

CIS 1951: Intro to iOS

Section 201

Welcome!

- Icebreakers
 - Name
 - Year
 - Why you're interested in iOS development, or a favorite project you've worked on (not necessarily iOS)!

Schedule

Meet weekly here, TOWN 337 - Two sections:

Section 201

Thursdays 7-8:30 PM

Section 202

Mondays 5:15-6:45 PM

Both sections have the **SAME** content

Class Resources

- Canvas Site
 - Submit HWs & Assignments
- Course Website:
<https://www.seas.upenn.edu/~cis1951/>
- Ed for questions/discussion (join through Canvas)
- 2 hours of OH for each Teacher/TA each week, still TBD

Other Policies

- If for some reason you cannot make a lecture for a week, you may join the other section as long as you ask at least 48 hours in advance. Note that for everyone in the Monday 202 section, this means you must ask before Thursday the week before since this is the one with the same content.
 - Remember attendance is required!

Prerequisites

- Some coding experience, e.g. CIS 1200
- Macs are ***HIGHLY PREFERRED***
 - iOS/Apple development can only be done on a Mac sadly
 - If you don't have a Mac, that's still fine, you can use a VM but this can be pretty annoying, or a computer lab
 - If you aren't going to use a Mac, please come talk to us after class so we can get you situated!

Permits and Waitlist...

Goals for Semester

- Learn Swift and iOS Dev obv...
- Be able to develop your own apps and projects independently! (ok maybe with ChatGPT too)
- Know how to submit them to App Store
- Make an app yourself that's publicly available!
 - Final projects can be done in groups up to 3

Finally... iOS Dev!

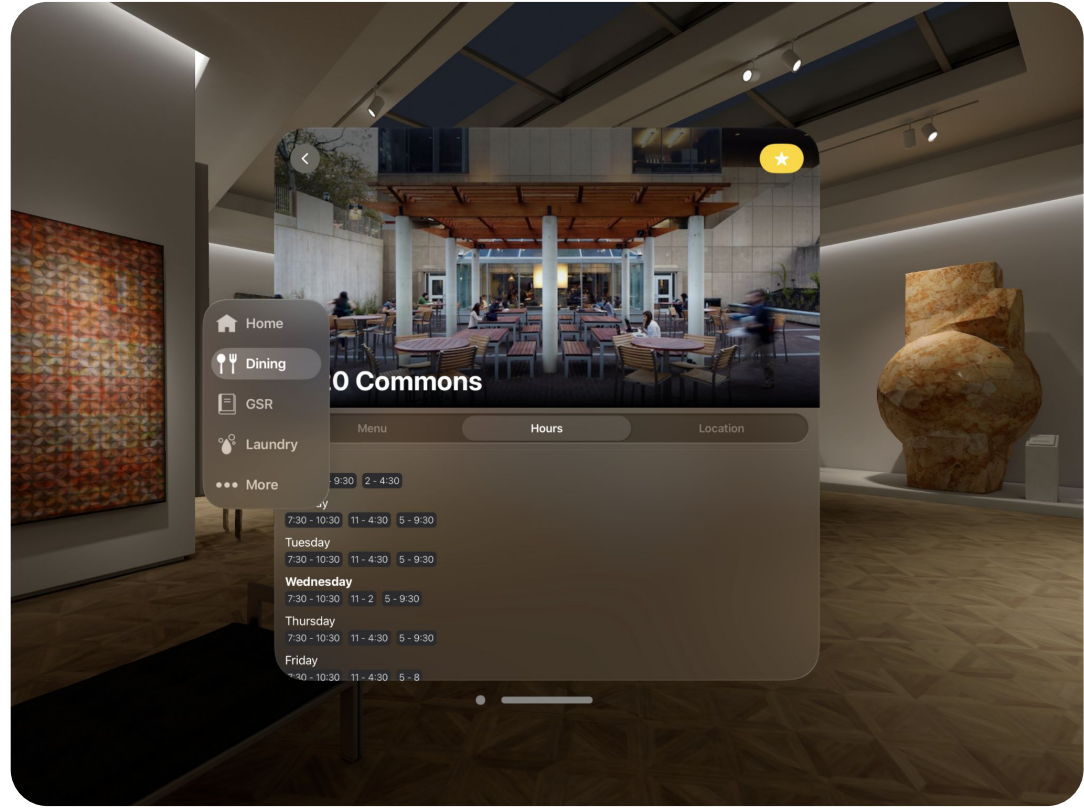
What is it and why?

- Good user experience
- Deploying on App Store for easy audience reachability
- Seamless with Apple ecosystem

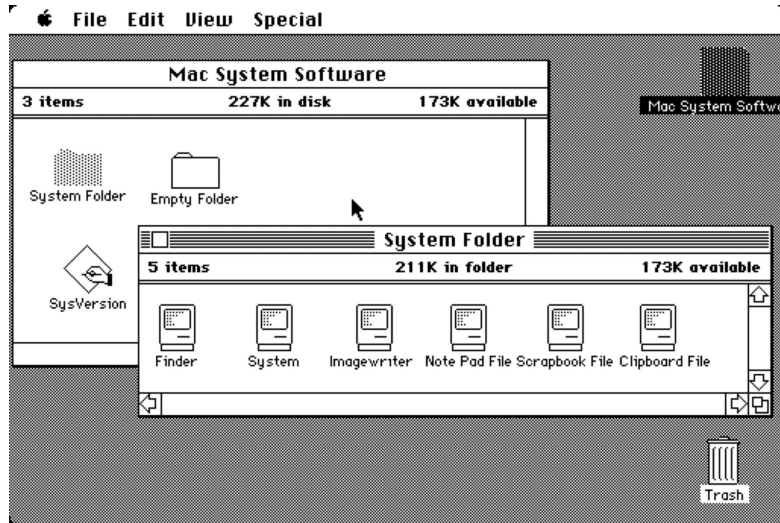
Other platforms such as

- macOS, tvOS, watchOS, and now recently visionOS

visionOS?



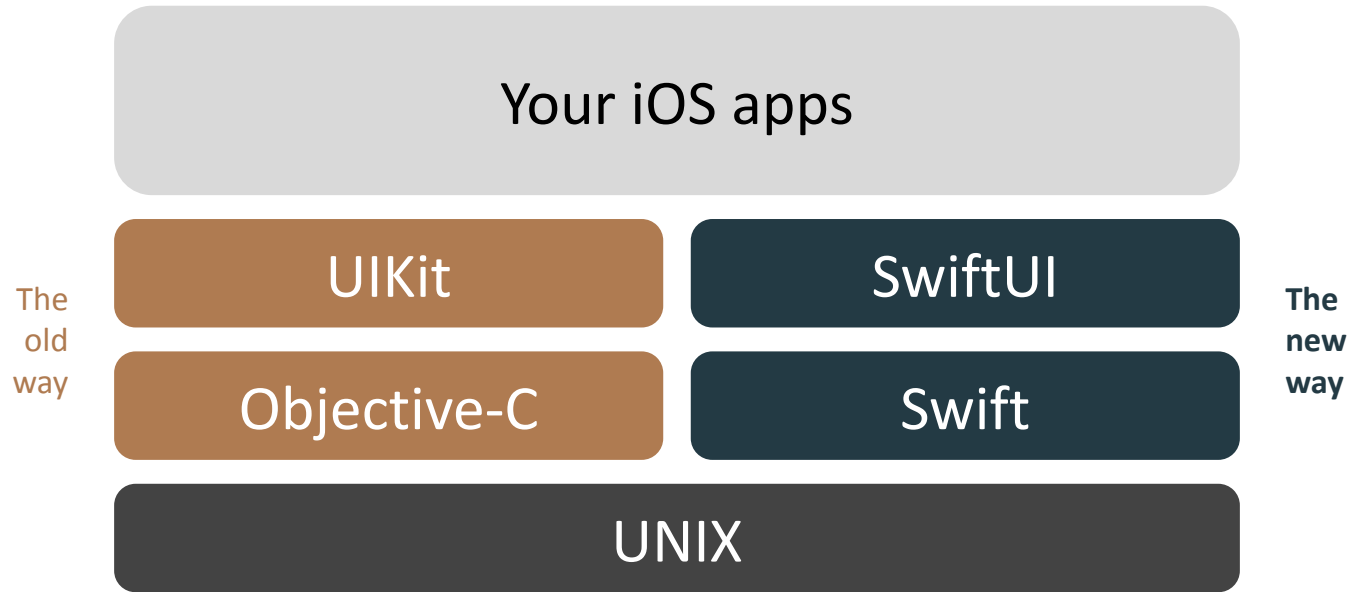
iOS Platform & Evolution



iOS Platform & Evolution

- Originally with Objective-C, a superset of C
- Shift to Swift for modern syntax
- UIKit for classic UI development
 - Will cover briefly later in the semester as it's still used a decent amount in legacy products
- Introduction of SwiftUI for declarative UI
- Continual updates with iOS releases
- Very easy integration with Apple ecosystem services

iOS Platform & Evolution



Installing Xcode

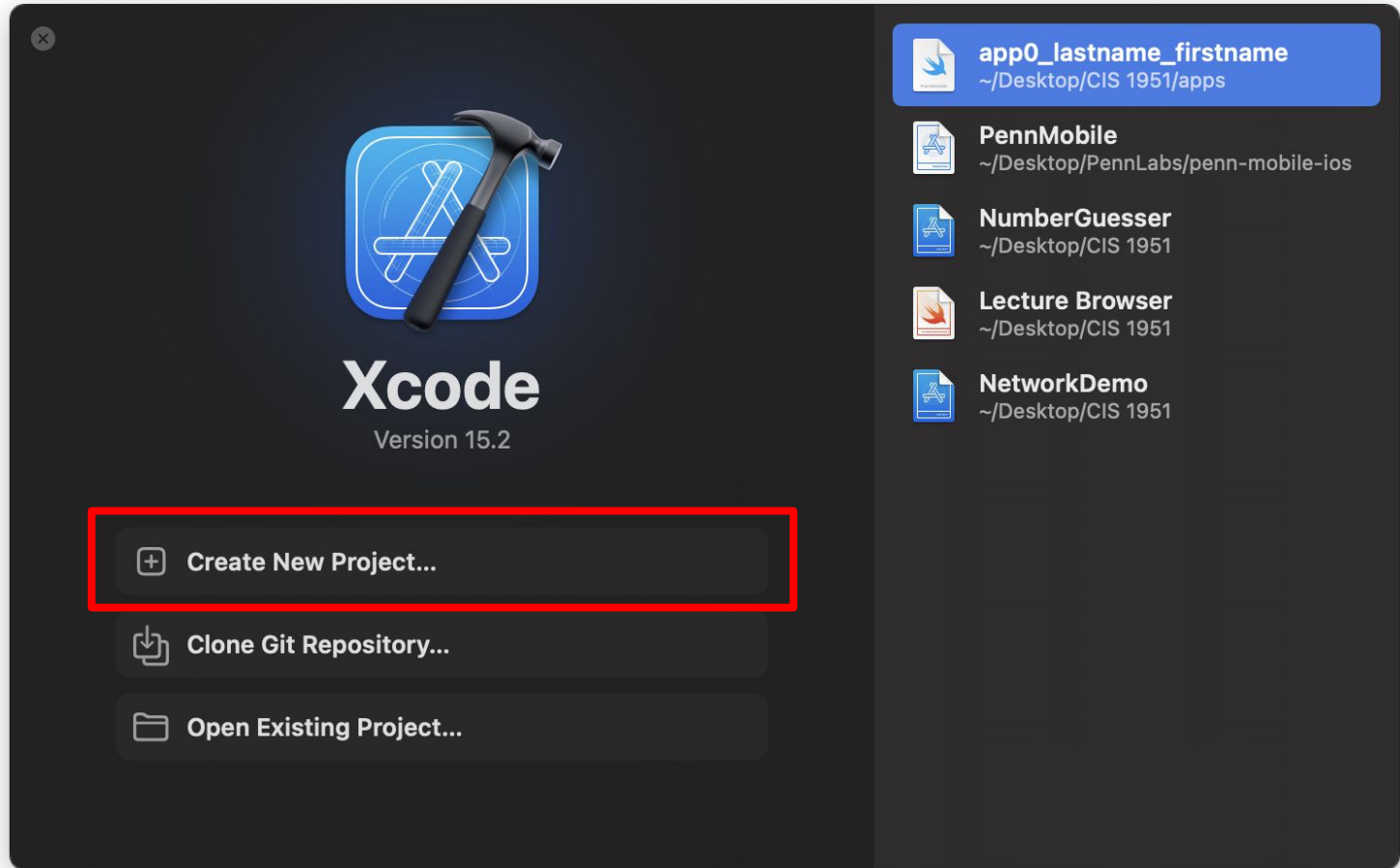
Important! **UPDATE TO macOS Ventura 13.5** or higher

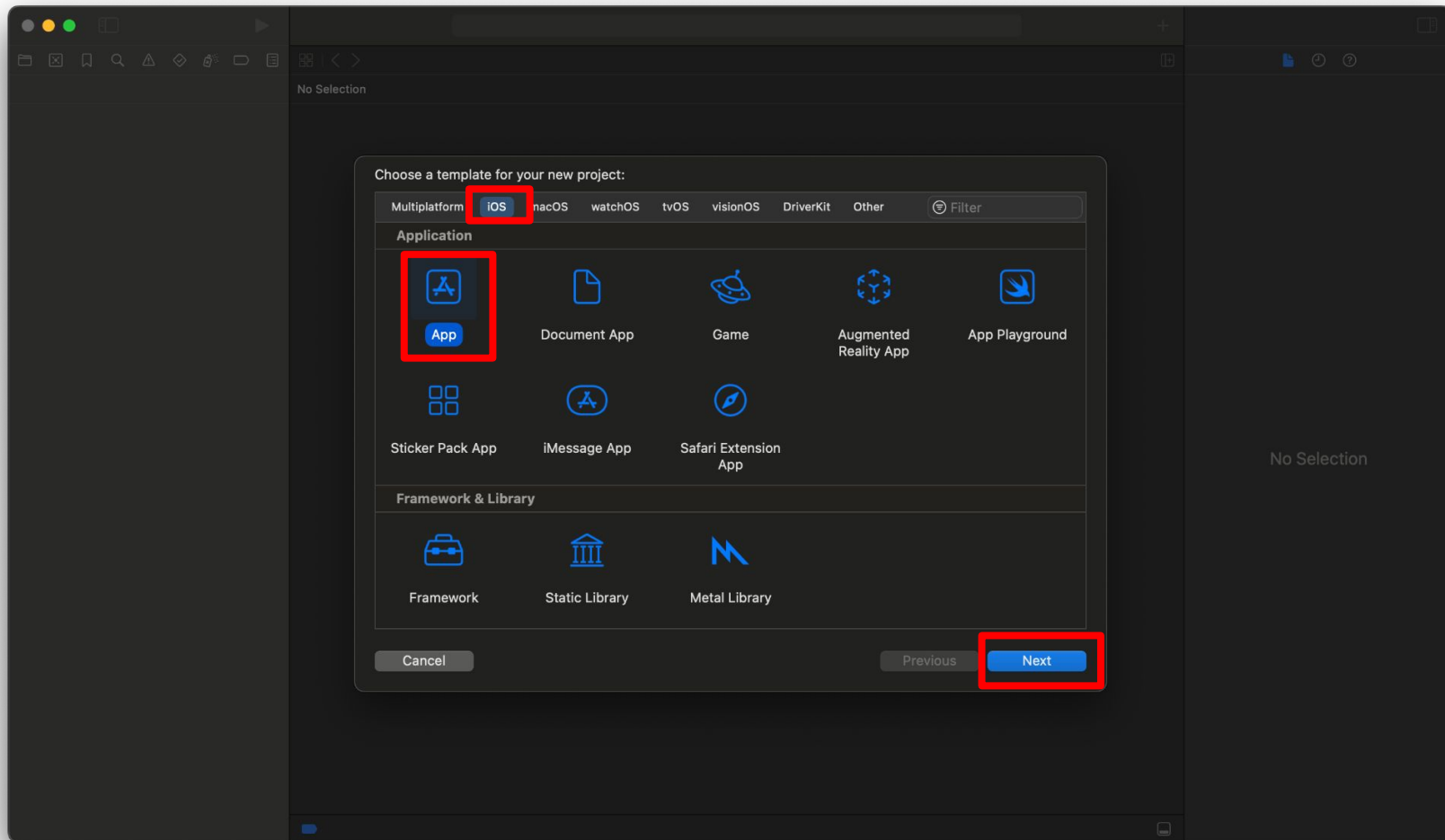
- Note, XCode takes **A LOT** of space :(
 - Expect ~40 GBs, so make sure you have space
 - If you have trouble clearing up space, come talk to us after and we have suggestions!
- For iOS/Apple development, we recommend always keeping your computer and Xcode updated to the most recent version

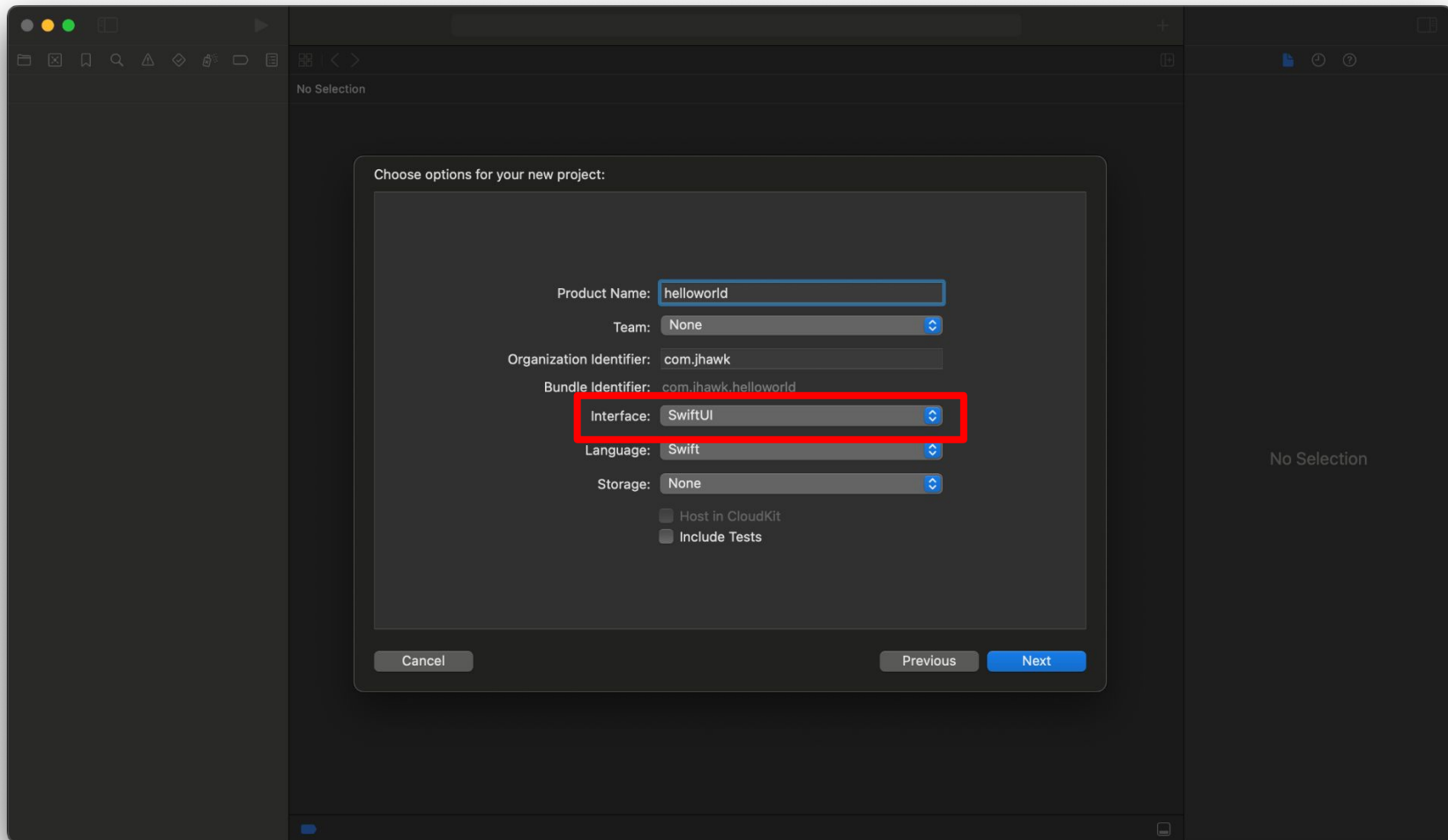
Installing Xcode Part 2

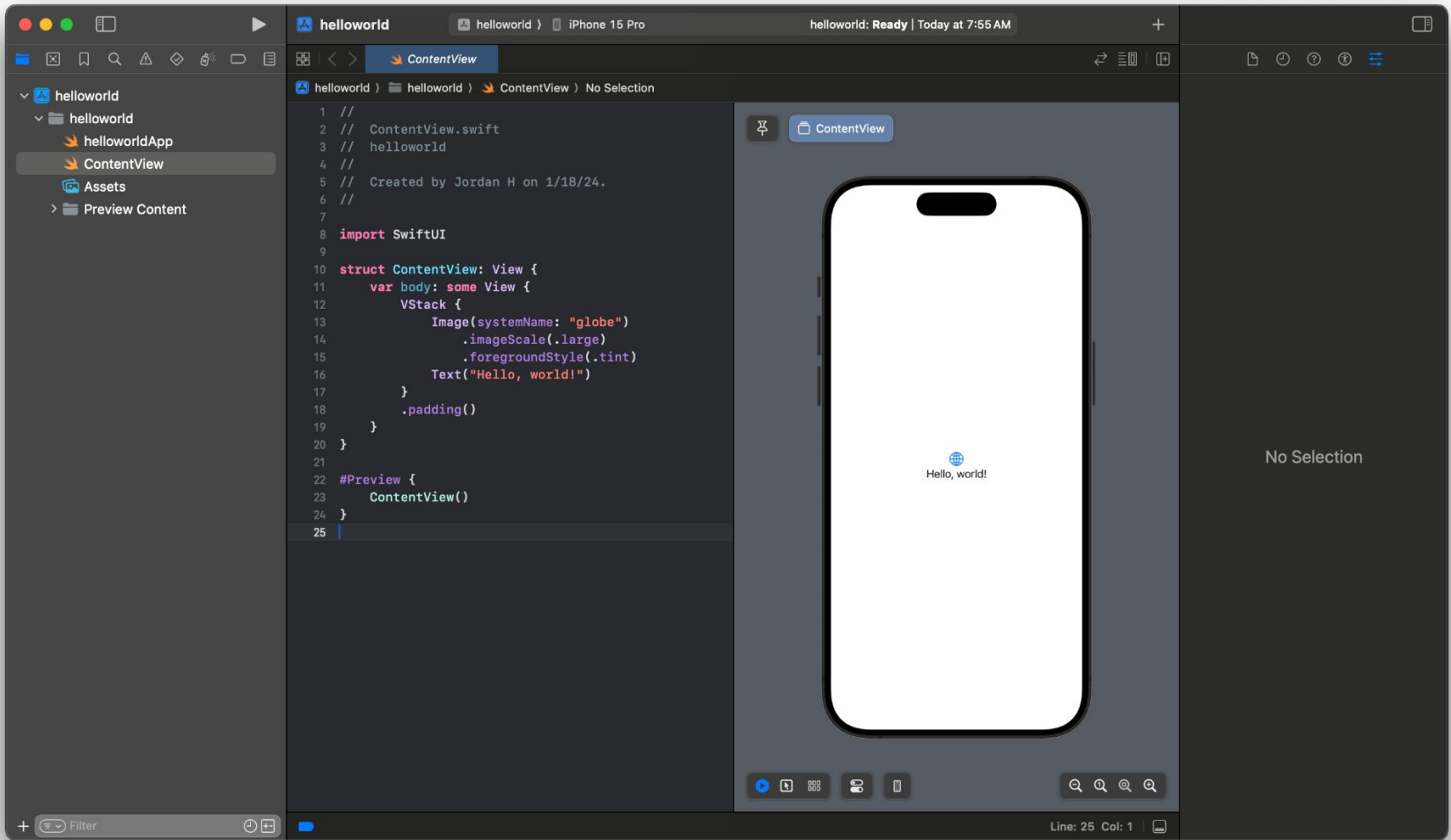
- Install the latest Xcode version from the App Store
- More detailed instructions, and a video can be found in HW0 instructions
 - Getting the environment set up is part of HW0, but start early! All of the updates/downloads/clearing space can take much longer than you expect.

Hello World App!







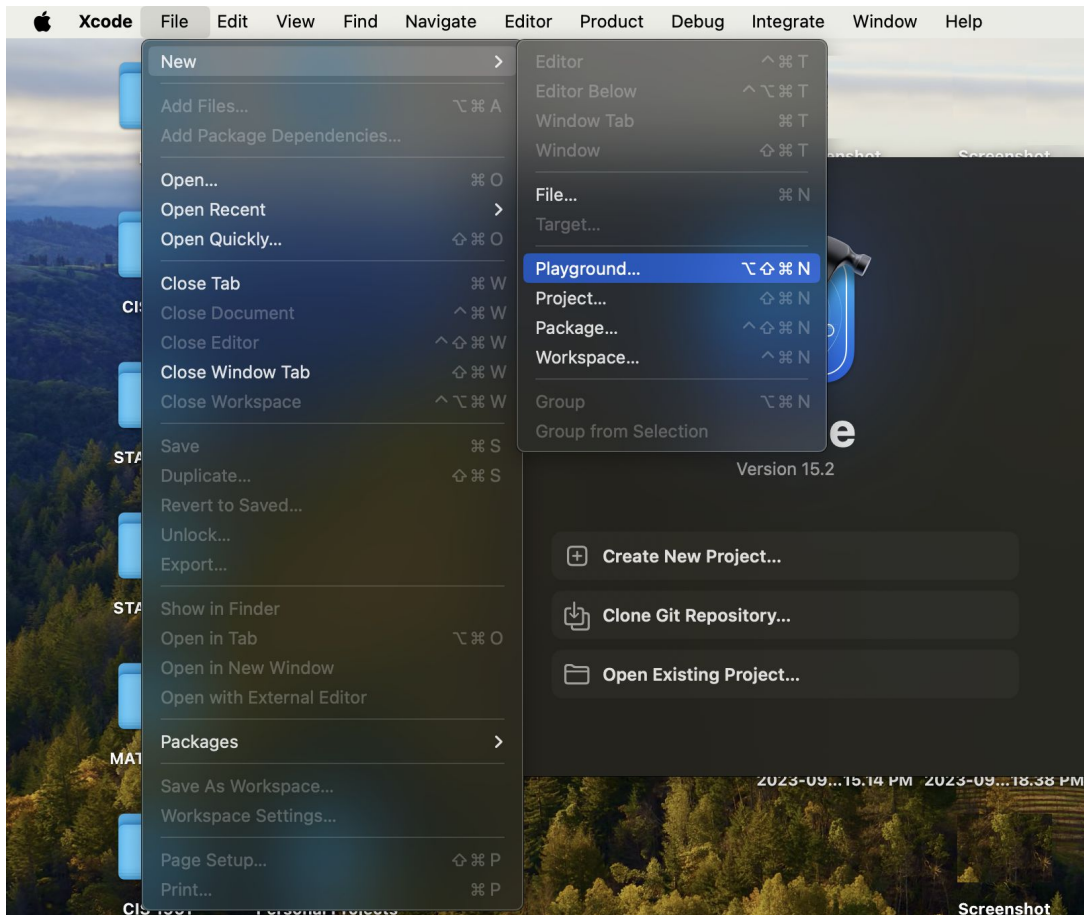


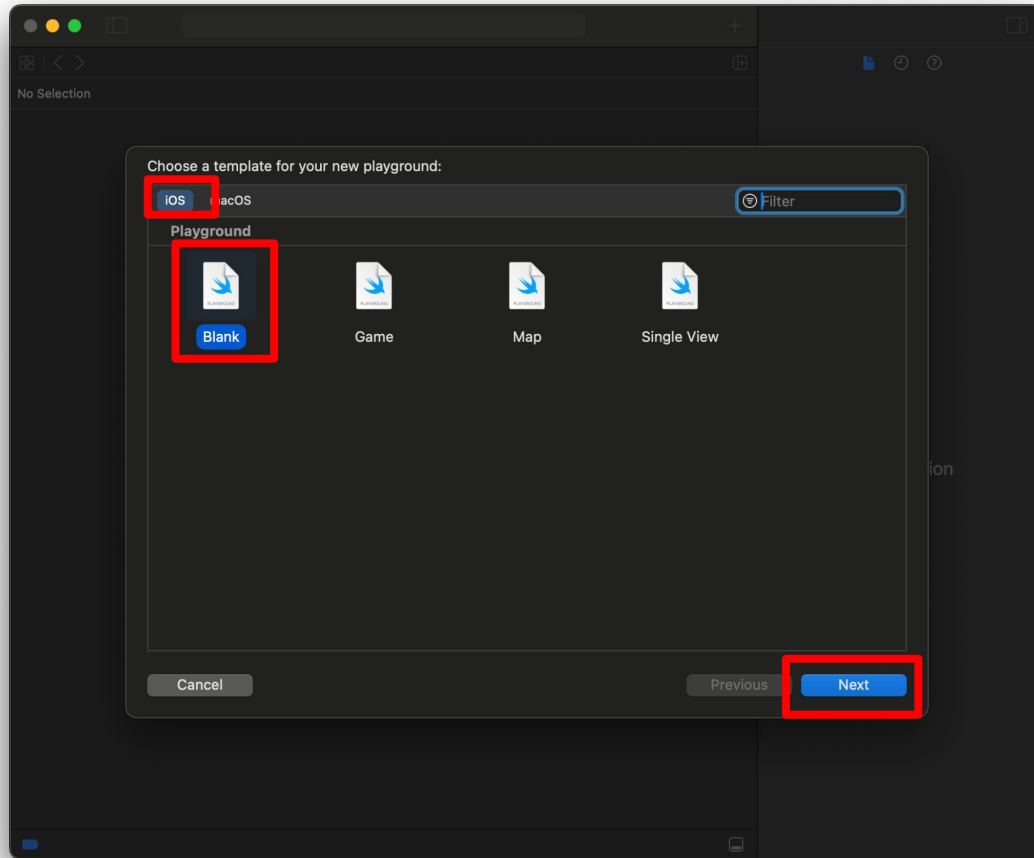
Playgrounds in Xcode

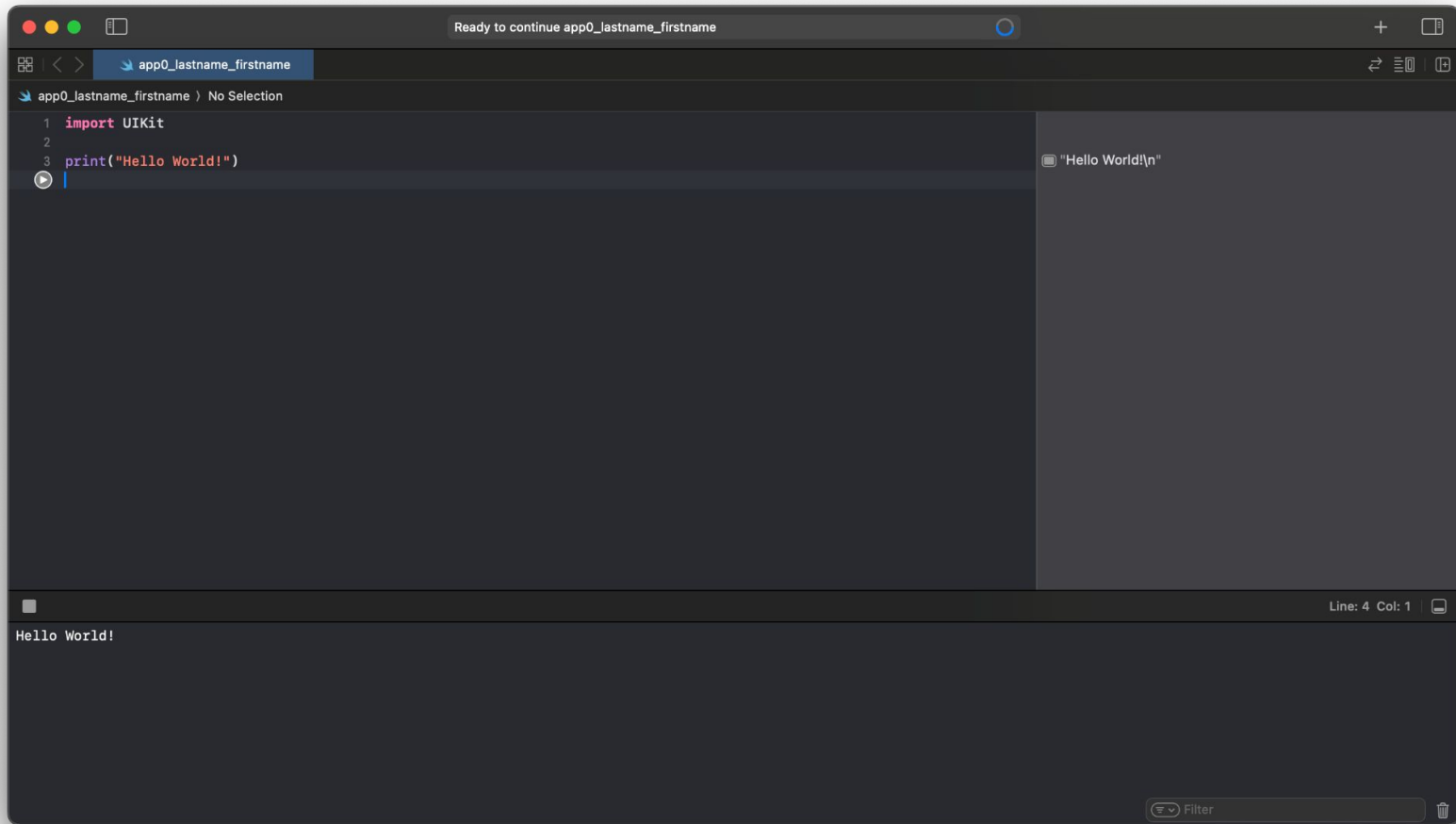
For some of our development, we will be using Playgrounds

- Easier/quicker development
- Instant execution
- Interact with and inspect return values

Making a Playground!







Thanks for Coming!!!!

Reminder, **UPDATE YOUR COMPUTER** and **INSTALL XCODE**.
This may take a decent amount of time to install.

- <https://github.com/cis1951/hw0>

Part of HW0 is to do this, which is due 1/29!