

Embedded System I

Project 1

Using EdSim51 develop a program simulating car turn light & beams commands:

1. Turn lights & Hazard button
 - a. SW0 ON -> Blink LED 7 (yellow)
 - b. SW2 ON -> Blink LED 1 (yellow)
 - c. SW1 ON -> Blink both LED 1 & 7
 - d. Constraints:
 - i. Both SW0 ON & SW2 ON invalid turn on LED0 (red alm1)
 - ii. Blinking Light ON 0.5 sec, Light OFF 0.3 sec
2. Beams
 - a. SW4 ON (day run) -> LED5 ON (green)
 - b. SW4 OFF -> LED4-5-6 OFF
 - c. SW5 ON (half beam) -> LED4 ON (yellow) LED5-6 OFF
 - d. SW6 ON (full beam) -> LED4-6 ON (red) LED5 OFF
 - e. Constraints
 - i. SW4 OFF LED4-5-6 always OFF
 - ii. SW6 ON & SW5 OFF invalid turn ON LED3 (red alm2) OFF LED6