

ANGELO CAMMALLERI

Junior iOS Developer Interactive-Pioneers

NOTIFICATION SERVICE EXTENSIONS

AVAILABLE WITH IOS 10

SOURCECODE

You can find my demo project here:

<https://github.com/ANGOmarcello/NotificationServiceDemo>

WHAT IS A NOTIFICATION SERVICE EXTENSION?

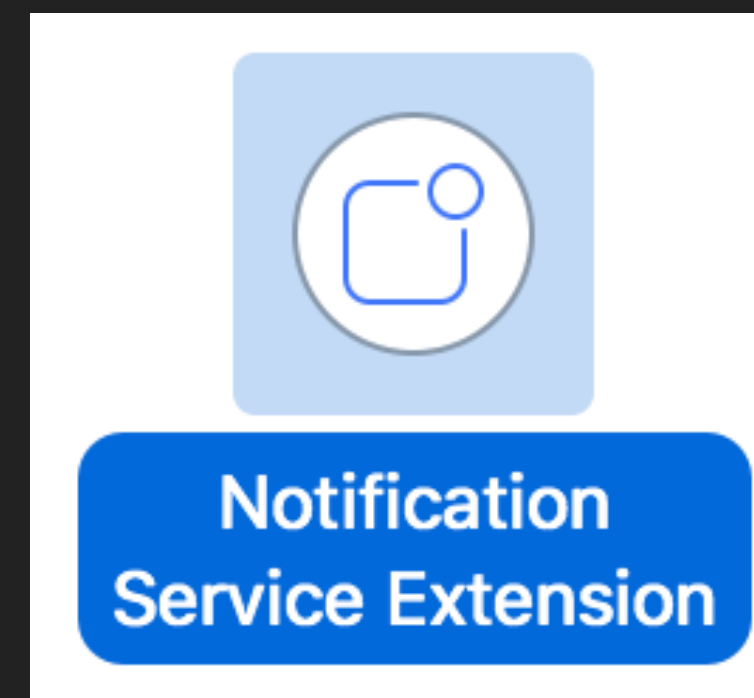
- ▶ Extension type introduced with iOS 10
- ▶ Executed before a push notification is displayed
- ▶ Duration of execution defined by iOS

AND FOR WHAT IS IT GOOD?

- ▶ Download media
- ▶ Attach pictures and videos
- ▶ Decrypt data before display

HOW TO START?

- ▶ Add a new target to your iOS Project
- ▶ File... > New > Target...
- ▶ Notification Service Extension



WHAT YOU GET

```
import UserNotifications

class NotificationService: UNNotificationServiceExtension {

    var contentHandler: ((UNNotificationContent) -> Void)?
    var bestAttemptContent: UNMutableNotificationContent?

    override func didReceive(_ request: UNNotificationRequest, withContentHandler contentHandler:
        @escaping (UNNotificationContent) -> Void) {
        self.contentHandler = contentHandler
        bestAttemptContent = (request.content.mutableCopy() as? UNMutableNotificationContent)

        if let bestAttemptContent = bestAttemptContent {
            // Modify the notification content here...
            bestAttemptContent.title = "\(bestAttemptContent.title) [modified]"

            contentHandler(bestAttemptContent)
        }
    }

    override func serviceExtensionTimeWillExpire() {
        // Called just before the extension will be terminated by the system.
        // Use this as an opportunity to deliver your "best attempt" at modified content, otherwise
        // the original push payload will be used.
        if let contentHandler = contentHandler, let bestAttemptContent = bestAttemptContent {
            contentHandler(bestAttemptContent)
        }
    }
}
```

WHAT IT DOES

- ▶ **override func** `didReceive(_ request: UNNotificationRequest, withContentHandler contentHandler: @escaping (UNNotificationContent) -> Void)`
 - Parse notification here and enhance it
- ▶ **var** `bestAttemptContent: UNMutableNotificationContent?`
 - Store enhanced notification content inside
- ▶ **override func** `serviceExtensionTimeWillExpire()`
 - If time runs out your `bestAttemptContent` will be used

PUSH PAYLOAD PREPARATION

- ▶ Recommended: Use [Knuff](#) for testing
- ▶ Set "mutable-content":1 in the payload
- ▶ Without this key the extension won't execute

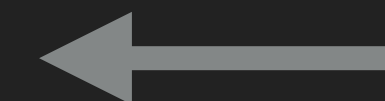
```
{  
  "aps":{  
    "alert":"Test",  
    "sound":"default",  
    "badge":1,  
    "mutable-content":1 ←  
  }  
}
```



LOADING A PICTURE

- ▶ Add pictureURL property to payload
- ▶ **Use https:// link**
- ▶ Parse the url from payload
- ▶ Download the picture

```
{  
  "aps":{  
    "alert":"Test",  
    "sound":"default",  
    "badge":1,  
    "mutable-content":1  
    "pictureURL":"Add URL here"  
  }  
}
```



ATTACHING THE IMAGE

- ▶ Attach the image as `UNNotificationAttachment`
- ▶ `UNNotificationAttachment` has no simple initializer
- ▶ More on this in the demo project



IM FOOTBALL



ABPFIFF!

Bor. M'Gladbach, Eintracht Frankfurt
Das Spiel Frankfurt gegen Gladbach ist aus! Endstand 0:0

Öffnen

Kommentieren



DEMONSTRATION

Notification Service Demo

THANK YOU FOR LISTENING

ANY QUESTIONS?

