Objective:
To work with steering behaviors.

What to do:
Your task is to implement fatigue in the Steering Behaviors simulation. The idea is that there is a set velocity $v_t$ above which the agents will tire. A tired agent has a reduced maximum steering force that it can apply. Tired agents will therefore be slower to respond and to reach maximum velocity. Below $v_t$, an agent will recover its energy and hence its maximum steering force.

The goal is to achieve believable movement. This will require tinkering with various parameters, such as the rate of fatigue, the rate of recovery, the degree of slow-down, and the velocity where fatigue begins.

You should begin to see the same behavior seen in real flocks where the lead bird in the flock eventually tires and slows and is replaced by another.

What to turn in:
- Make a zip file containing your project folder (remove binaries in Debug folder, please) and upload to Course On-Line under Extra Credit.

Hints and notes:
- For your world, you can omit the "shark" agent. You should start with a small number of agents so you can see what is happening. If you select "Render Neighbors" in the menu, the agent you select will be a different color, so you can see it more directly.
- Most of the work in this assignment will not be with the SteeringBehavior class but with the Vehicle class. You will need to modify the information it stores (by including fatigue) and the update cycle so that the fatigue variable is maintained.