

Introducing

# Concurrency

NSOperation

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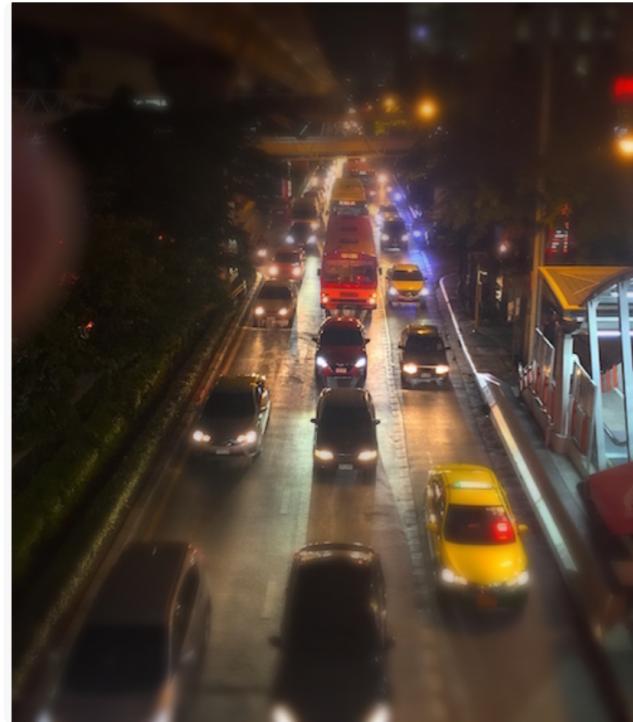
# Tilt-Shift Operation

```
30 let inputImage = UIImage(named: "dark_road_small.jpg")
```



```
31
```

```
51 tsOp.outputImage
```



```
52
```

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# NSOperation

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```
class TiltShiftOperation : NSOperation {
    var inputImage: UIImage?
    var outputImage: UIImage?

    override func main() {
        guard let inputImage = inputImage else { return }
        let mask = topAndBottomGradient(inputImage.size)
        outputImage = inputImage.applyBlurWithRadius(4, maskImage: mask)
    }
}
```

NSOperation



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# NSOperation

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NSOperation

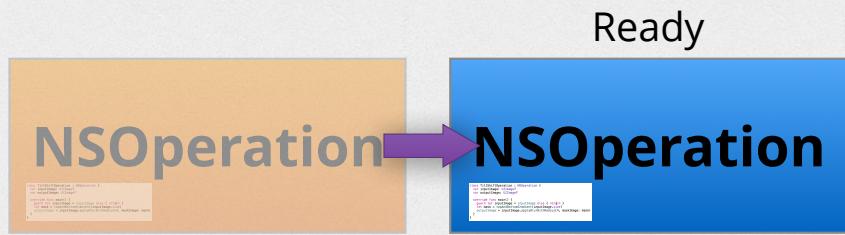
```
NSOperation *operation = [NSOperation new];  
[operation setBlock:^{  
    NSLog(@"Operation 1");  
}];  
[operation start];  
  
NSOperation *operation2 = [NSOperation new];  
[operation2 setBlock:^{  
    NSLog(@"Operation 2");  
}];  
[operation2 start];
```



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# NSOperation

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# NSOperation

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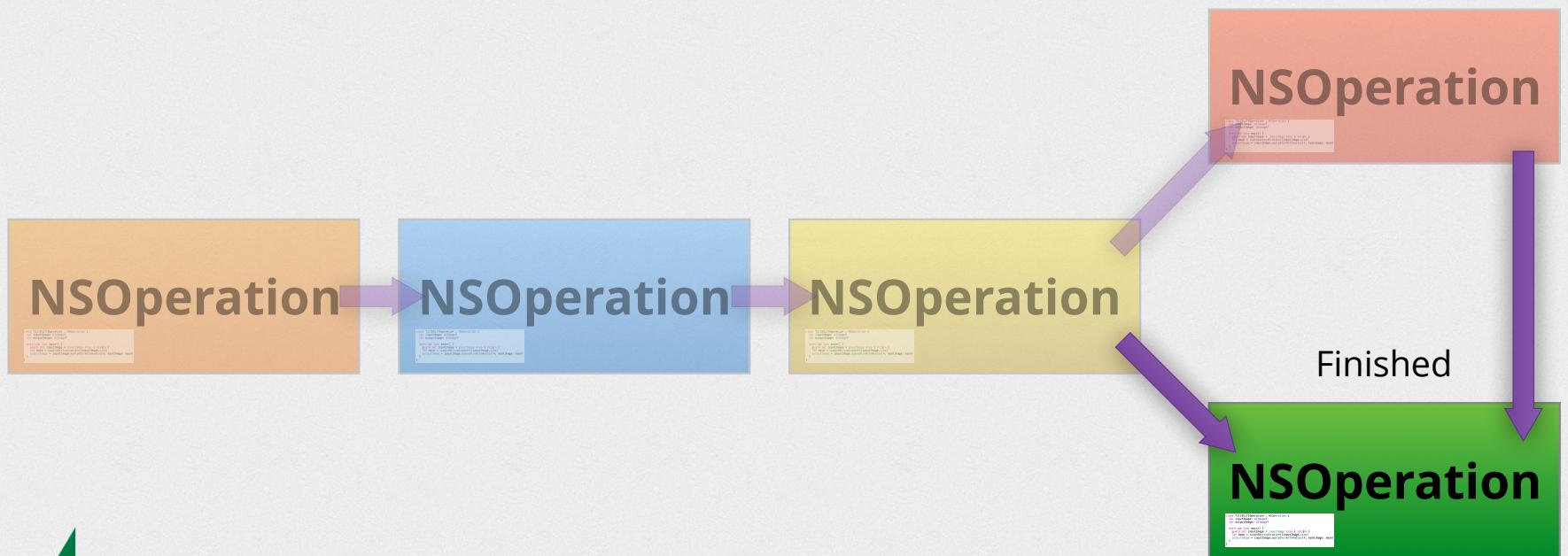
# NSOperation

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# NSOperation

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# NSOperation

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```
public class NSOperation : NSObject {
    public func start()
    public func main()
    public var cancelled: Bool { get }
    public func cancel()

    public var executing: Bool { get }
    public var finished: Bool { get }
    public var asynchronous: Bool { get }
    public var ready: Bool { get }

    public var completionBlock: (() -> Void)?
    public var qualityOfService: NSQualityOfService
    public var name: String?
    ...
}
```

# Quality of Service

---

```
public enum NSQualityOfService : Int {  
    case UserInteractive  
    case UserInitiated  
    case Utility  
    case Background  
    case Default  
}
```



# NSBlockOperation

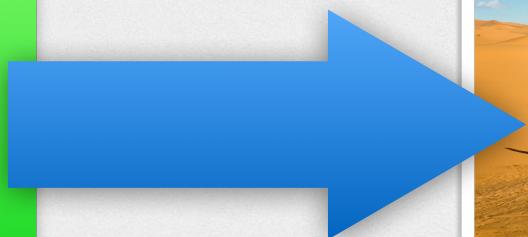
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```
public class NSBlockOperation : NSOperation {  
  
    public convenience init(block: () -> Void)  
  
    public func addExecutionBlock(block: () -> Void)  
    public var executionBlocks: [() -> Void] { get }  
}
```



# It's Challenge Time!

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