
MODULE *HourMin*

This module specifies a 24-hour clock displaying the hour h and the minute m , initially showing the time 00:00.

EXTENDS *Integers*

VARIABLES h, m

$TypeOK \triangleq (h \in 0 \dots 23) \wedge (m \in 0 \dots 59)$

$Init \triangleq (h = 0) \wedge (m = 0)$

$Next \triangleq \begin{array}{l} \wedge m' = (m + 1) \% 60 \\ \wedge h' = \text{IF } m' = 0 \text{ THEN } (h + 1) \% 24 \\ \quad \text{ELSE } h \end{array}$

$Spec \triangleq Init \wedge \Box [Next]_{\langle h, m \rangle}$

\ * Modification History
\ * Last modified *Thu Oct 20 05:48:46 PDT 2016* by *lamport*
\ * Created *Sun Oct 02 09:59:18 PDT 2016* by *lamport*