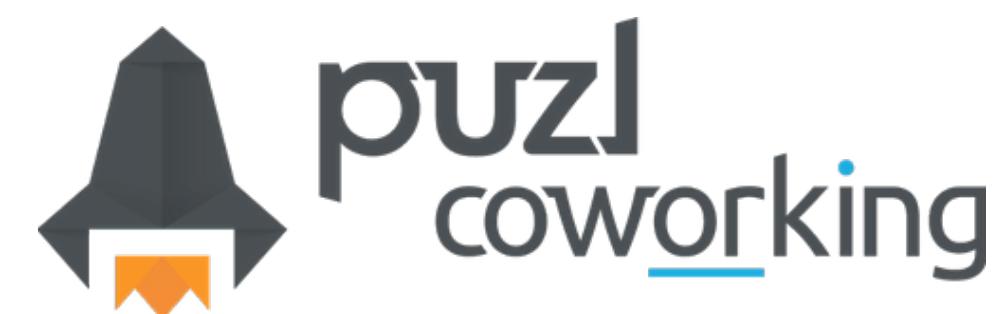


Thanks to

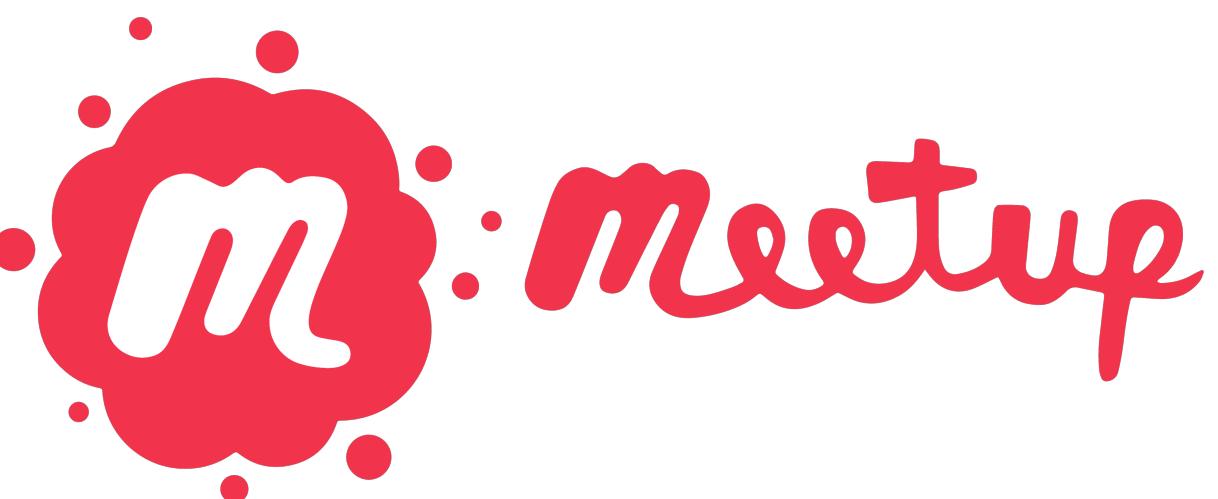
BARTER
COMMUNITY HUB



Thanks to

valtech *

Follow us - Xcoders Sofia



<https://www.facebook.com/profile.php?id=61565246821995>

<https://www.meetup.com/Xcoders-Sofia>

<https://www.linkedin.com/company/Xcoders-Sofia>

Build a Spatial App with Xcode and Reality Composer

Xcoders Sofia

Nikola Kirev 15.01.2025

Hi, I'm Nikola

- Making iOS apps since 2011
- Work at Omnissa (formerly VMware EUC)
- Just became a dad



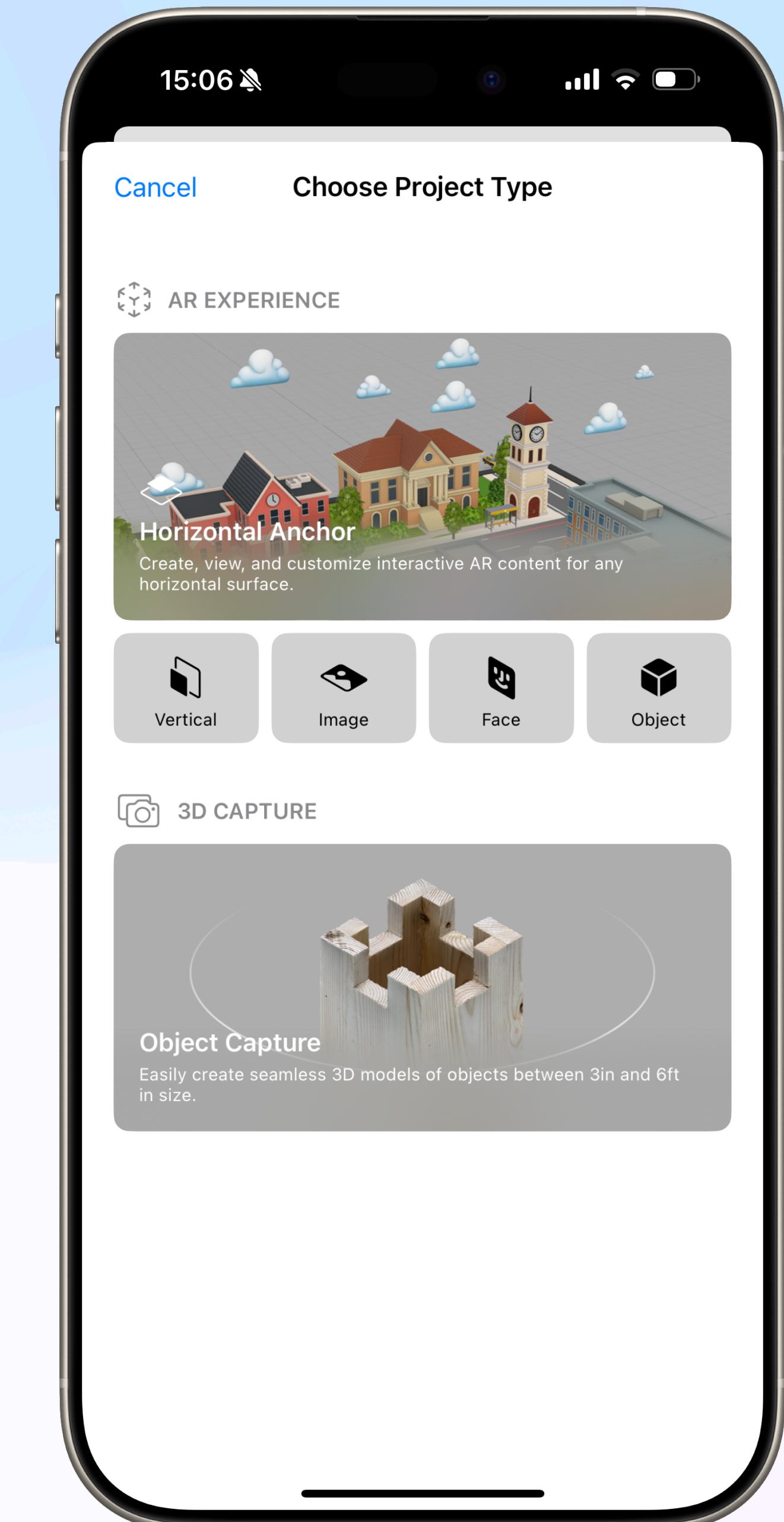
The Plan for Today

- Demo heavy presentation
- Beginner level code
- Get familiar with new concepts
- Learn about new tools
- Have something like a working app by the end

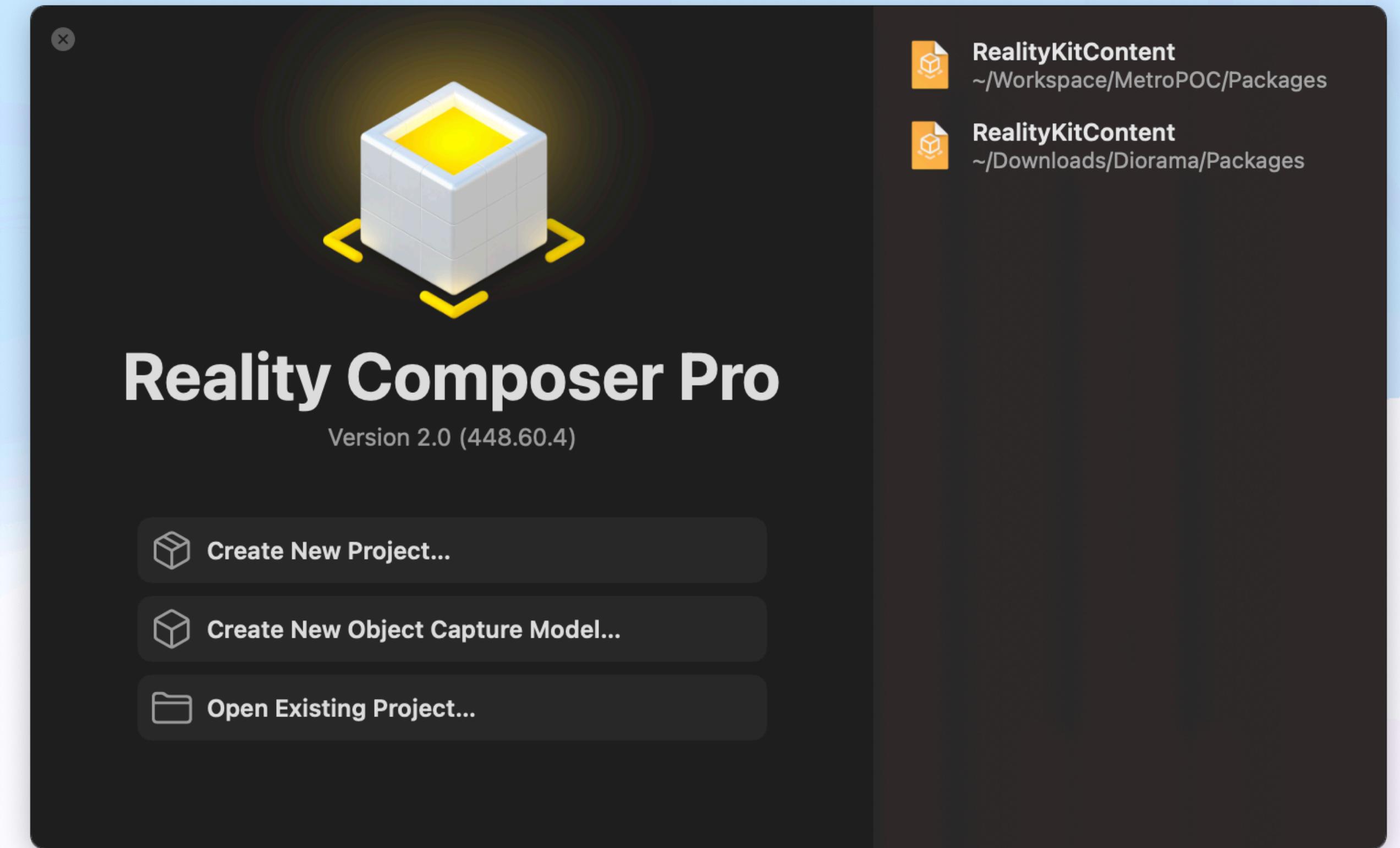
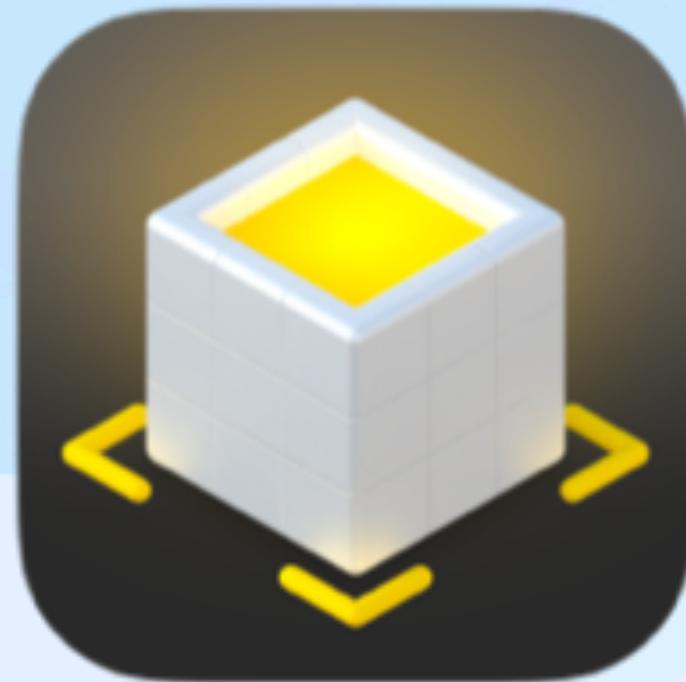
Sofia Metro



Reality Composer (iOS)



Reality Composer Pro (macOS)



Entity Component System

- Architectural design pattern popular in video game development
- **Entities** composed from **Components** of data, with **Systems** which operate on the components
- Composition over inheritance

RealityView

- “Use RealityView to display rich 3D RealityKit content in your app, including content you author in Reality Composer Pro.”

```
RealityView { content, attachments in
    ...
}
```

update: { content, attachments in
 ...
}

```
attachments: {
    ...
}
```

RealityView Attachments

- A way to add 2D SwiftUI views inside RealityKit content
- Attach them to entities in your scene

```
Attachment(id: <unique ID>) {  
    <Swift UI content>  
}
```

Summary

What did we just do?

- We started from the Xcode project template for visionOS app
- Added some sample data
- Did some modeling in Reality Composer Pro
- Learned about Entity-Component-System
- Added interactive SwiftUI attachments to our RealityKit content
- Made (something like) our first spatial app

What we did not cover

- RealityKit for iOS/iPadOS/macOS is a thing
 - However some APIs like Attachment are not available
- Audio in RealityKit
- Much more..

Sources & Links

- [RealityKit - Apple Developer](#)
- [Meet Reality Composer Pro - WWDC 23 Session](#)
- [Diorama Sample Code - Apple Developer](#)
- [Entity-Component-System - Wikipedia](#)
- [RealityKit Attachment - Apple Developer](#)
- [Break into the RealityKit debugger - WWDC 24 Session](#)

Thanks!

Questions & Comments



Peer-to-peer communication on iPhone

w/ Ilian Konchev

DATE

11 Feb 2025, Tuesday
19:00

VENUE

Barter Community Hub
47 Cherni Vrah Blvd, Sofia

Feedback



<https://forms.gle/TPQWEUP4bQAsXfy88>