

continueContext

choosing a dispatcher

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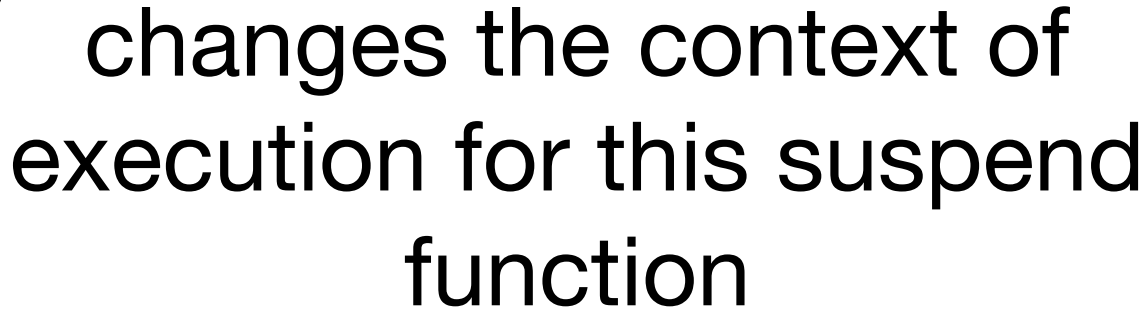












changes the context of
execution for this suspend
function

```
suspend fun preheatOven(oven: Oven): HotOven = withContext(Dispatchers.IO) {  
    when (oven) {  
        is ColdOven -> {  
            delay(PREHEAT_OVEN) //network call or file operations  
            HotOven  
        }  
        is HotOven -> oven  
    }  
}
```

Coroutine Context

choosing a dispatcher

changes the context of execution for this suspend function

```
suspend fun preheatOven(oven: Oven): HotOven = withContext(Dispatchers.IO) {  
    when (oven) {  
        is ColdOven -> {  
            delay(PREHEAT_OVEN) //network call or file operations  
            HotOven  
        }  
        is HotOven -> oven  
    }  
}
```

Coroutine Scope

structured concurrency

- coroutines can be launched only in a `CoroutineScope`
- `coroutineScope` builder create a coroutine scope that does not complete until all the launched children complete
- `coroutineScope` builder is suspended - does not block a thread while waiting
- a coroutine launched in the scope of another coroutine inherits the context and the job (the job of the new coroutine becomes the child of the job of the old coroutine)
- if the parent job is canceled all the children of that job are cancelled, recursively
- if an exception is thrown and not caught, the job is cancelled
- prevents coroutine leaks