



链滴

Java 基础 1 多线程的两种实现方式 继承 Thread 、 实现 Runnable 接口

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来源网站: [链滴](#)

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<p>一个类只要继承了 Thread 类同时覆写了本类中的 run()方法就可以实现多线程操作了，但是一类只能继承一个父类，而实现 Runnable 不受这个的约束。 </p>

<p>Thread</p>

<p>例子 1:</p>

```
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">public class demo {
</span></span><span class="highlight-line"><span class="highlight-cl">  public static void
main(String[] args){
</span></span><span class="highlight-line"><span class="highlight-cl">  ThreadDemo d1
= new ThreadDemo("syy");
</span></span><span class="highlight-line"><span class="highlight-cl">  ThreadDemo d2
= new ThreadDemo("qb");
</span></span><span class="highlight-line"><span class="highlight-cl">  d1.start();
</span></span><span class="highlight-line"><span class="highlight-cl">  d2.start();
</span></span><span class="highlight-line"><span class="highlight-cl">  }
</span></span><span class="highlight-line"><span class="highlight-cl">>
</span></span><span class="highlight-line"><span class="highlight-cl">>
</span></span><span class="highlight-line"><span class="highlight-cl">> class ThreadDem
extends Thread {
</span></span><span class="highlight-line"><span class="highlight-cl">  private String n
me;
</span></span><span class="highlight-line"><span class="highlight-cl">  ThreadDemo(S
tring name){
</span></span><span class="highlight-line"><span class="highlight-cl">    this.name = n
me;
</span></span><span class="highlight-line"><span class="highlight-cl">  }
</span></span><span class="highlight-line"><span class="highlight-cl">  public void run
(){
</span></span><span class="highlight-line"><span class="highlight-cl">    for(int x=1;x&t;10;x++)
</span></span><span class="highlight-line"><span class="highlight-cl">      System.out.pr
ntln(Thread.currentThread().getName()+" "+name +"===="+x);
</span></span><span class="highlight-line"><span class="highlight-cl">  }
</span></span><span class="highlight-line"><span class="highlight-cl">>
</span></span></code></pre>
```

<p>此时输出的结果可能为线程 0、1 的来回切换</p>

<p>如果调用 d1.run()来"启动"线程，发现并没有来回切换。启用多线程时我们使用 start()方法，在 DK 的文档中可以发现，一旦调用 start()方法，则会通过 JVM 找到 run()方法。 </p>

<p>public class Thread extends Object implements Runnable</p>

<p>发现 Thread 类也是 Runnable 接口的子类。

*是重写 run 方法</p>

<p>Runnable</p>

<p>例 2:</p>

```
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">public class demo
</span></span><span class="highlight-line"><span class="highlight-cl">{
</span></span><span class="highlight-line"><span class="highlight-cl">  public static vo
d main(String[] args){
</span></span><span class="highlight-line"><span class="highlight-cl">    RunnableDe
o r1 =new RunnableDemo("syy");
</span></span><span class="highlight-line"><span class="highlight-cl">    RunnableDe
o r2 = new RunnableDemo("q");
</span></span><span class="highlight-line"><span class="highlight-cl">    new Thread(r
).start();
</span></span></code></pre>
```

```

</span></span><span class="highlight-line"><span class="highlight-cl">    new Thread(r
).start();
</span></span><span class="highlight-line"><span class="highlight-cl">    }
</span></span><span class="highlight-line"><span class="highlight-cl"> }
</span></span><span class="highlight-line"><span class="highlight-cl"> class RunnableD
mo implements Runnable {
</span></span><span class="highlight-line"><span class="highlight-cl">    private String n
me;
</span></span><span class="highlight-line"><span class="highlight-cl">    RunnableDemo
String name){
</span></span><span class="highlight-line"><span class="highlight-cl">        this.name = n
me;
</span></span><span class="highlight-line"><span class="highlight-cl">    }
</span></span><span class="highlight-line"><span class="highlight-cl">    }
</span></span><span class="highlight-line"><span class="highlight-cl">    public void run()
{
</span></span><span class="highlight-line"><span class="highlight-cl">    // TODO Auto-g
nerated method stub
</span></span><span class="highlight-line"><span class="highlight-cl">    for(int x=1;x<&lt;
0;x++)
</span></span><span class="highlight-line"><span class="highlight-cl">        System.out.pri
tln(Thread.currentThread().getName()+" "+name +"===="+x);
</span></span><span class="highlight-line"><span class="highlight-cl">    }
</span></span><span class="highlight-line"><span class="highlight-cl"> }
</span></span></code></pre>

```

<p>实现效果与例 1 相同。

使用 Runnable 定义子类中没有 start()方法通过 Thread 类来启动 Runnable 实现的多线程.</p>

<p>Runnabe 的好处:</p>

避免点继承的局限，一个类可以继承多个接口。

适合于资源的共享

