

# Concurrency

---



**Harit Himanshu**

@harittweets



# Overview



Concurrency and parallelism

*Future* and ExecutionContext

*Future* transformation

Filtering and collecting *Future*

Other ways to model asynchronous computations

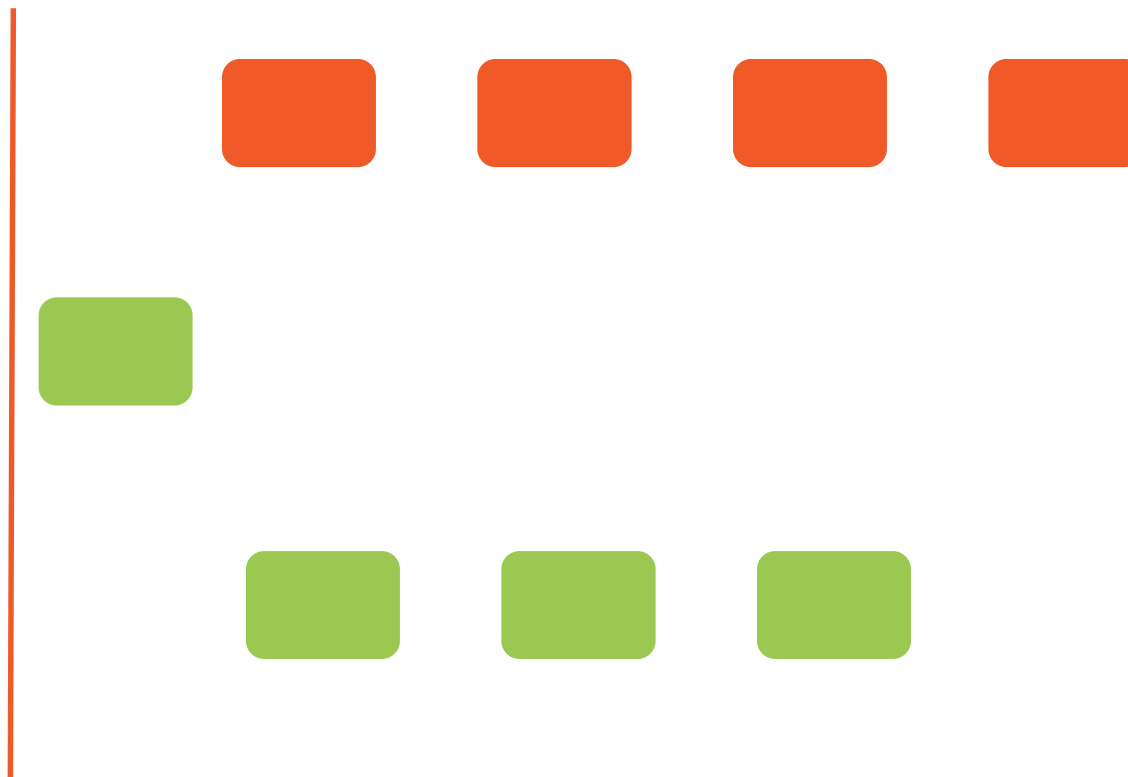
Dealing with *Future* failures



# Concurrency



Ticket Counter



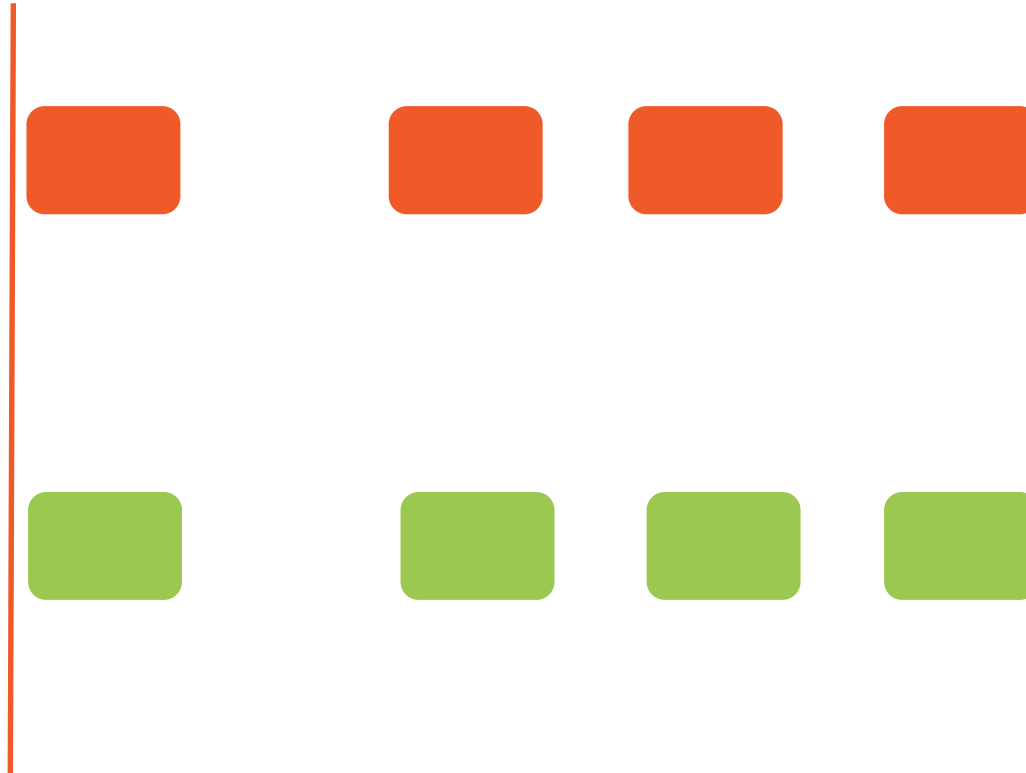
Queues



# Parallelism



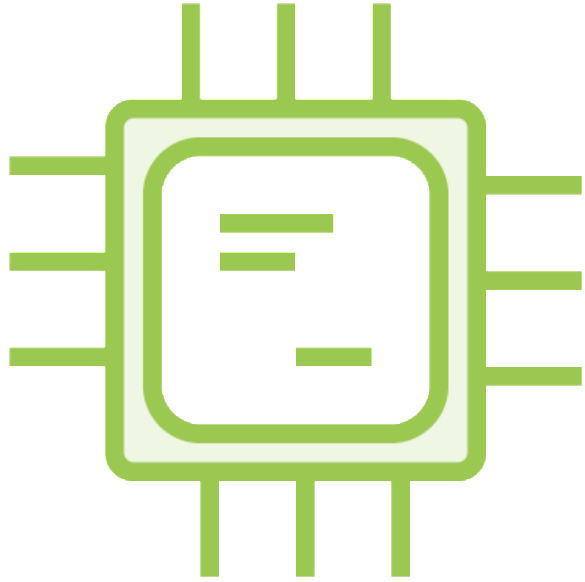
Ticket Counter



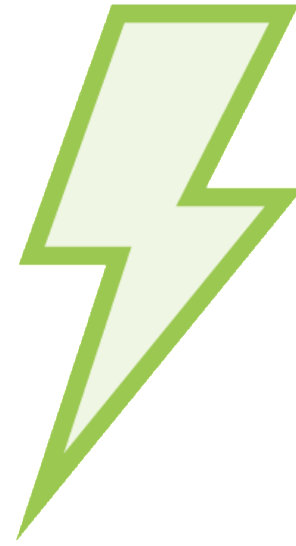
Queues



# Why care about *concurrency*?

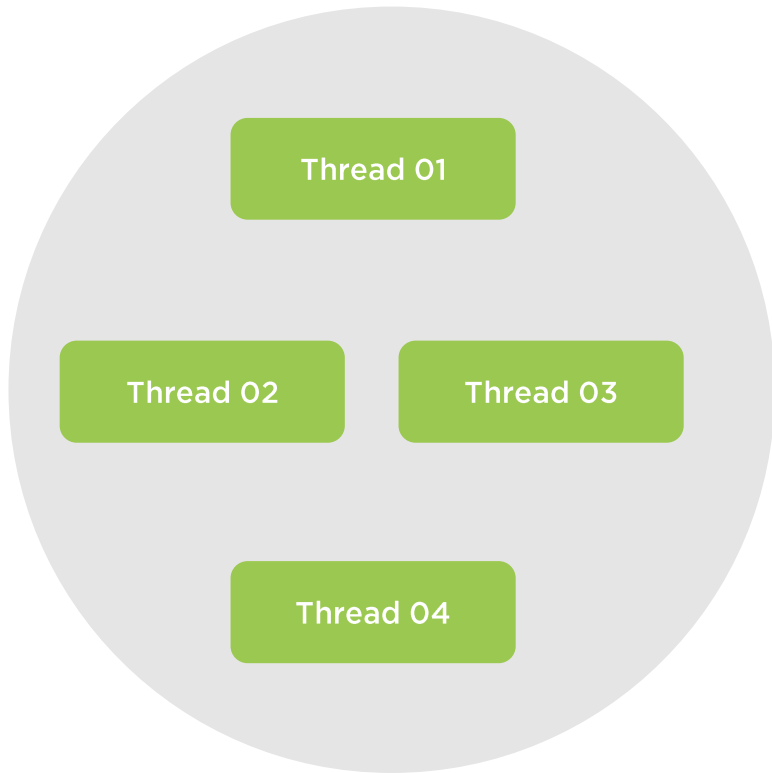


Multicore CPU



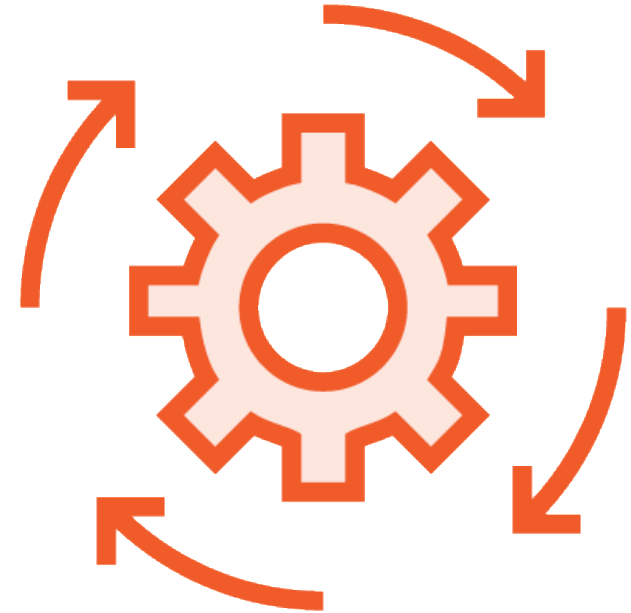
Fast

# ThreadPool & ExecutionContext



ThreadPool

←  
Backed by



ExecutionContext

```
import ExecutionContext.Implicits.global
```

Import Scala Global ExecutionContext



```
doWork(a: Int, b: Int)(implicit arg: Int => String)
```

## Scala Implicit Example





# Summary



Concurrency and parallelism

*Future* and ExecutionContext

*Future* transformation

Filtering and collecting *Future*

Other ways to model asynchronous computations

Dealing with *Future* failures

