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Pedestrian Crossing Simulation
Programming Exercises

17.1 There is a ‘bug’ in the pedestrian crossing: if a pedestrian request button is pressed whilst the pedestrian lights are green or flashing green the button lights up ’WAIT’ but causes no sequencing. We believe that a button press on pedestrian green should do nothing and a button press on flashing should schedule a new sequencing-flashing green means pedestrians should not start crossing, they should only start on green. Implement this bug fix.

17.2 Undertake Direction 1 of the fifth round of development reworking the use of threads so as to get more accuracy to the switching on and off of the lights.

17.3 Undertake the development of a simulation of a right-hand-drive crossroads where the up traffic stream has a left filter.

Challenges

17.1 Investigate the subject of Discrete Event Simulation and do the initial design of a full simulation with animation of the vehicles in the pedestrian crossing simulation.