Multithreading in JAVA

Multithreading in java is a process of executing multiple thread's simunltaneously

-> A thread is a lightweight sub-process

-> However we use multithreading than multiprocessing because thread use a shared memory area

-> It is mostly used in game's

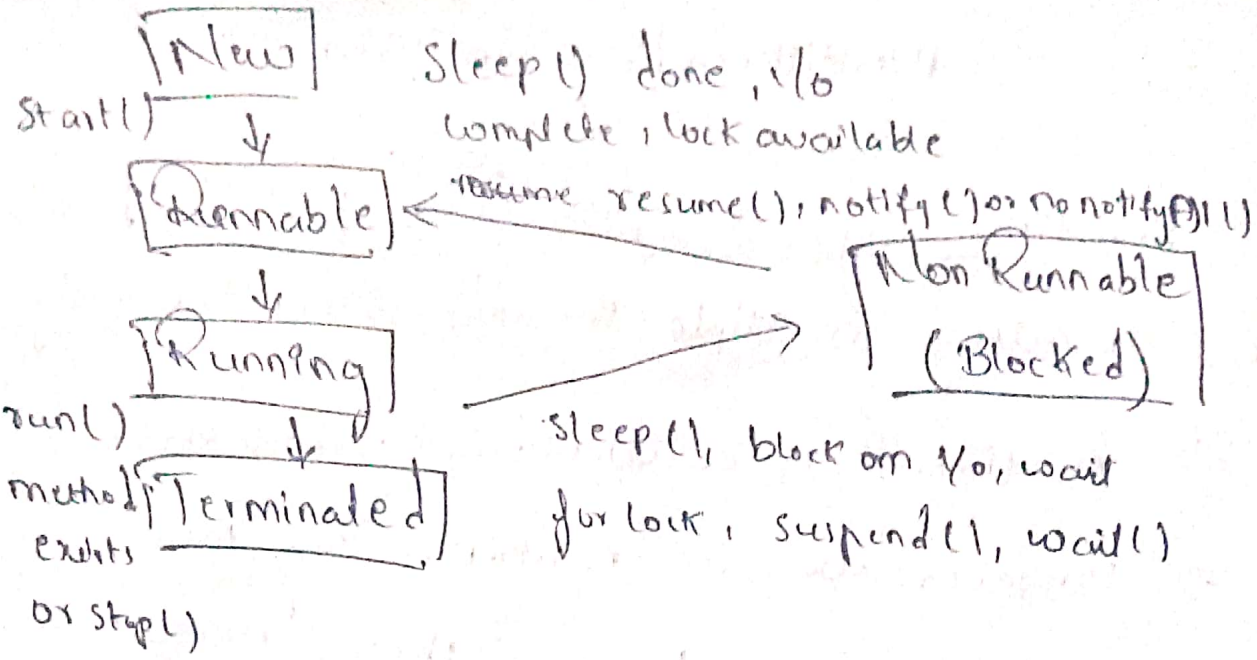
Advantage's of Multithreading

1) It doesn't block the user
2) You can perform many operation's together
3) They are independent

Life cycle of a Thread

According to Sun, There are is only 4 state's in thread life cycle in java

new, runnable, non-runnable, terminated



Priority of Thread (ThreadPriority)

Each thread have a priority. priorities are represented by a number b/w 1 and 10

In most cases thread scheduler schedules the threads according to their priority

But it is not gran guaranted because it depends on JVM specification.

3- constants defined in thread class

1. public static int MIN_PRIORITY
2. public static int NORM_PRIORITY
3. public static int MAX_PRIORITY

Default priority is 5. MIN-PRIORITY-1, MAX-priority-10

Synchronization in java

- Synchronization in java is the capablity to control the access of multiple threadi to any shared resource.
- It is better option when we want to allow only on thread to access the shared resource

Why use Synchronization

1) to prevent thread interface
2) to prevent consistency problem

Types of Synchronization.

1) process synchronization.
2) thread synchronization

Thread Synchronization.

There are two types of thread Synchronizatio

1) Mutual Exclusive
    1. Synchronized method
    2. Synchronized block.
    3. static synchronization.
2) Cooperation.

Synchronized block in Java

We can ~~we~~ be used to perform synchronization on any ~~specific~~ resource specific of the method

If we have 50 line's of code we can synchronized only 5 line's by using synchronized block.