

CUSTOM DRAWING IN IOS 12 WITH drawRect

Section 6, Lecture 43

Resources available

Carrier: iPhone 7 5:24 PM

15.50

225.25

15 hours

Clear Calculator

hVC: UIViewController

```
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let calcBtn
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om.apple.

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ew.frame.size.width, height: 60))
```

Window Shopper - Result.png

\$13.00

\$416.00

32

Go to Dashboard

Add \$ symbol using draw(Rect) to textField

The image displays a composite view. On the left, there's a screenshot of an iPhone 7 displaying a calculator application. The app has a dark theme with light-colored text fields. The top text field shows '\$13.00' and the bottom one shows '\$416.00'. Below these fields is a large, semi-transparent black box containing the number '32'. On the right side of the image, there's a video feed of a man with a beard and a white baseball cap with a red logo. He is wearing a blue t-shirt and speaking into a black microphone. The background behind him includes a window with horizontal blinds and some wall art.

```
Running window-shopper on iPhone 7
window-shopper > Views > CurrencyTxtField.swift > M draw(_:)
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import UIKit

class CurrencyTextField: UITextField {

    override func draw(_ rect: CGRect) {
        let size: CGFloat = 20
        let currencyLbl = UILabel(frame: CGRect(x: (rect.size.width - size) / 2, y: (rect.size.height / 2) - size / 2, width: size, height: size))
        currencyLbl.backgroundColor = .white
        currencyLbl.textAlignment = .center
        currencyLbl.textColor = .black
        currencyLbl.layer.cornerRadius = 5.0

        let formatter = NumberFormatter()
        formatter.numberStyle = .currency
        formatter.locale = .current
        currencyLbl.text = formatter.currencySymbol
        addSubview(currencyLbl)
    }

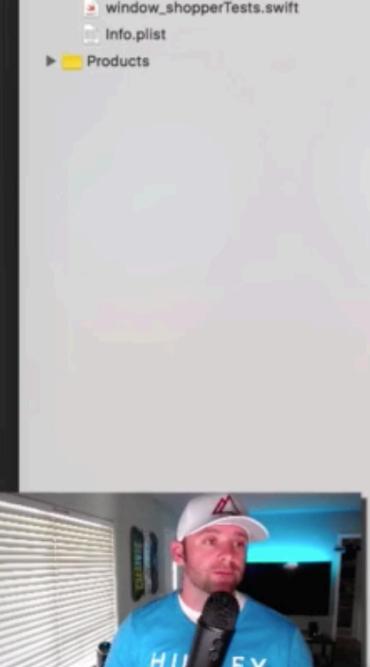
    override func prepareForInterfaceBuilder() {
        customizeView()
    }

    override func awakeFromNib() {
        super.awakeFromNib()
        customizeView()
    }
}

extension CurrencyTextField {
    func customizeView() {
        self.borderStyle = .none
        self.attributedPlaceholder = NSAttributedString(string: "Your hourly wage", attributes: [NSAttributedString.Key.foregroundColor: UIColor.lightGray])
        self.attributedPlaceholder = NSAttributedString(string: "Item price", attributes: [NSAttributedString.Key.foregroundColor: UIColor.lightGray])
    }
}
```

If we have used `draw(rect)` method to draw something, '`clipToBounds = true`' needs to be set because this feature is removed when `draw()` is used.

Notice how `cornerRadius` applied on the layer is not working and we see 90 deg corners.



Xcode File Edit View Find Navigate Editor Product Debug Source Control Window Help

Building window-shopper: window-shopper | Copying Swift standard libraries 4 1

window-shopper window-shopper Model Wage.swift Views CurrencyTxtField.swift currencyView()

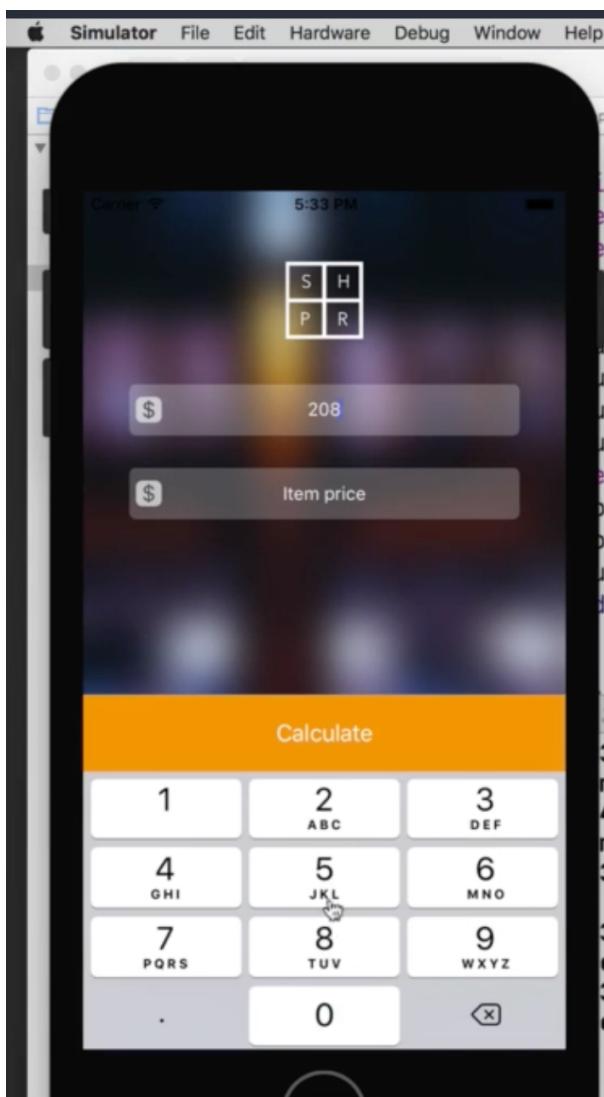
```
override func draw(_ rect: CGRect) {
    let size: CGFloat = 20
    let currencyLbl = UILabel(frame: CGRect(x: 5, y: (frame.size.height / 2) - size / 2, width: size, height: size))
    currencyLbl.backgroundColor = black
    currencyLbl.textAlignment = .center
    currencyLbl.textColor = black
    currencyLbl.layer.cornerRadius = 5.0
    currencyLbl.clipsToBounds = true
    let formatter = NumberFormatter()
    formatter.numberStyle = .currency
    formatter.locale = .current
    currencyLbl.text = formatter.currencySymbol
    addSubview(currencyLbl)
}

override func prepareForInterfaceBuilder() {
    customizeView()
}

override func awakeFromNib() {
    super.awakeFromNib()
    customizeView()
}

func customizeView() {
    backgroundColor = black
    layer.cornerRadius = 5.0
    textAlign = .center
}
```

clipToBounds true for
normal UITextFields as
well.



Running window-shopper on iPhone X
window-shopper > Views > CurrencyTextField.swift

```
override func draw(_ rect: CGRect) {
    let size: CGFloat = 20
    let currencyLbl = UILabel(frame: CGRect(x: 5, y: (frame.size.height / 2) - size / 2, width:
        size, height: size))
    currencyLbl.backgroundColor = .white
    currencyLbl.textAlignment = .center
    currencyLbl.textColor = .black
    currencyLbl.layer.cornerRadius = 5.0
    currencyLbl.clipsToBounds = true
    let formatter = NumberFormatter()
    formatter.numberStyle = .currency
    formatter.locale = .current
    currencyLbl.text = formatter.currencySymbol
    addSubview(currencyLbl)
}
```

Notice :

1. No need to call super in draw()
2. Don't put empty stub if you are not going to use draw(). It causes performance issues.

```
33:14.773091-0700 window-shopper[32217:1953282] [M] m.apple.configurationprofiles path is /Users/markprice/4FFC-80BE-AB877E9683D3/data/Containers/Shared/System
33:14.773451-0700 window-shopper[32217:1953282] [M]
33:14.794221-0700 window-shopper[32217:1953282] [M] e-PortraitChoco-DecimalPad; using 1203216132112063
33:14.805646-0700 window-shopper[32217:1953282] [M] e-PortraitChoco-DecimalPad; using 1203216132112063
```

