

Loading vc-cvs...

```

1 package caltool.schedule;
2
3 import mvp.*;
4
5 /****
6 *
7 * A Time consists of an hour, minute, and AM or PM indicator. A time value is
8 * expressed using a 12-hour or 24-hour clock style. The clock style is set as
9 * an option by the user. If the clock style is 24-hour, the AmOrPm indicator
10 * is nil.
11 *
12 */
13
14 public class Time extends Model {
15
16     /**
17     * Construct an empty time value.
18     */
19     public Time() {
20         hour = 0;
21         minute = 0;
22         amOrPm = null;
23         valid = true;
24         empty = true;
25     }
26
27     /**
28     * Construct a time from the given string. Set the valid field to false if
29     * the given string does not parse to a valid time. Note that the invalid
30     * state representation is used instead of throwing an exception because
31     * some users may want to delay the processing of invalid dates, and hence
32     * may not be interested in handling an exception.
33     */
34     public Time(String time) {
35         /**
36         * Constant stubbed implementation.
37         */
38         hour = 12;
39         minute = 0;
40         amOrPm = null;
41
42         valid = true;
43         empty = false;
44     }
45
46     /**
47     * Return true if this is an empty time.
48     */
49     public boolean isEmpty() {
50         return empty;
51     }
52
53     /**
54     * Return the string representation of this.
55     */
56
57     public String toString() {
58         return Integer.toString(hour).concat(":").
59             concat((minute < 10) ? "0" : "").concat(
60             Integer.toString(minute)).
61             concat((amOrPm != null) ?
62             " " + amOrPm.toString() : "");
63     }
64
65     /**
66     * Define equality for this as componentwise equality.
67     */
68     public boolean equals(Object obj) {
69         Time otherTime = (Time) obj;
70
71         return
72             hour == otherTime.hour &&
73             minute == otherTime.minute &&
74             amOrPm.equals(otherTime.amOrPm);
75     }
76
77     /**
78     * Define the hash code for this as the sum of the components. This hash
79     * code is used in turn by ItemKey.hashCode.
80     */
81     public int hashCode() {
82         return hour + minute + amOrPm.hashCode();
83     }
84
85     /**-
86     * Derived data fields
87     */
88
89     /** The hour component of a time value, between 1 and 12 or 0 and 24 based
90     * on the clock style in use
91     */
92     protected int hour;
93
94     /** The minute component of a time value, between 0 and 59 */
95     protected int minute;
96
97     /** Standard suffix used in 12-hour time value */
98     protected AmOrPm amOrPm;
99
100
101     /**-
102     * Process data fields
103     */
104
105     /** True if this is a valid time */
106     boolean valid;
107
108     /** True if this is an empty time, indicated by hour = 0, minute = 0, and
109     * amOrPm = "empty". */
110     boolean empty;
111

```

```
112 }
```