

# NSOperationQueue 동시성 관리

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Swift - iOS 앱 개발 심화과정



## NSOperationQueue - 동시성 관리

### 목표

GCD를 추상화한 NSOperationQueue를 통해  
고차원에서 동시성을 구현하는 방법을 익힌다.

# Concurrency

## 정의

프로그램을 I/O를 수행하는 여러 개의 쓰레드를 구현하는 것을 의미한다. 쓰레드가 I/O를 수행하기 때문에 프로그램의 의미는 비결정적(non-deterministic)이다.

# Concurrency

## 구현방법

- performSelectorInBackground:withObject:

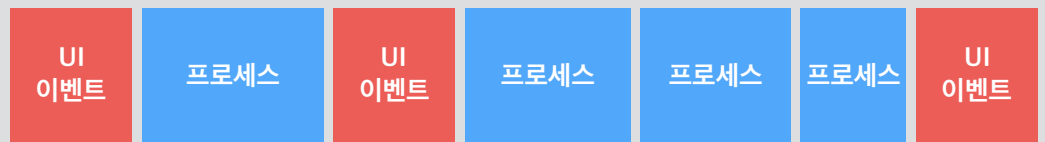
```
- (void)performSelectorInBackground:(SEL)aSelector  
    withObject:(id)arg;
```

- NSOperationQueue
- Grand Central Dispatch

## OperationQueue

### Main Queue

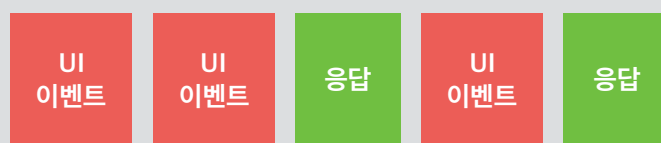
*User Interface*



## OperationQueue

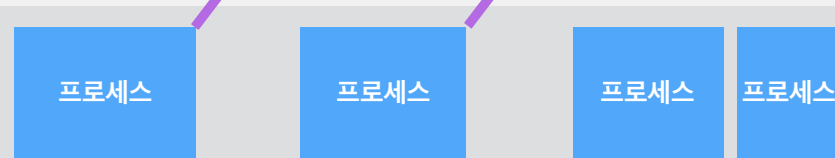
### Main Queue

*User Interface*



### Sub Queue

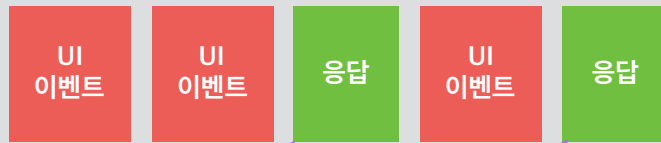
*Sub Thread*



## OperationQueue

### Main Queue

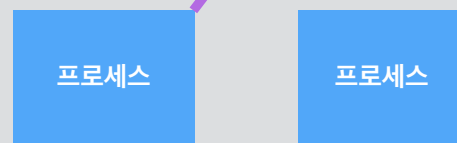
User Interface



### Sub Queue 1

1

Sub Thread



### Sub Queue 2

2

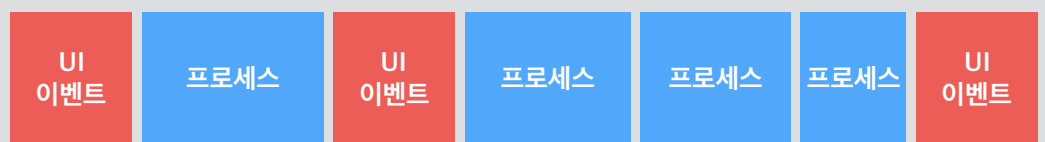
Sub Thread



## OperationQueue

### Main Queue

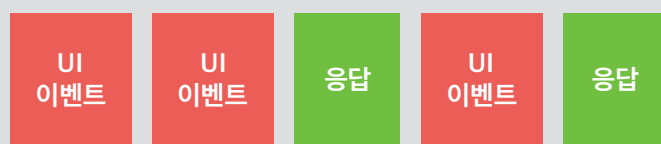
User Interface



VS

### Main Queue

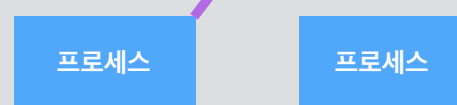
User Interface



### Sub Queue 1

1

Sub Thread



### Sub Queue 2

2

Sub Thread

