

```

Loading vc-cvs...
1 package caltool.schedule;
2
3 import mvp.*;
4
5 /**
6  *
7  * Duration is the time length of a scheduled item, in hours and minutes. The
8  * minimum duration value is 1 minute. The maximum is 999 hours.
9  *
10 */
11
12 public class Duration extends Model {
13
14     /**
15      * Construct an empty duration value.
16      */
17     public Duration() {
18         hours = 0;
19         minutes = 0;
20     }
21
22     /**
23      * Construct a duration from the given hours and minutes.
24      */
25     public Duration(int hours, int minutes) {
26         this.hours = hours;
27         this.minutes = minutes;
28     }
29
30     /**
31      * Return true if this is an empty duration, indicated by both hours and
32      * minutes = 0.
33      */
34     public boolean isEmpty() {
35         return (hours == 0) && (minutes == 0);
36     }
37
38     /**
39      * Return the string representation of this.
40      */
41     public String toString() {
42
43         String hrString = (hours == 0) ?
44             "" : Integer.toString(hours).concat(
45                 (hours == 1) ? " hr " : " hrs ");
46
47         String minString = (minutes > 0) ?
48             Integer.toString(minutes).concat(" min ") : "";
49
50         return hrString.concat(minString);
51     }
52 }
53
54 /**
55  * Define equality for this as componentwise equality.
56
57  */
58     public boolean equals(Object obj) {
59         Duration otherDuration = (Duration) obj;
60
61         return
62             hours == otherDuration.hours &&
63             minutes == otherDuration.minutes;
64     }
65
66     /**
67      * Define the hash code for this as the sum of the components. This hash
68      * code is used in turn by ItemKey.hashCode.
69      */
70     public int hashCode() {
71         return hours + minutes;
72     }
73
74     /**-
75      * Derived data fields
76      */
77
78     /** Hour component of a duration value, between 0 and 999 */
79     int hours;
80
81     /** Minute component of a duration value, between 0 and 60*999 */
82     int minutes;
83
84 }

```