Managing the Java Thread Lifecycle: Introduction



Douglas C. Schmidt

<u>d.schmidt@vanderbilt.edu</u>

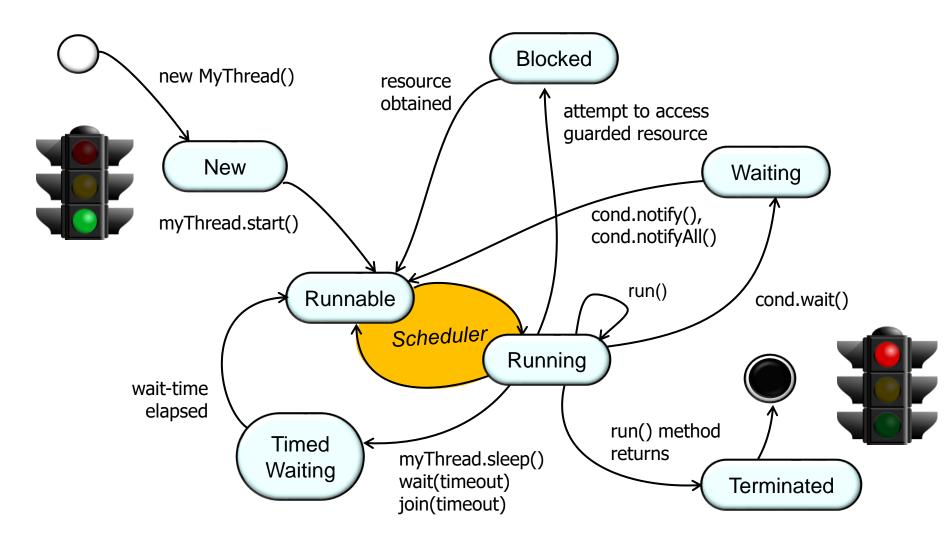
www.dre.vanderbilt.edu/~schmidt

Institute for Software Integrated Systems Vanderbilt University Nashville, Tennessee, USA



Learning Objectives in this Part of the Lesson

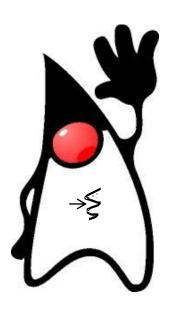
Be aware of the Java thread lifecycle



The primarily focus of this overall lesson is on starting & stopping Java threads

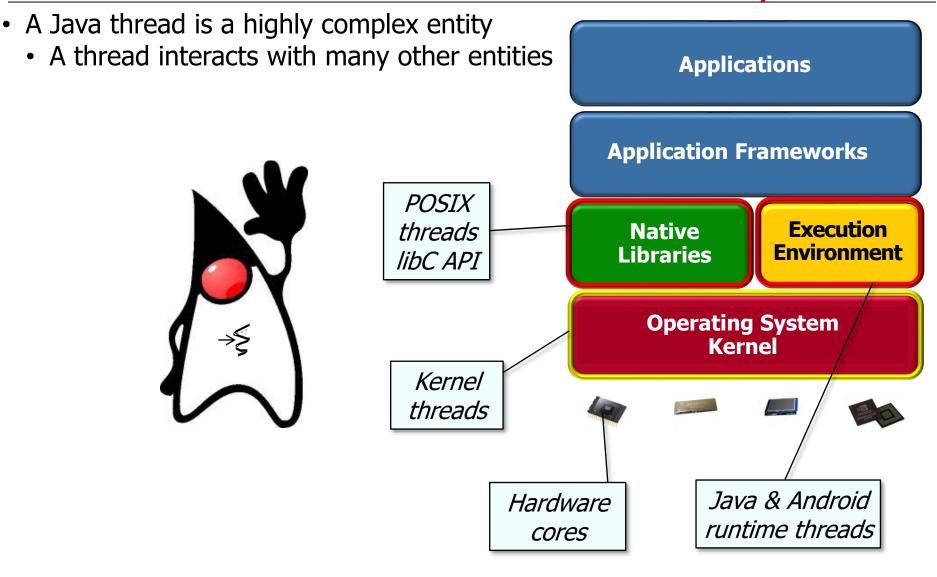
Overview of the States in the Java Thread Lifecycle

A Java thread is a highly complex entity



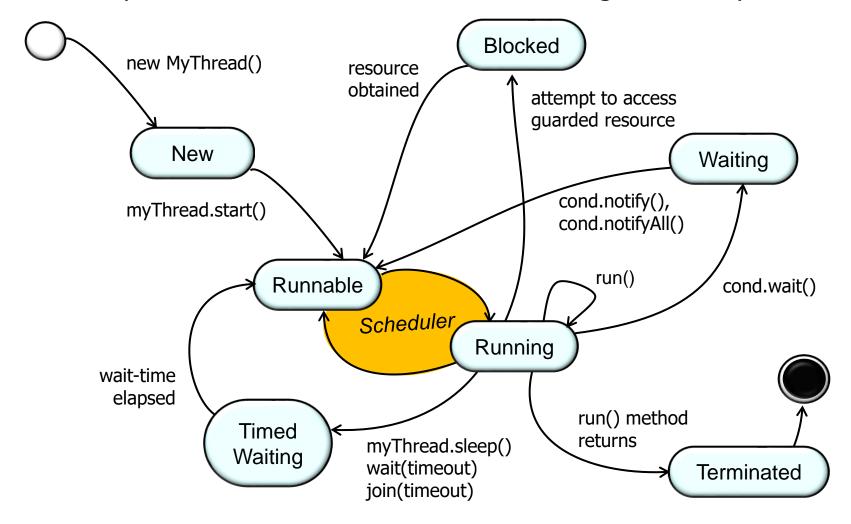


See docs.oracle.com/javase/8/docs/api/java/lang/Thread.html

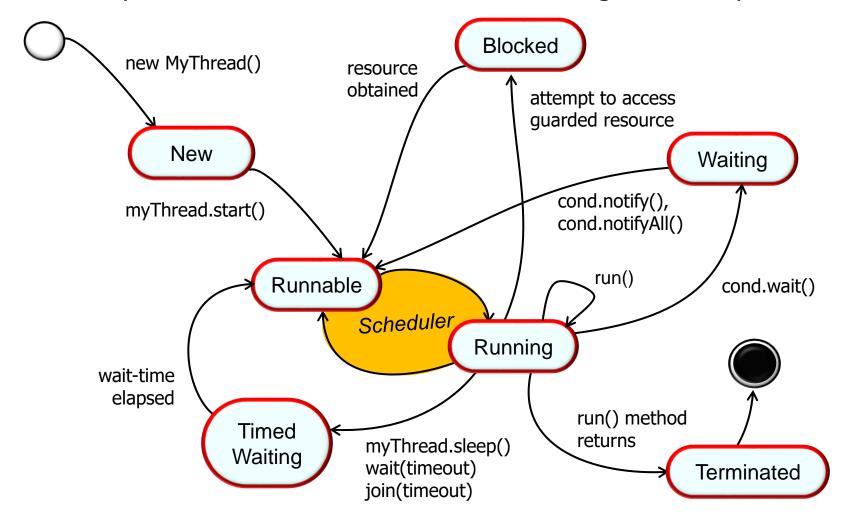


See docs.oracle.com/javase/8/docs/api/java/lang/Thread.html

The lifecycle of a thread must therefore be managed carefully

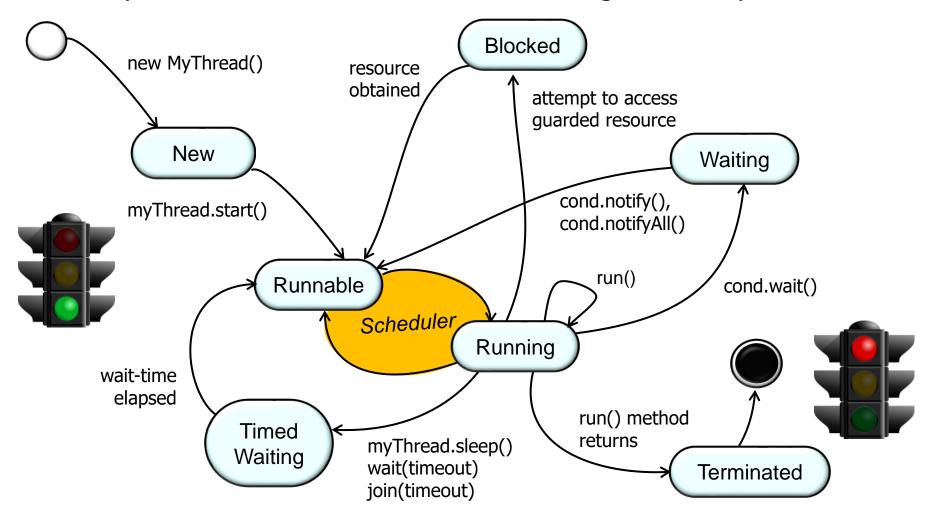


The lifecycle of a thread must therefore be managed carefully



A thread transitions through various "states" based on program operations

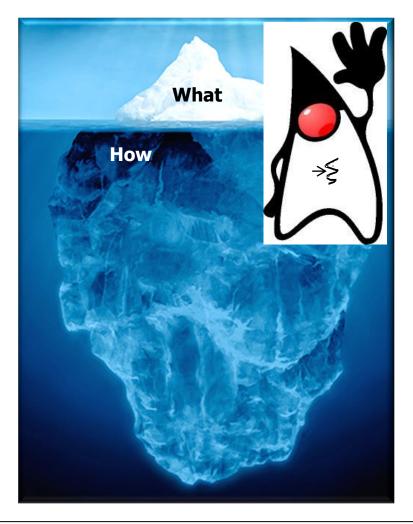
The lifecycle of a thread must therefore be managed carefully

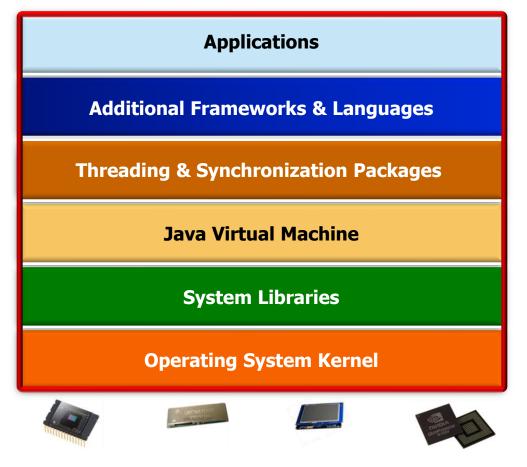


Two key parts of a Java thread's lifecycle involve starting & stopping it

You needn't understand all the details of Java thread internals to program

them effectively





You needn't understand all the details of Java thread internals to program

them effectively

 However, your reputation (& value) as a "full stack" developer will increase if you learn how threads work internally





See www.laurencegellert.com/2012/08/what-is-a-full-stack-developer

• You needn't understand all the details of Java thread internals to program

them effectively

 However, your reputation (& value) as a "full stack" developer will increase if you learn how threads work internally

 This type of "systems" knowledge may help you avoid "commoditization"!!





See softwareengineeringdaily.com/2016/08/07/you-are-not-a-commodity

End of Managing the Java Thread Lifecycle: Introduction