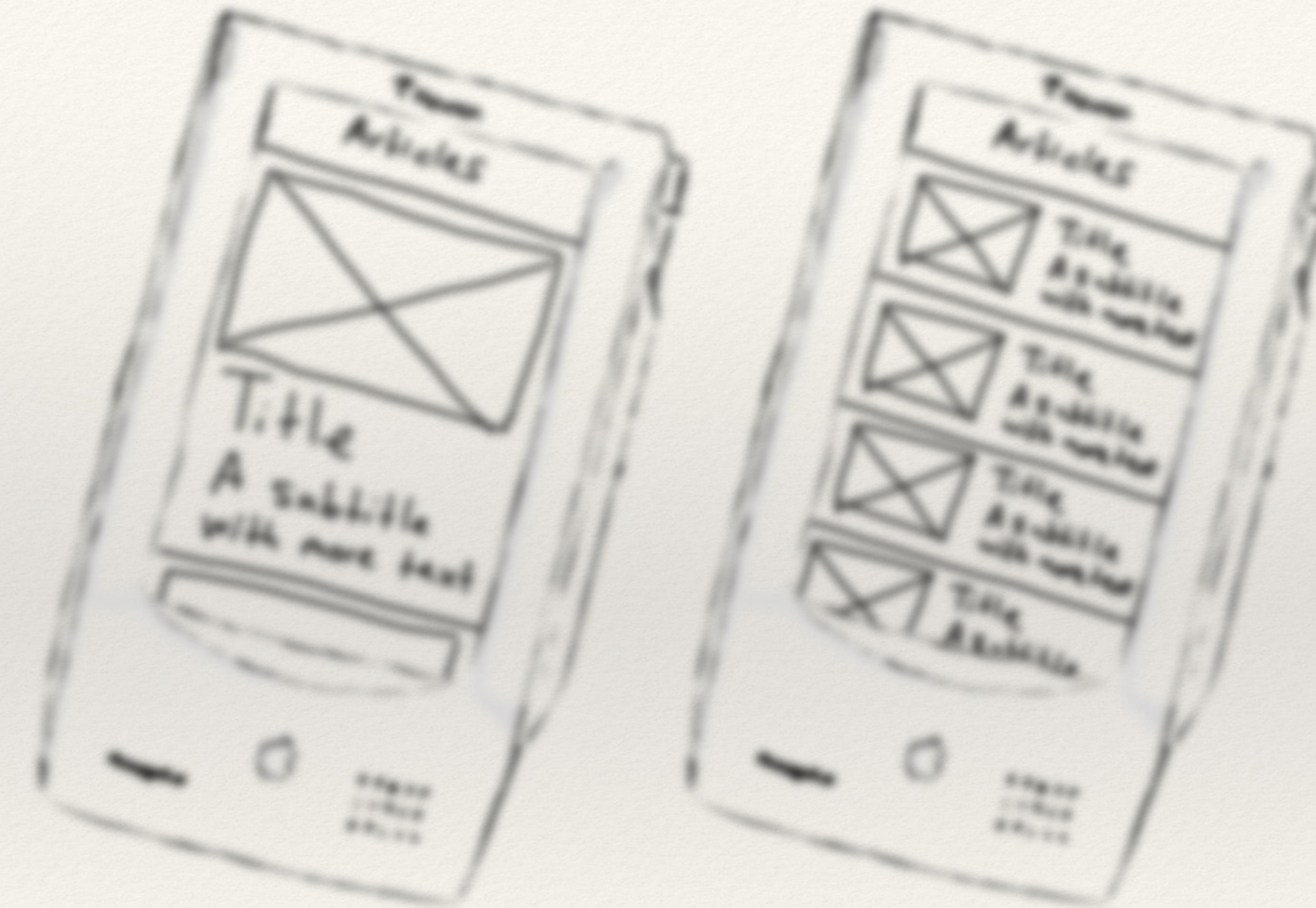
# 8.- Big



# 9: Alternative Layout



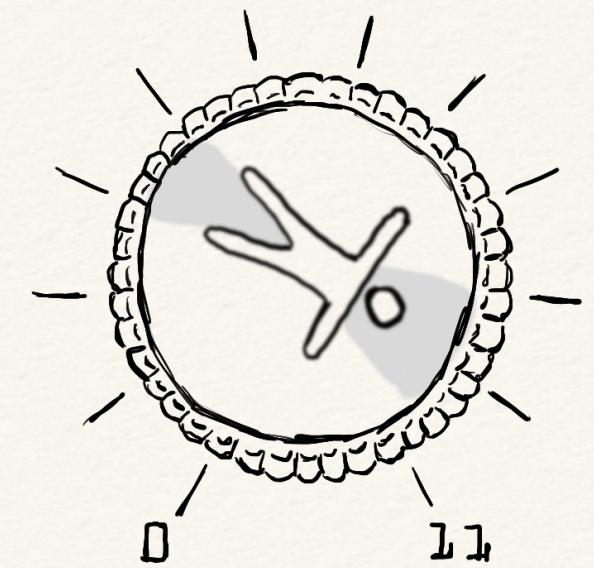
# 9: Alternative Layout



ACCESSIBILITY

```
if traitCollection.preferredContentSizeCategory.  
    isAccessibilitySizeCategory {  
    cell = tableView.dequeueReusableCell(  
       (withIdentifier: "alternativeCellId",  
        for: indexPath)  
} else {  
    cell = tableView.dequeueReusableCell(  
       (withIdentifier: "defaultCellId",  
        for: indexPath)  
}
```

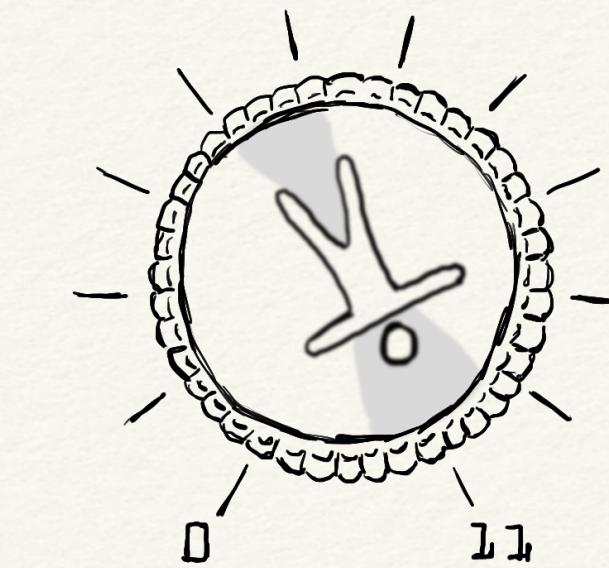
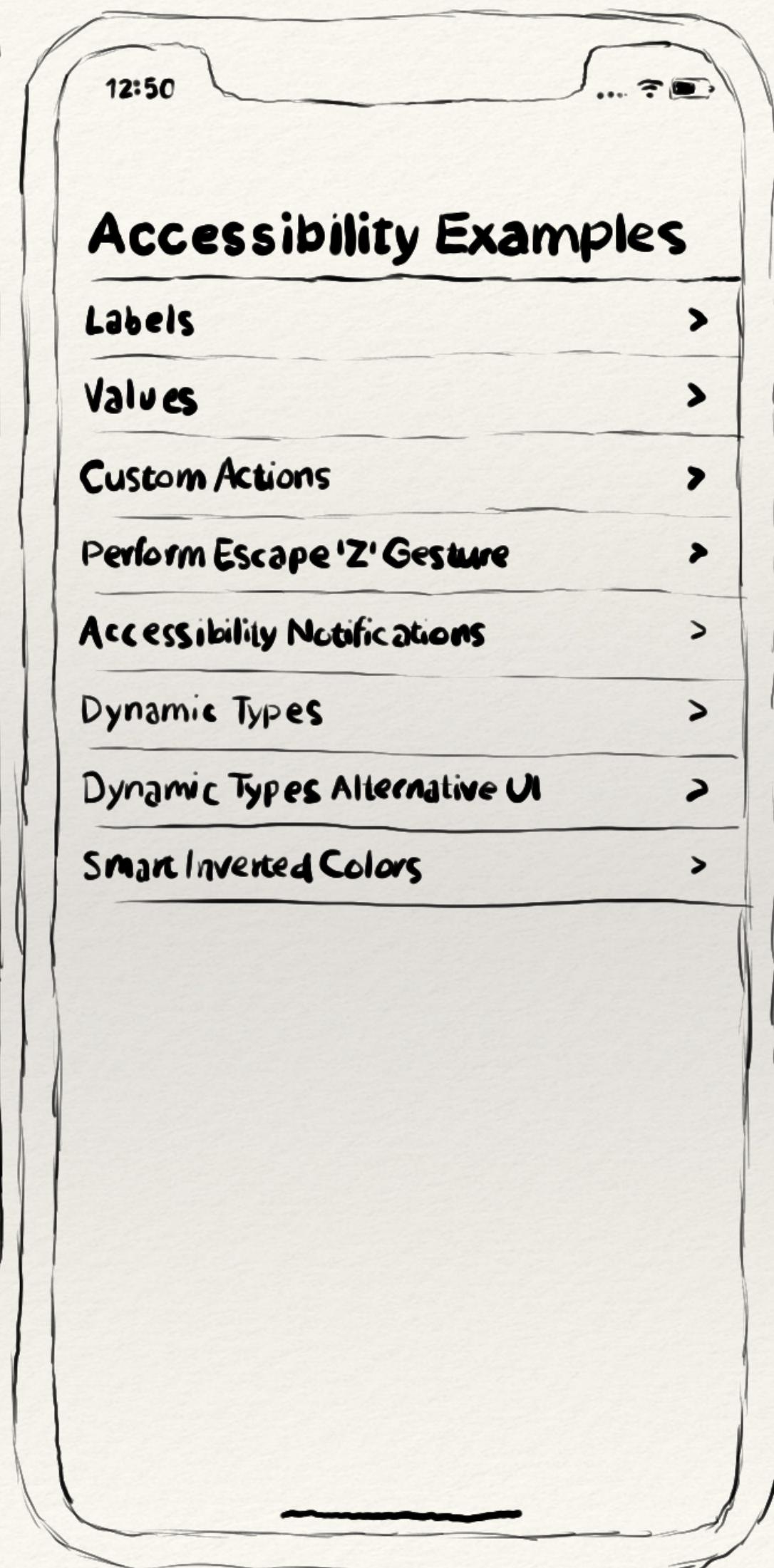
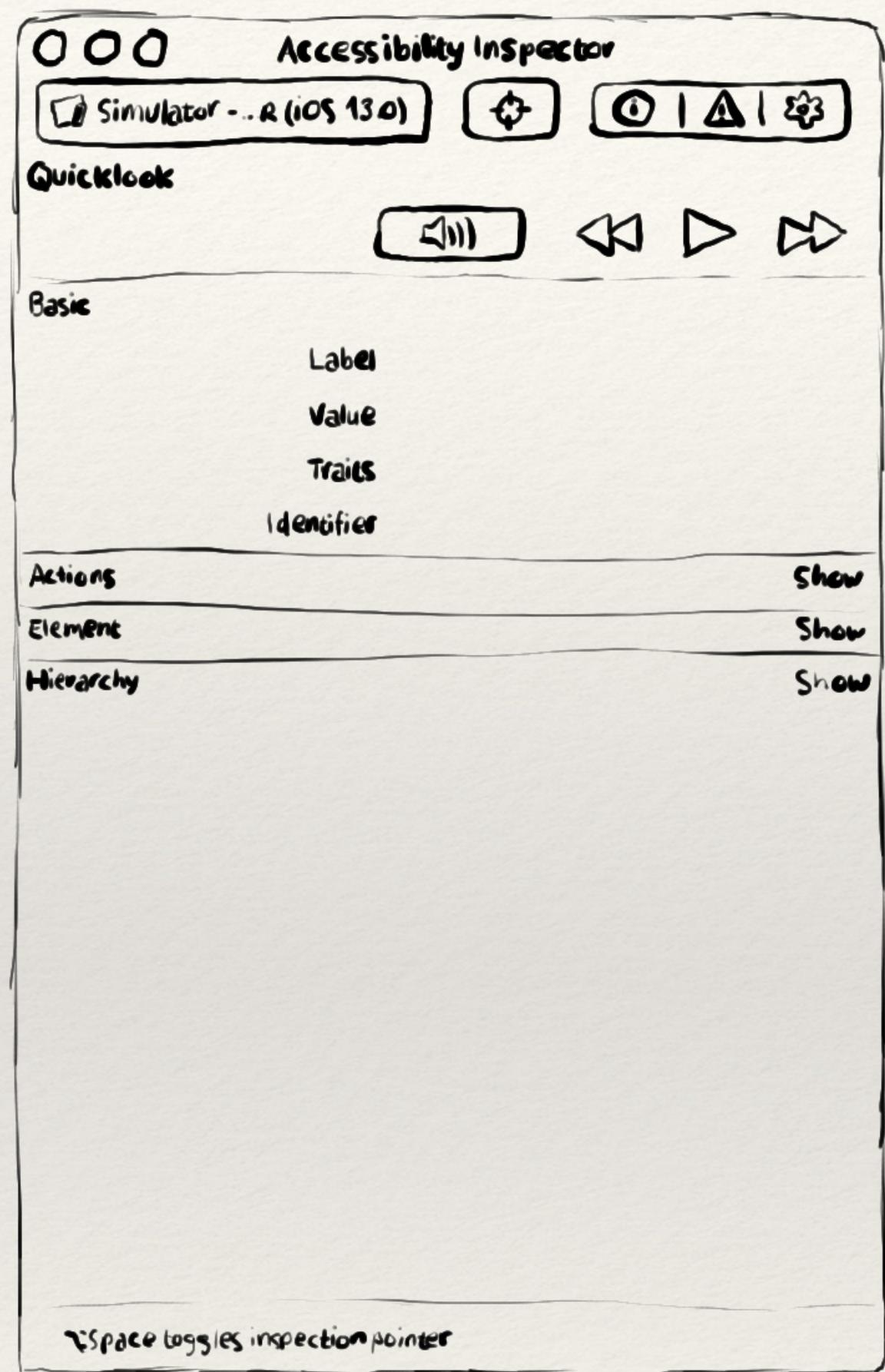
# 10.- Come to the dark side



ACCESSIBILITY

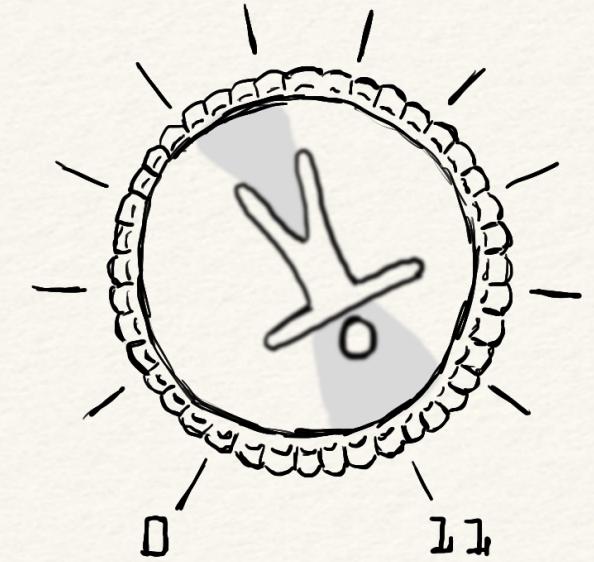
imageView.accessibilityIgnoresInvertColors = true

# 11- Test!



ACCESSIBILITY

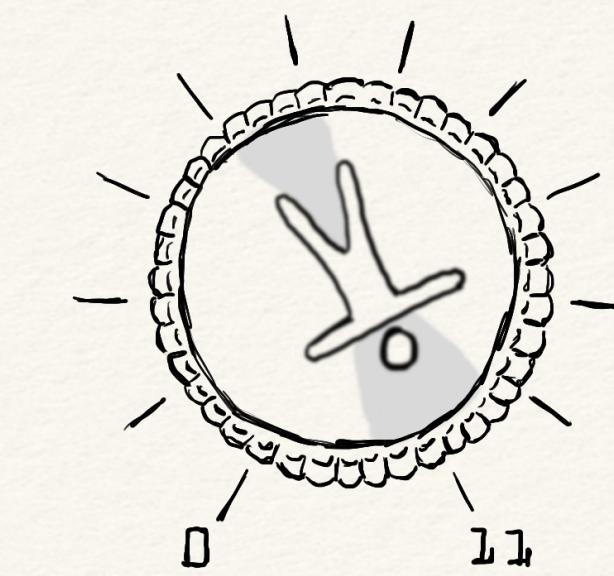
# 11- Test!



ACCESSIBILITY

- Screen Curtain
- Set audio on/off for VoiceOver
- Shortcuts!





ACCESSIBILITY

DAREDEVIL IS A MARVEL CHARACTER

# Accessibility → Up to 11!

DANI D'EVESA  
@dadederk  
iOS Engineer at  
skyscanner



\*THE LOONEY TUNES ARE  
CHARACTERS FROM WARNER BROS