

MODULE <i>traffic_light</i>
<p>VARIABLE <i>color</i></p> <p>$AcceptableColor \triangleq color \in \{\text{"red"}, \text{"green"}, \text{"yellow"}\}$</p> <p>$AlwaysAcceptableColor \triangleq \Box AcceptableColor$ (for use as spec PROPERTY where state "must always be an acceptable color")</p> <p>$Init \triangleq color = \text{"red"}$</p> <p>$TurnGreen \triangleq$ $\quad \wedge color = \text{"red"}$ $\quad \wedge color' = \text{"green"}$</p> <p>$TurnYellow \triangleq$ $\quad \wedge color = \text{"green"}$ $\quad \wedge color' = \text{"yellow"}$</p> <p>$TurnRed \triangleq$ $\quad \wedge color = \text{"yellow"}$ $\quad \wedge color' = \text{"red"}$</p> <p>$Next \triangleq$ $\quad \vee TurnGreen$ $\quad \vee TurnYellow$ $\quad \vee TurnRed$</p>