

Car Compartment Light

- This light can be switched "on" or "off". This light is sensitive to the following events "opening/closing of a door", the "select mode" button. The behaviour is the following:
- The car compartment light will be turned "on" when one or more of the doors are opened,
- The "select mode" button allows to enter three different modes which are:
 - "Off": When the doors are opened, the light will not be turned on.
 - "Door sensitive": Normal mode.
 - "On": Whatever do the doors, the light is still on.
- When the door is locked, the light should go "off".

Pedestrian Crossing

- Model the behavior of a traffic light (for the cars) at a pedestrian crossing.
 - First model behavior of a red-orange-green light (this depends on country so select a behavior that you find realistic).
 - By default light is green, but when pedestrian presses button it should turn red as soon as it's been green long enough.
 - The traffic light should be green for at least 5 secs.
 - It stays red for exactly 3 secs.
- Also model the behavior of the pedestrian traffic light:
 - It should turn green 1 sec after car traffic light has completed turning red.
 - It should turn red 1 sec before car traffic light starts to turn green.