

Introducing

Concurrency

Grand Central Dispatch

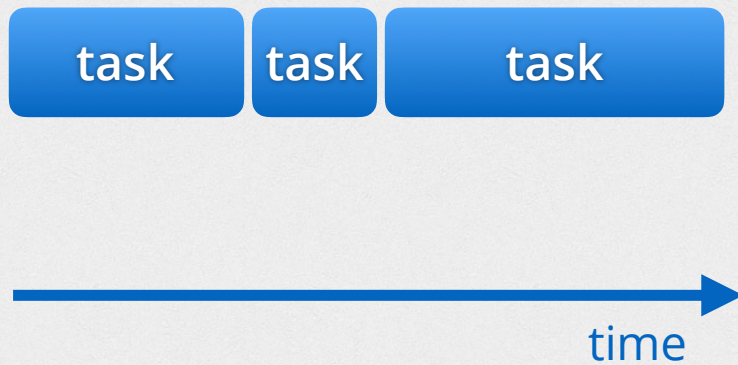
raywenderlich.com

Grand Central Dispatch



GCD Queues

Serial



Concurrent



Queue Types

- * QOS_CLASS_USER_INTERACTIVE
- * QOS_CLASS_USER_INITIATED
- * QOS_CLASS_DEFAULT
- * QOS_CLASS_UTILITY
- * QOS_CLASS_BACKGROUND

```
let queue = dispatch_get_global_queue(QOS_CLASS_USER_INITIATED, 0)
let mainQueue = dispatch_get_main_queue()
```

```
let attr = dispatch_queue_attr_make_with_qos_class(DISPATCH_QUEUE_SERIAL,
                                                    QOS_CLASS_USER_INITIATED, 0)
let workerQueue = dispatch_queue_create("com.raywenderlich.worker", attr)
```



Adding Tasks to the Queue

```
public func dispatch_async(queue: dispatch_queue_t, _ block: dispatch_block_t)
public func dispatch_sync(queue: dispatch_queue_t, _ block: dispatch_block_t)
```

```
dispatch_async(workerQueue) {
    print("Running on an asynchronous queue")
}
```



It's Challenge Time!

- ⚙️ Convert `slowSum()` into an asynchronous function

6	
7	<code>// Demo of the sync function</code>
8	<code>print("=== Starting Sync ===")</code>
9	<code>let result = slowSum(1, 2)</code>
10	<code>print("SYNC Result = \(result)")</code>
11	

<code>"=== Starting Sync ===\n"</code>
<code>3</code>
<code>"SYNC Result = 3\n"</code>