

# «Projector»

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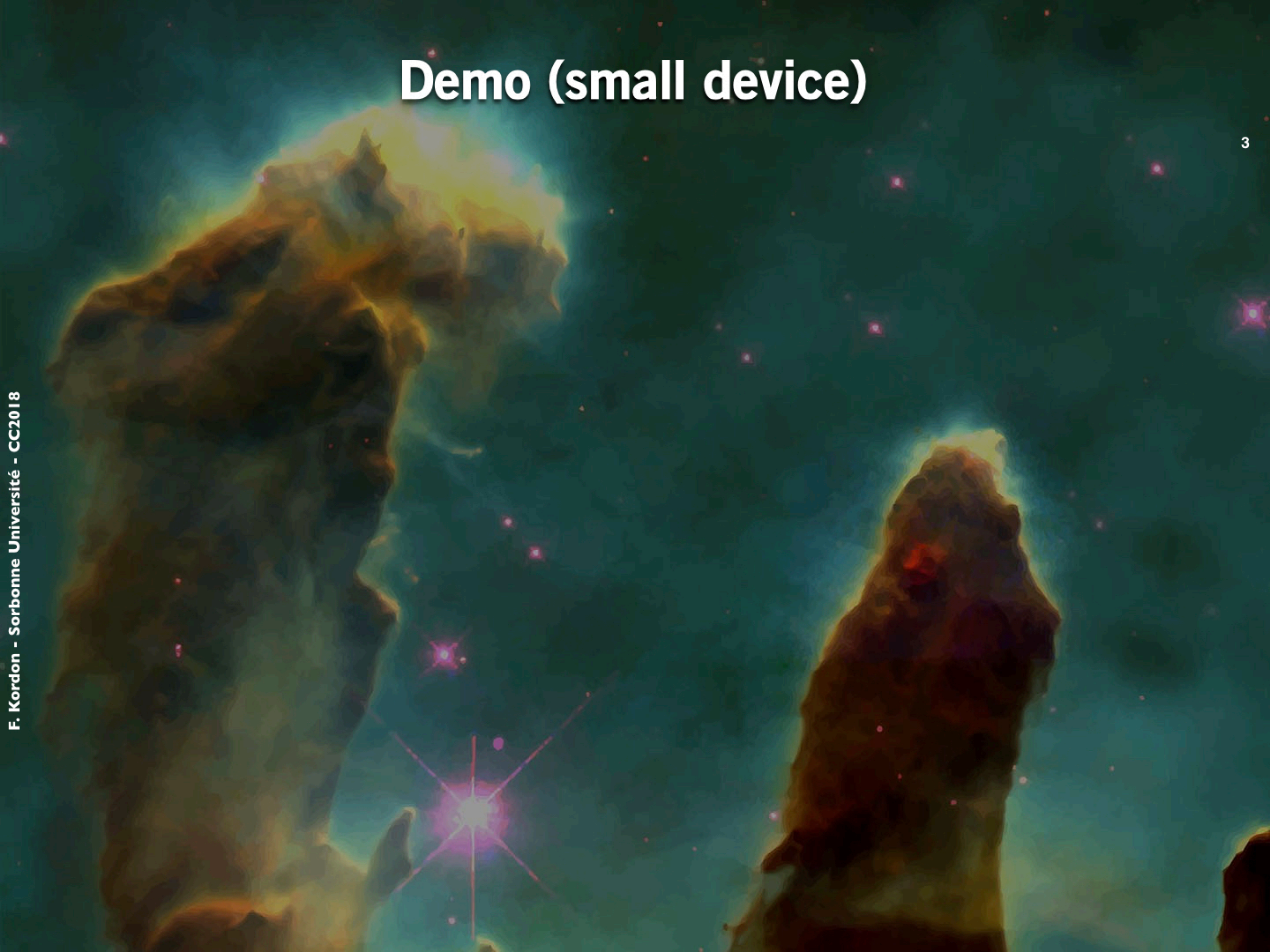
# Goal of the example



## Play a video

- Create an `AVAudioSession`
  - ▶ Enable picture-in-picture
- `AVPlayerViewController`
  - ▶ Handling a bit of `AVPlayerViewControllerDelegate`
  - ▶ Displaying a background image
- Play with an `AVPlayer`
- Observe...

# Demo (small device)



# Demo (large device)



# AppDelegate

```
import UIKit
import AVFoundation // Necessary for AVAudioSession

@UIApplicationMain
class AppDelegate: UIResponder, UIApplicationDelegate {

    var window: UIWindow?

    func application(_ application: UIApplication,
                    didFinishLaunchingWithOptions
                    launchOptions: [UIApplication.LaunchOptionsKey: Any]?) -> Bool {
        // Override point for customization after application launch.
        let session = AVAudioSession.sharedInstance()
        do {
            try session.setCategory(AVAudioSession.Category.playback, mode: .default)
        } catch {
            let a = UIAlertController(title: "Problem",
                                     message: "Unable to set an audio session category",
                                     preferredStyle: .alert)
            a.addAction(UIAlertAction(title: "OK", style: .default,
                                      handler: nil))
            self.window?.rootViewController?.present(a,
                                                       animated: true,
                                                       completion: nil)
        }
        return true
    }
}
```

# AppDelegate

```
func applicationWillResignActive(_ application: UIApplication) {}  
func applicationDidEnterBackground(_ application: UIApplication) {}  
func applicationWillEnterForeground(_ application: UIApplication) {}  
func applicationDidBecomeActive(_ application: UIApplication) {}  
func applicationWillTerminate(_ application: UIApplication) {}
```

```
}
```

# ViewController

```
import UIKit
import AVKit // Necessary for the player
import AVFoundation

class ViewController: UIViewController, AVPlayerViewControllerDelegate {

    private let playerVC = AVPlayerViewController()
    //private let videoURL = URL(string: "https://lip6.fr/Fabrice.Kordon/VideoDrone/Videos/2017-12/Ortenbourg/Ortenbourg-1.mp4")
    private let videoURL = Bundle.main.url(forResource: "Ortenbourg-overfly-HD",
                                           withExtension: "mp4")

    private let background = UIImageView(image: UIImage(named: "background"))
    private var isBackOn = false

    override func viewDidLoad() {
        super.viewDidLoad()
        // Do any additional setup after loading the view, typically from a nib.
        let player = AVPlayer(url: videoURL!)
        playerVC.player = player
        player.play()
        self.addChild(playerVC) // To avoid multiple controllers
        self.view.addSubview(playerVC.view)
        playerVC.view.frame = self.view.frame // Pass the view's frame
        playerVC.delegate = self
        self.drawInSize(UIScreen.main.bounds.size)
    }

    override var prefersStatusBarHidden: Bool {
        return true
    }
}
```

# ViewController

```
override func viewWillTransition(to size: CGSize,
    with coordinator: UIViewControllerTransitionCoordinator) {
    self.drawInSize(size)
}

func drawInSize(_ size : CGSize) {
    if isBackOn {
        background.center = CGPoint(x: size.width / 2 ,
            y: size.height / 2)
    }
}

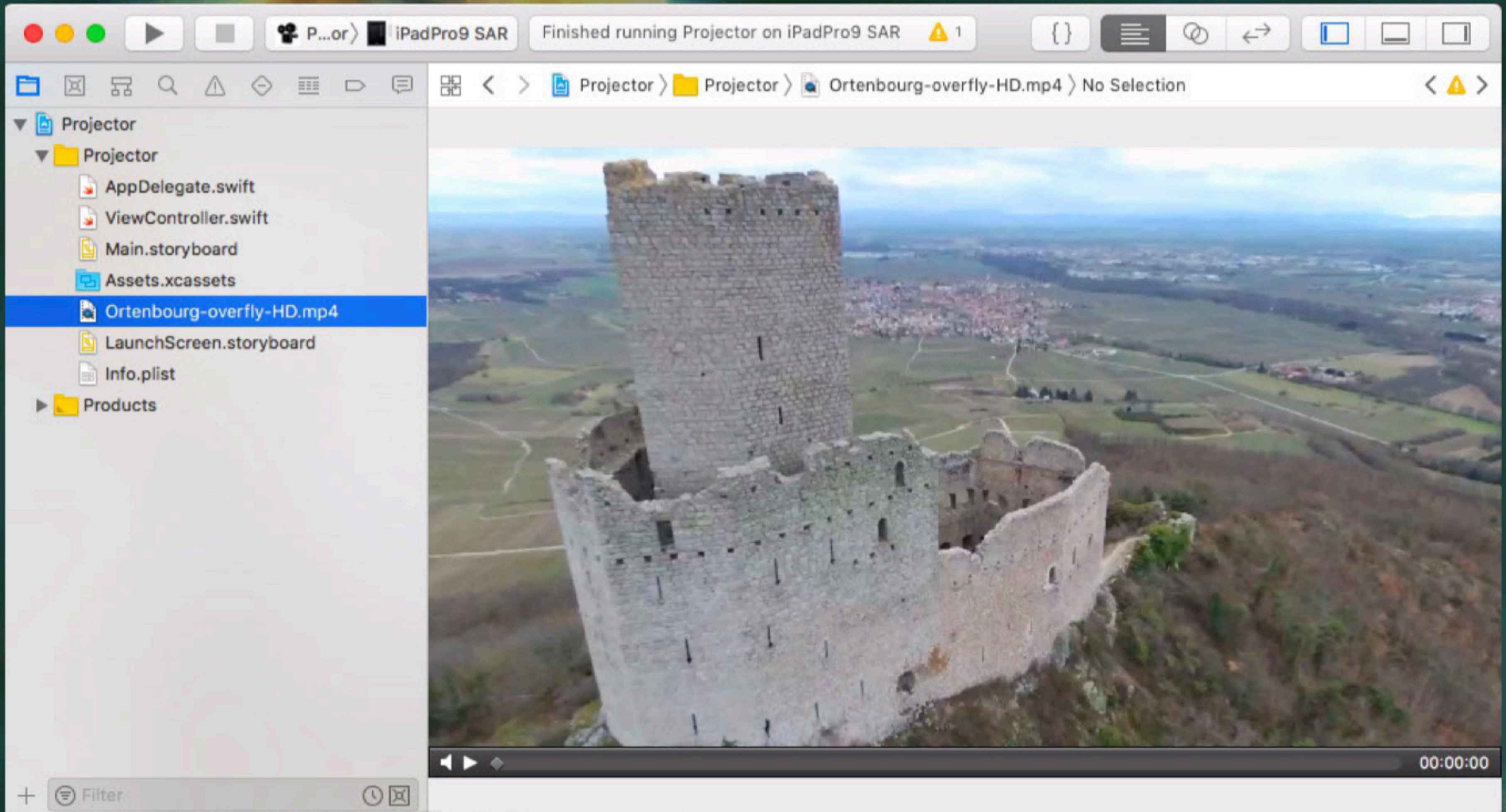
// AVPlayerViewControllerDelegate protocol

func playerViewControllerDidStartPictureInPicture(_
    playerViewController: AVPlayerViewController) {
    isBackOn = true
    self.view.addSubview(background)
    self.drawInSize(UIScreen.main.bounds.size)
}

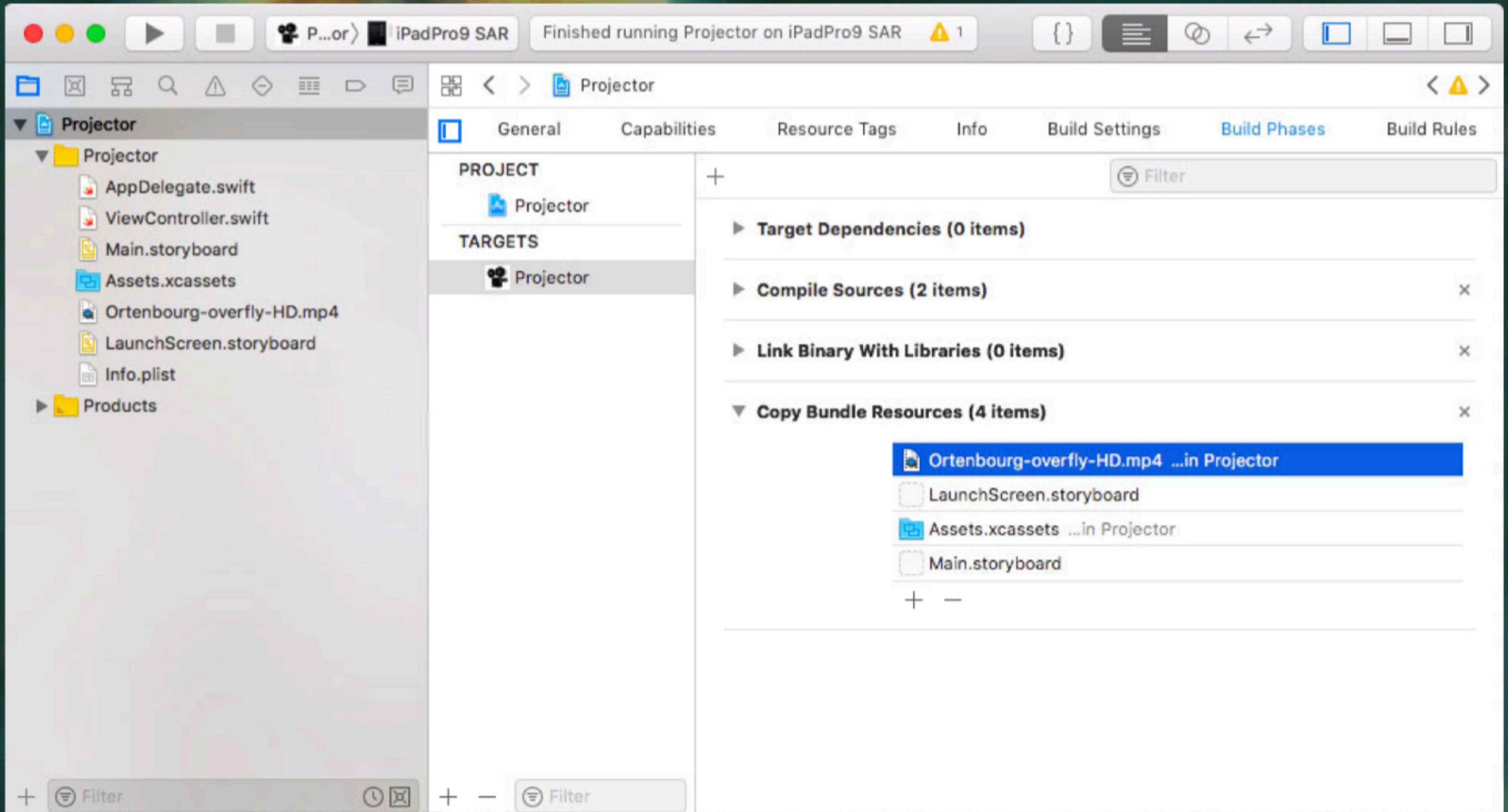
func playerViewControllerWillStopPictureInPicture(_
    playerViewController: AVPlayerViewController) {
    isBackOn = false
    background.removeFromSuperview()
}
}
```



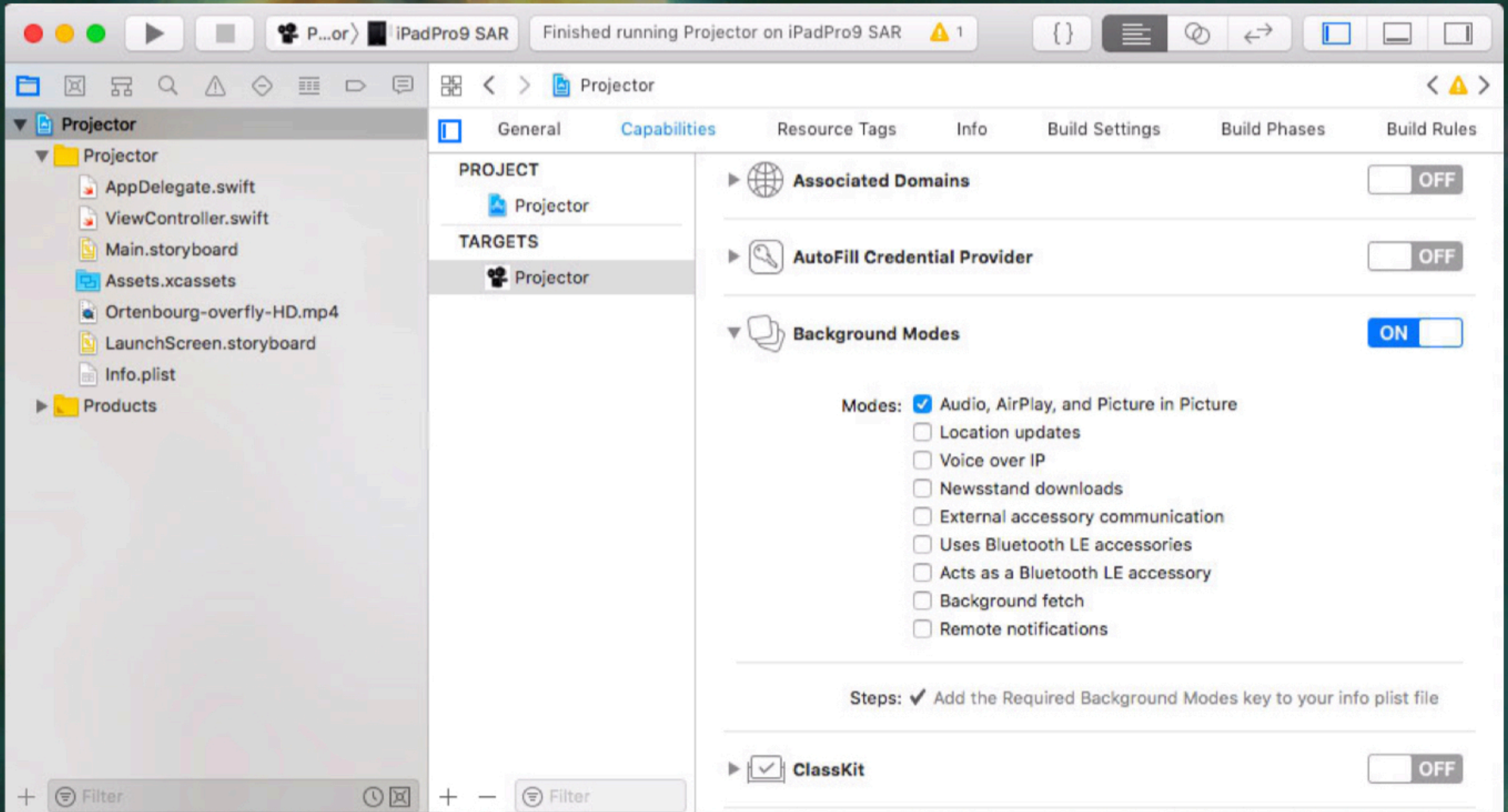
# In the project



# In the project



# In the project



# As a conclusion...



You now know how to play videos!

