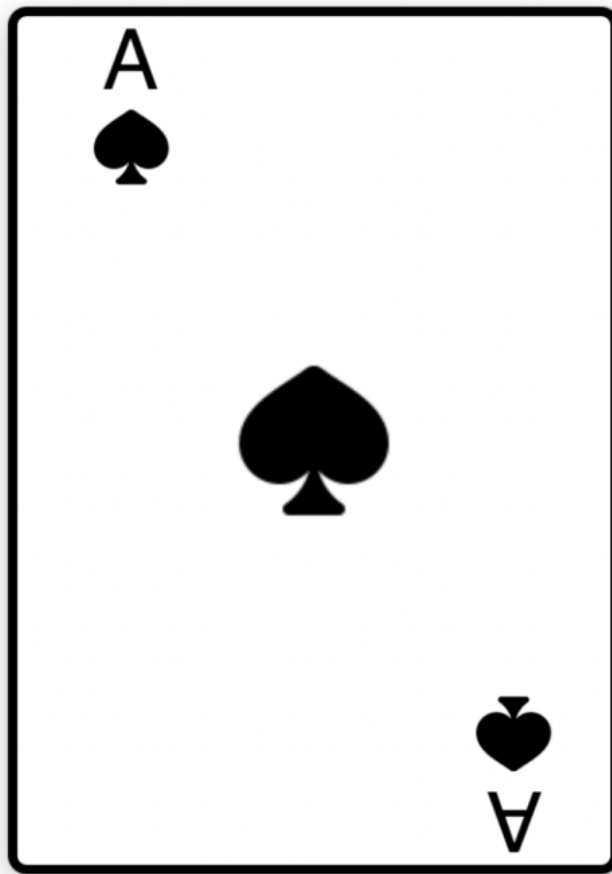# Creating a Playing Card using CALayer and CATextLayer in Swift

ddas.tech/creating-a-playing-card-using-calayer-and-catextlayer-in-swift/

Created By: Debasis Das (19-Nov-2022)

In this post we will create a playing card using CALayer and CATextLayer.

A playing card created using CALayer and CATextLayer

```swift
//  AppDelegate.swift
//  CALayer-PlayingCard
//  Created by Debasis Das on 7/30/22.

import Cocoa

@main
class AppDelegate: NSObject, NSApplicationDelegate {

    @IBOutlet var window: NSWindow!
    @IBOutlet weak var placeholderView:NSView!

    func applicationDidFinishLaunching(_ aNotification: Notification) {

        self.window.alphaValue = 1.0
        self.window.backgroundColor = NSColor.clear


        let cardLayer = CALayer()
        cardLayer.frame = self.placeholderView.frame
        cardLayer.backgroundColor = NSColor.white.cgColor
        cardLayer.cornerRadius = 10.0
        cardLayer.borderWidth = 5.0
        cardLayer.borderColor = NSColor.black.cgColor
        cardLayer.shadowOpacity = 1.0
        cardLayer.shadowRadius = 20.0
        self.placeholderView.layer = cardLayer
        self.placeholderView.wantsLayer = true

        let topTextLayer = CATextLayer()
        topTextLayer.string = "A"
        topTextLayer.alignmentMode = CATextLayerAlignmentMode(rawValue: "center")
        topTextLayer.frame = CGRect(x: cardLayer.bounds.width/8, y:
cardLayer.bounds.size.height - 50.0, width: 50 , height: 50)
        topTextLayer.fontSize = 45
        topTextLayer.foregroundColor = NSColor.black.cgColor
        topTextLayer.contentsScale = NSScreen.main!.backingScaleFactor
        cardLayer.addSublayer(topTextLayer)

        let topImageLayer = CALayer()
        topImageLayer.frame = CGRect(x: cardLayer.bounds.size.width/8, y:
cardLayer.bounds.size.height - 100, width: 50, height: 50)
        topImageLayer.contents = NSImage(named: "spade")
        cardLayer.addSublayer(topImageLayer)

        let centerImageLayer = CALayer()
        centerImageLayer.frame = CGRect(x: cardLayer.bounds.size.width/2 - 50.0, y:
cardLayer.bounds.size.height/2 - 50.0, width: 100, height: 100)
        centerImageLayer.contents = NSImage(named: "spade")
        cardLayer.addSublayer(centerImageLayer)

        let bottomImageLayer = CALayer()
```

```swift
        bottomImageLayer.frame = CGRect(x: (cardLayer.bounds.size.width *
CGFloat(6.0/8)), y: 50, width: 50, height: 50)
        bottomImageLayer.contents = NSImage(named: "spade")
        bottomImageLayer.transform =
CATransform3DScale(CATransform3DMakeRotation(CGFloat(Double.pi), 0, 0, 1),
                                          1.0, 1.0, 1);
        cardLayer.addSublayer(bottomImageLayer)


        let bottomTextLayer = CATextLayer()
        bottomTextLayer.string = "A"
         bottomTextLayer.alignmentMode = CATextLayerAlignmentMode(rawValue: "center")
        bottomTextLayer.frame = CGRect(x: (cardLayer.bounds.size.width *
CGFloat(6.0/8)), y: 0.0 , width: 50 , height: 50)
        bottomTextLayer.fontSize = 45
        bottomTextLayer.foregroundColor = NSColor.black.cgColor
        bottomTextLayer.transform = CATransform3DMakeRotation(CGFloat(Double.pi), 0.0,
0.0, 1.0);
        bottomTextLayer.contentsScale = NSScreen.main!.backingScaleFactor
        cardLayer.addSublayer(bottomTextLayer)
    }
}
```