



Introduction to iOS Development



Topics

- iOS / Xcode (version 16) Overview
- iOS MVC: essential vocabulary



IMPORTANT: Saving Your Work

- Do not save your XCode projects locally on the Mac Station
- Option #1 Use the DFS (Network Drive)
 - Faculty: Computing-Private
 - Student: GVSU-LabData ⇒ X folder (where X is the **first letter** of your last name)
 - More Details: <https://www.gvsu.edu/it/file-access-off-campus-211.htm>
 - Also accessible at <https://mystudentdata.gvsu.edu>
- Option #2 Use GVSU Google Drive (*not your personal* GMail)
- It is strongly recommended that you **git-commit** and **git-push** your work prior to logging off



Using Xcode



Xcode

- Apple's IDE for iOS and Mac development
- Free download from the Apple Mac Store
 - Version 16 (or newer) installed on EOS MacMinis
- Requires a Mac to run
- Features
 - Integration with Git
 - Intellisense, syntax highlighting, code folding
 - Integrated debugger
 - Integrated documentation
 - Support for deploying apps to AppStore



Xcode Tour (Live Demo)



Xcode Quick Tour

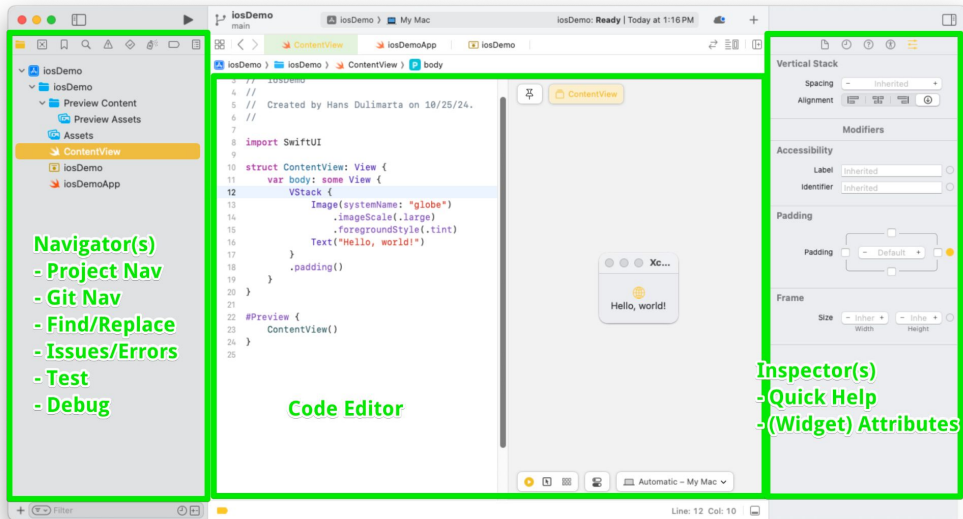
1. How to launch Xcode on Mac
2. Create a new iOS app
3. Get familiar with Xcode
4. Important Swift files of an iOS app
5. Running on the iOS Simulator



Your First iOS Project

1. Create a new project iOS ⇒ Application ⇒ App
 - a. Fill in Product Name
 - b. Organization Identifier (edu.gvsu.cis.____)
 - c. Testing System ⇒ None

Xcode Main Screen

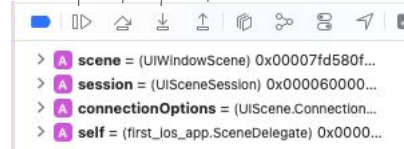
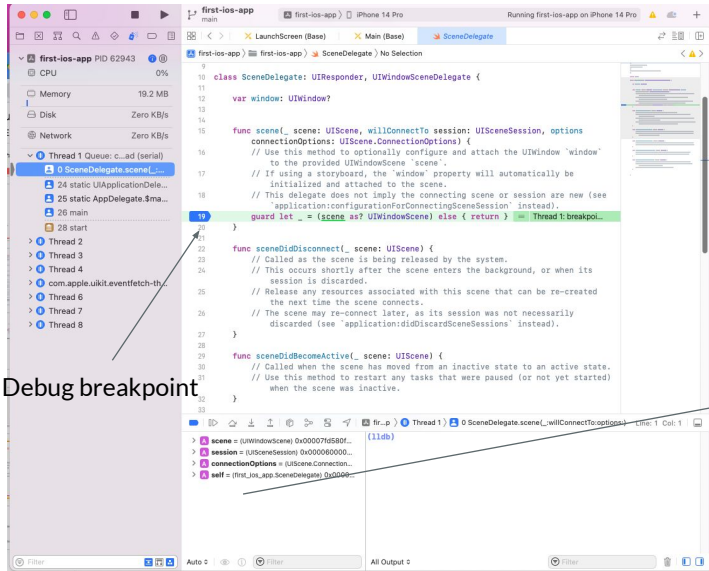


Xcode Toolbar



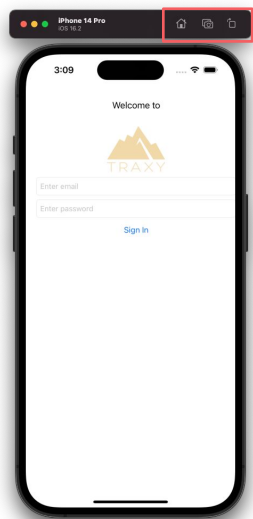


Xcode Debugger



The iOS Simulator

- iPad
- iPad Mini
- iPhone (several models)



- Home button
- Screen capture
- Rotate device



XCode: First iOS App



Edit the UI

- Build the UI
 - Click the PLUS button to show palette of UI widgets
 - Drag Selected UI Widget to canvas
 - UI attribute inspector

