# Yield (multithreading)

In <u>computer science</u>, **yield** is an action that occurs in a <u>computer program</u> during <u>multithreading</u> of forcing a processor to relinquish control of the current running thread and sending it to the end of therunning queue, of the same scheduling priority.

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## **Examples**

Different programming languagesimplement yielding in various ways.

- pthread\_yield() in the language C, a low level implementation, provided by POSIX Threads<sup>[1]</sup>
- std::this\_thread::yield()in the languageC++, introduced inC++11.
- The Yield method is provided in various object-oriented programming languages with multithreading support, such
  as C# and Java.<sup>[2]</sup> OOP languages generally provide class abstractions for thread objects.

#### In coroutines

<u>Coroutines</u> are a fine-grained <u>concurrency</u> primitive, which may be required to yield explicitly. They may enable specifying another function to take control. Coroutines that explicitly yield allowcooperative multitasking

### See also

- Coroutines
- Java (software platform)
- Common Language Runtime
- Java virtual machine
- Actor model

## References

- 1. "pthread\_yield" (https://www.ibm.com/support/knowledgecenter/#!/SSLTBW\_2.1.0/com.ibm.zos.v2r1.bpxbd00/ptyield.htm).
- 2. "Thread.yield" (http://www.javamex.com/tutorials/threads/yeld.shtml). Javamex. Retrieved 24 June 2011.

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