# **Xcode:** Custom Fonts

Mobile App Development— DES 421

Mobile App Development Spiring Daria Tsoupikova

Open new Xcode project CustomFontSample

Add Files to CustomFontSample project folder



### Open new Xcode project CustomFontSample

| • • • • |   |               |              |
|---------|---|---------------|--------------|
|         |   |               | <b>b</b> O O |
| No      | Choose a template for your new project:                       |               |              |
|         | Multiplatform 105 macOS watchOS tvOS visionOS DriverKit Other | Iter          |              |
|         | Application   |               |              |
|         | App Document App Game Augmented App                           | pp Playground |              |
|         | Reality App   |               |              |
|         | Sticker Pack App iMessage App Safari Extension<br>App         |               | No Selection |
|         | Framework & Library   |               |              |
|         | 🖻 🏛 N   |               |              |
|         | Framework Static Library Metal Library                        |               |              |
|         | Cancel Previous   | Next          |              |
|         |   |               |              |
|         |   |               |              |
|         |   |               |              |

### Open new Xcode project CustomFontSample

|  |      | 0 0          |
|--|------|--------------|
| No Selection Choose options for your new project:  |      |              |
| Product Name: CustomFontSample<br>Team: Add account<br>Organization Identifier: CustomFontSample.DES420<br>Bundle Identifier: CustomFontSample.DES420.CustomFontS<br>Interface: Storyboard ©<br>Language: Swift ©<br>Testing System: XCTest for Unit and UI Tests ©<br>Storage: None ©<br>Host in CloudKit |      | No Selection |
| Cancel   | Next |              |

### Add Files to CustomFontSample project folder

|   | •                                     | CustomFontSample   | 🛛 CustomFontSample 👌 📋 iPhone 16 Pro  | Indexing   Processing files (                                | + 🛥         |  |
|---|---------------------------------------|--|---|--|-------------|--|
|   |                                       | Barrier CustomFont                                       | Sample  |  | ₹ 1         | <b>L</b> O ()  |
| CustomFontSam   | ple                                   | CustomFontSample   |   |  |             | Identity and Type  |
| ✓   | Show in Finder                        | Seneral  | Signing & Capabilities Resource Tags  | Info Build Settings Build Phases Build Ru                    | es          | Name CustomFontSample  |
| CustomFonts     Show in Finder       AppDelegation     Open in Tab       Info     Open with External Ed       LaunchScret     New Empty File       Main     New File from Clipboa       SceneDelegation     Add Files to "CustomFonts       CustomFonts     Add Package Depender       CustomFonts     Delete       CustomFonts     New Group from Select       New Folder     New Folder from Select       New Folder from Select     Convert to Group |                                       | l Editor<br>board<br>plate<br>omFontSample"<br>endencies | <ul> <li>Supported Destinations</li> <li>Destination         <ul> <li>iPhone</li> <li>iPad</li> <li>Mac (Designed for iPad)</li> <li>Apple Vision (Designed for iPad)</li> <li>+ =</li> </ul> </li> </ul> | SDK<br>IOS<br>IOS<br>IOS<br>IOS                              |             | Location Relative to Group<br>CustomFontSample<br>Full Path /Users/tsoupi/Desktop/<br>2025_Courses/MAD/<br>2025_421_Spring/WEEK-6/<br>FontExerciseLab/<br>CustomFontSample/<br>CustomFontSample<br>Build Rules Apply to Each File<br>Target Membership<br>CustomFontSample<br>CustomFontSample Default |
|   |                                       | election<br>election                                     | <ul> <li>Minimum Deployments</li> <li>iOS</li> <li>Identity</li> <li>App Category</li> </ul>  | None   | +           | + - /<br>Text Settings<br>Indent Using Spaces  |
|   | Find in Selected C                    |  | Display Name  | Display Name   | +           | Widths 4 0 4 0   |
|   | Source Control<br>Project Navigator I | Help   | Bundle Identifier<br>Version<br>Build   | CustomFontSample.DES420.CustomFontSample 1.0 1               | →<br>+<br>+ | Vrap lines   |
|   |                                       |  | <ul> <li>Deployment Info</li> <li>iPhone Orientation</li> <li>iPad Orientation</li> </ul>   | Portrait Upside Down Landscape Left Landscape Right Contract |             |  |

### Add Files to CustomFontSample project folder



|                          | 🛃 CustomFontSample | CustomFo                     | ntSample 〉 📋 iPhone 16 Pro     | CustomFontSample: Ready   Toda        | y at 12:11 PM 🧶 | +                       |   |  |
|--------------------------|--------------------|------------------------------|--------------------------------|---------------------------------------|-----------------|-------------------------|---|--|
|                          | 聞 I く >            | FontSample                   |                                |                                       |                 | $\rightleftharpoons$ (+ | © ( <u>)</u>  |  |
| ✓ ▲ CustomFontSample     | CustomFontSample   |                              |                                |                                       |                 |                         | Identity and Type                                     |  |
| CustomFontSample         | Gene               | eral Signing &               | Capabilities Resource Tags I   | nfo Build Settings Build Phases       | Build Rules     |                         | Name Montserrat-Bold.ttf                              |  |
| 🌙 AppDelegate            |                    | <ul> <li>Supporte</li> </ul> | d Destinations                 |                                       |                 |                         | Type Default - TrueType® Open 📀                       |  |
| 🔄 Assets                 | PROJECT            | oupporte                     |                                |                                       |                 |                         | Location Relative to Group 🗘                          |  |
| 🖽 Info                   | 🛃 CustomFontSample |                              | Destination                    | SDK                                   |                 |                         | Montserrat-Bold.ttf                                   |  |
| 🔀 LaunchScreen           |                    |                              | iPhone                         | iOS                                   |                 |                         | Full Path /Users/tsoupi/Desktop/<br>2025_Courses/MAD/ |  |
| × Main                   | TARGETS            |                              | iPad                           | iOS                                   |                 |                         | 2025_421_Spring/WEEK-6/                               |  |
| Montserrat-Bold          | CustomFontSample   |                              | Mac (Designed for iPad)        | iOS                                   |                 |                         | CustomFontSample/                                     |  |
| SceneDelegate            | CustomFontSample   |                              | Apple Vision (Designed for iPa | d) iOS                                |                 |                         | CustomFontSample/<br>Montserrat-Bold.ttf ©            |  |
|                          | CustomFontSample   |                              | + -                            |                                       |                 |                         |   |  |
|                          |                    |                              |                                |                                       |                 |                         | On Demand Resource Tags                               |  |
| CustomFontSamplel ITests |                    |                              |                                |                                       |                 | - 1                     | Tags  |  |
|                          |                    | ✓ Minimum Deployments        |                                |                                       |                 |                         |   |  |
| CustomFontSsLaunchTests  |                    |                              |                                |                                       |                 |                         |   |  |
|                          |                    |                              |                                |                                       |                 |                         | Localize  |  |
|                          |                    | ✓ Identity                   |                                |                                       |                 |                         | Target Membership                                     |  |
|                          |                    |                              | App Category                   | None                                  | •               | - 1                     | CustomFontSample                                      |  |
|                          |                    |                              | Display Name                   | Display Name                          | +               |                         |   |  |
|                          |                    |                              | Bundle Identifier              | CustomFontSample.DES420.CustomFo      | ontSample →     |                         |   |  |
|                          |                    |                              | Version                        | 1.0                                   | +               |                         | +   -   /   |  |
|                          |                    |                              | Build                          | 1                                     | +               |                         |   |  |
|                          |                    | ✓ Deployment                 | ent Info                       |                                       |                 |                         |   |  |
|                          |                    |                              | iPhone Orientation             | V Portrait                            |                 |                         |   |  |
|                          |                    |                              | in none offentation            | Upside Down                           |                 |                         |   |  |
|                          |                    |                              |                                | ✓ Landscape Left<br>✓ Landscape Right |                 |                         |   |  |
|                          |                    |                              | iPad Orientation               | V Portrait                            |                 |                         |   |  |
|                          |                    |                              |                                | ✓ Upside Down                         |                 |                         |   |  |
|                          |                    |                              |                                | ✓ Landscape Left                      |                 |                         |   |  |
|                          |                    |                              |                                | ✓ Landscape Right                     | _               |                         |   |  |
|                          |                    |                              | Status Bar Style               | Default                               | •               |                         |   |  |

Select the font and copy file name from inspector. Then add the font to Info.plist Fonts provided by application – paste file name as a value of the Item 0 - String. Press return.



### Select the font and copy file name from inspector. Then add the font to Info.plist Fonts provided by application – paste file name as a value of the Item 0 - String. Press return.

|                           | <b>CustomFontSample</b>     | 🛽 CustomFontSample ) 📋 iPhone 16 Pro     | CustomFontSample: Ready   Today at 12:11 PM | <b>e</b> + |   |                         |     |
|---------------------------|-----------------------------|--|---|------------|---|-------------------------|-----|
|                           | 器 I く > 目 Info              |  |   | ₹ 📰 🕀      | <b>)</b> ()   | ady   Today at 12:11 PM |     |
| ✓ ▲ CustomFontSample      | 🚨 CustomFontSample 👌 🚞 C    | CustomFontSample 〉 🖽 Info 〉 No Selection |   |            | Identity and Type                                     |                         | ≓ ≣ |
| CustomFontSample          | Key                         | Туре                                     | Value                                       |            | Name Info.plist                                       |                         |     |
| 🎽 AppDelegate             | ✓ Information Property List | Dictionary                               | (1 item)                                    |            | Type Default - Property List XML 😌                    |                         |     |
| 🔄 Assets                  | > Application Scene Manife  | est Oictionary                           | (2 items)                                   |            | Location Relative to Group 🗘                          |                         |     |
| 🖽 Info                    |                             |  |   |            | Info.plist  |                         |     |
| 🔀 LaunchScreen            |                             |  |   |            | Full Path /Users/tsoupi/Desktop/<br>2025 Courses/MAD/ |                         |     |
| 🔀 Main                    |                             |  |   |            | 2025_421_Spring/WEEK-6/                               |                         |     |
| F Montserrat-Bold         |                             |  |   |            | FontExerciseLab/<br>CustomFontSample/                 |                         |     |
| 🔌 SceneDelegate           |                             |  |   |            | CustomFontSample/Info.plist                           |                         |     |
| 🔌 ViewController          |                             |  |   |            | On Demond Descurses Terre                             |                         |     |
| ✓                         |                             |  |   |            | On Demand Resource Tags                               |                         |     |
| 🄌 CustomFontSampleTests   |                             |  |   |            | Add to a target to enable tagging                     |                         |     |
| ✓                         |                             |  |   |            | Localization  |                         |     |
| 🔌 CustomFontSampleUITests |                             |  |   |            | Localization  |                         |     |
| 🔌 CustomFontSsLaunchTests |                             |  |   |            | Localize  |                         |     |
|                           |                             |  |   |            |   |                         |     |
|                           |                             |  |   |            | larget Membership                                     |                         |     |
|                           |                             |  |   |            |   |                         |     |
|                           |                             |  |   |            | No Targets  |                         |     |
|                           |                             |  |   |            |   |                         |     |
|                           |                             |  |   |            |   |                         |     |
|                           |                             |  |   |            | + - /   |                         |     |
|                           |                             |  |   |            |   |                         |     |
|                           |                             |  |   |            |   |                         |     |

Mobile App Development Spiring Daria Tsoupikova

Select the font and copy file name from inspector. Then add the font to Info.plist Fonts provided by application – paste file name as a value of the Item 0 - String. Press return.

|  | 🛃 CustomFontSample                           | 🖪 CustomFontSample > 📋 iP      | hone 16 Pro | CustomFontSample: Ready   Today at 12:11 PM | <b>e</b> + | -   |  |
|--|--|--------------------------------|-------------|---|------------|---|--|
|  | 器 I く > 目 Info                               |                                |             |   | ₹ ≣ (      | +   | ?  |
| ✓ ▲ CustomFontSample   | 🐱 CustomFontSample 👌 🧮                       | CustomFontSample ) 🖽 Info 〉 No | Selection   |   |            | Identity and  | Туре   |
| 🗸 💳 CustomFontSample   | Key  |                                | Туре        | Value                                       |            | Name  | Info.plist   |
| 🔌 AppDelegate  | ✓ Information Property List                  |                                | Dictionary  | (2 items)                                   |            | Туре  | Default - Property List >  |
| G Assets   | > Application Scene Manif                    | est 🗘                          | Dictionary  | (2 items)                                   |            | Location  | Relative to Group  |
| Info   | <ul> <li>Fonts provided by applic</li> </ul> | ation 🗘                        | Array       | (1 item)                                    |            |   | Info.plist   |
| <ul> <li>LaunchScreen</li> <li>Main</li> <li>Montserrat-Bold</li> <li>SceneDelegate</li> <li>ViewController</li> <li>CustomFontSampleTests</li> <li>CustomFontSampleTests</li> <li>CustomFontSampleUlTests</li> <li>CustomFontSampleUlTests</li> <li>CustomFontSampleUlTests</li> <li>CustomFontSampleUlTests</li> <li>CustomFontSampleUlTests</li> <li>CustomFontSampleUlTests</li> </ul> | Item 0                                       | 00                             | String ♀    | Montserrat-Bold.ttf                         |            | Full Path<br>On Demand<br>Add to a targ<br>Localization | /Users/tsoupi/Desktop/<br>2025_Courses/MAD/<br>2025_L31_Spring/WEEK-<br>FontExerciseLab/<br>CustomFontSample/<br>CustomFontSample/Info.<br>Resource Tags<br>et to enable tagging<br>Localize |
|  |  |                                |             |   |            | +   -   /   | No Targets   |

#### Check if your font is added to Bundle resource folder. Targets > CustomFontSample > Build Phases > Copy Bundle Resources

|   | <b>GustomFontSample</b>                            | 🖪 CustomFontSample > 📋 iPhone 16 Pro CustomFontSample: Ready   Today at 12:20 PM 👛    | +  |  |
|---|--|---|--|--|
|   | ⊞ I < > I  | CustomFontSample  | $\overrightarrow{\leftarrow}$ (+)  | ① ⑦     ③  |
| ✓ ▲ CustomFontSample  | CustomFontSample                                   |   |  | Identity and Type  |
| ~ CustomFontSample  | Gen  | ral Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules |  | Name CustomFontSample  |
| ▲ AppDelegate     PROJECT       Image: Constraint of the sector o |  | + (right Dependencies (0 items) > Run Build Tool Plug-ins (0 items)                   | Location Absolute Containing directory Full Path /Users/tsoupi/Desktop/ 2025_Courses/MAD/ 2025_421_Spring/WEEK-6/ FontExerciseLab/ CustomFontSample/ CustomFontSample/ |  |
| <ul> <li>Montserrat-Bold</li> <li>SceneDelegate</li> <li>ViewController</li> <li>CustomFontSampleTests</li> <li>CustomFontSampleTests</li> </ul>  | CustomFontSample CustomFontSample CustomFontSample | Compile Sources (3 items)     Link Binary With Libraries (0 items)                    | 1  | oj Project Document  |
|   |  | ✓ Copy Bundle Resources (4 items)   |  | Project Format Xcode 16.0 Crganization   |
| CustomFontSampleUlTests   |  | E Montserrat-Bold.ttfin CustomFontSample  |  | Class Prefix   |
| CustomFontSsLaunchTests   |  | Access vasces in CustomFontSample/(localization).lproj                                |  | Encoding 🗹 Minimize Project References   |
|   |  | Main.storvboardin CustomFontSample/(localization).lproj                               |  | Text Settings  |
|   |  | + -   |  | Indent Using Spaces  Widths 4 0 4 0 Tab Indent Variable V |

#### Save project.

### In the Main storyboard add label. Select Custom Font, Font name should be on top.









#### Save project. In the Main storyboard add label. Select Custom Font, Font name should be on top.



### If not showing, to info.plist add Application Fonts Resource Path (make sure the fonts are in the main folder, not in the subfolder "fonts" etc.

|                           | 🔀 CustomFontSample 🛛 🖾 CustomFontSample > 📋 iPhone 16 Pro CustomFontSam | ple: Ready   Today at 12:27 PM 🔺 1 🐠 🕂                |
|---------------------------|---|---|
|                           | B I < > ■ Info × Main (Base)  | ₹ <b>= • • • •</b>                                    |
| CustomFontSample          | 🚨 CustomFontSample ) 🚞 CustomFontSample ) 🖽 Info ) No Selection         | < 🔺 > Identity and Type                               |
| ~ 💳 CustomFontSample      | Key Type Value  | Name Info.plist                                       |
| 🌙 AppDelegate             | Information Property List Dictionary (3 items)                          | Type Default - Property List XML 😒                    |
| 🖻 Assets                  | Application Scene Manifest     O     Dictionary     (2 items)           | Location Relative to Group \$                         |
| 🖽 Info                    | App transport Security Settings   | Info.plist  |
| 🔀 LaunchScreen            | App Uses Non-Exempt Encryption String Montserrat-Bold.ttf               | Full Path /Users/tsoupi/Desktop/<br>2025 Courses/MAD/ |
| 🔀 Main                    | Application can be killed immediately when                              | 2025_421_Spring/WEEK-6/                               |
| Montserrat-Bold           | Application can be killed to reclaim memory                             | FontExerciseLab/<br>CustomFontSample/                 |
| 🌙 SceneDelegate           | Application does not run in background                                  | CustomFontSample/Info.plist 🕥                         |
| 🌙 ViewController          | Application has localized display name                                  | On Demand Decauses Taxe                               |
| 🗸 💳 CustomFontSampleTests | Application is agent (UIElement)  | On Demand Resource Tags                               |
| 🌙 CustomFontSampleTests   | Application is background only<br>Application is visible in Classic     | Add to a target to enable tagging                     |
| CustomFontSampleUITests   |   | Localization  |
| 🌙 CustomFontSampleUITests |   | Localization  |
| 🄌 CustomFontSsLaunchTests |   | Localize  |
|                           |   | Target Membership                                     |
|                           |   | No Targets  |
|                           |   |   |
|                           |   |   |

In ViewController.swift add the following code:

import UIKit

class ViewController: UIViewController {

override func viewDidLoad() { super.viewDidLoad() // Do any additional setup after loading the view.

for family in UIFont.familyNames as [String] { print("font family \(family)") for fontName in UIFont.fontNames(forFamilyName:family) { print("font name\(fontName)")

# Use Your Custom Font in Source Code

### Save and run your project. See the fonts in the console area.



# Use Your Custom Font in Source Code

#### Create New Label SwiftFontLabel



# Use Your Custom Font in Source Code

### Link swiftFontLabel to ViewController as outlet:



Link swiftFontLabel to ViewController as outlet:

import UIKit

- class ViewController: UIViewController {
  - @IBOutlet var SwiftFontLabel: UILabel!



import UIKit
class ViewController: UIViewController {

@IBOutlet var SwiftFontLabel: UILabel!

override func viewDidLoad() { super.viewDidLoad() // Do any additional setup after loading the view.

### SwiftFontLabel.font=UIFont(name:"Montserrat-Bold", size: 38)

### Save project. Run. Check the font.



Xcode 16 is reorienting heavily towards Swift and away from IB storyboard. See the following video for Swift custom font implementation.

https://youtu.be/ClJowYh1gT8?si=TMOyyCetgBKthdnP

Apple Developer Guidelines (have swift code issues)

https://developer.apple.com/documentation/uikit/adding-a-custom-font-to-your-app

