

```

1 package club.westcs.NifflerCeciliaB;
2
3 public class Stopwatch {
4     //Attributes
5     private boolean running;
6     private long startTime, stopTime, pausedTime;
7
8     //Constructor
9     public Stopwatch() {
10         running = false;
11         startTime = 0;
12         stopTime = 0;
13         pausedTime = 0;
14     }
15     //Methods
16     public boolean isRunning() {
17         return this.running;
18     }
19
20     public void start() {
21         this.running = true;
22         this.startTime = System.currentTimeMillis();
23     }
24
25     public void stop() {
26         this.running = false;
27         this.stopTime = System.currentTimeMillis();
28     }
29
30     public void pause() {
31         if(this.running) {
32             stop();
33             this.pausedTime += this.stopTime - this.startTime;
34         }
35     }
36
37     public void unpause() {
38         if(this.running == false) {
39             start();
40             this.pausedTime += this.startTime - this.stopTime;
41         }
42     }
43
44     public long getElapsedTime() {
45         long elapsed = 0;
46         if(this.running) {
47             elapsed = System.currentTimeMillis() - this.startTime;
48             elapsed += this.pausedTime;
49         }
50         else {
51             elapsed = this.pausedTime;
52         }
53         return elapsed/1000;
54     }
55 }
56

```