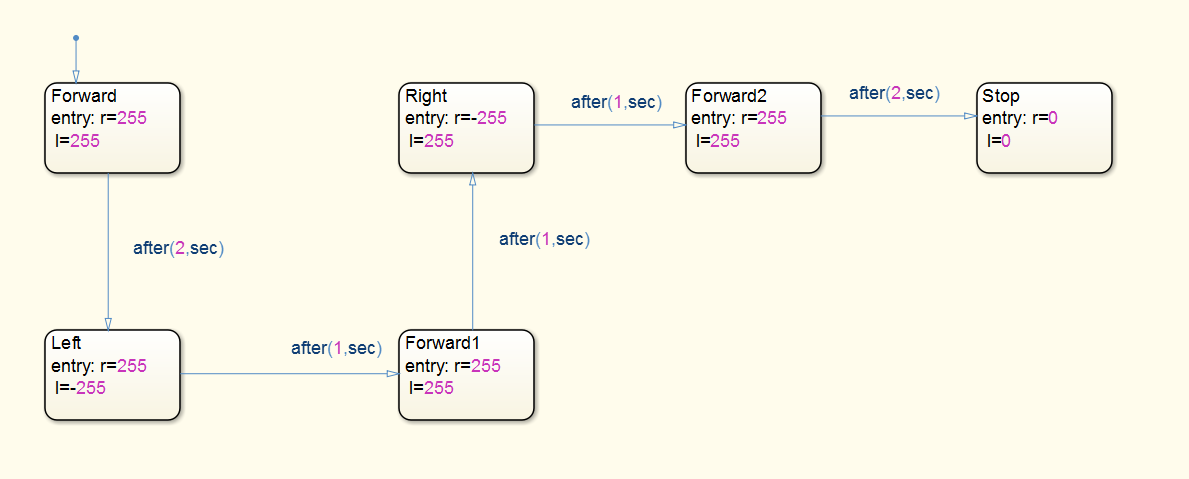
Goals: To practice adding additional outputs and inputs to Simulink charts. Specifically, by incorporating the RGB LED colors into the movement of the MiniQ robot.

Standards Covered: (f), (i), (j)

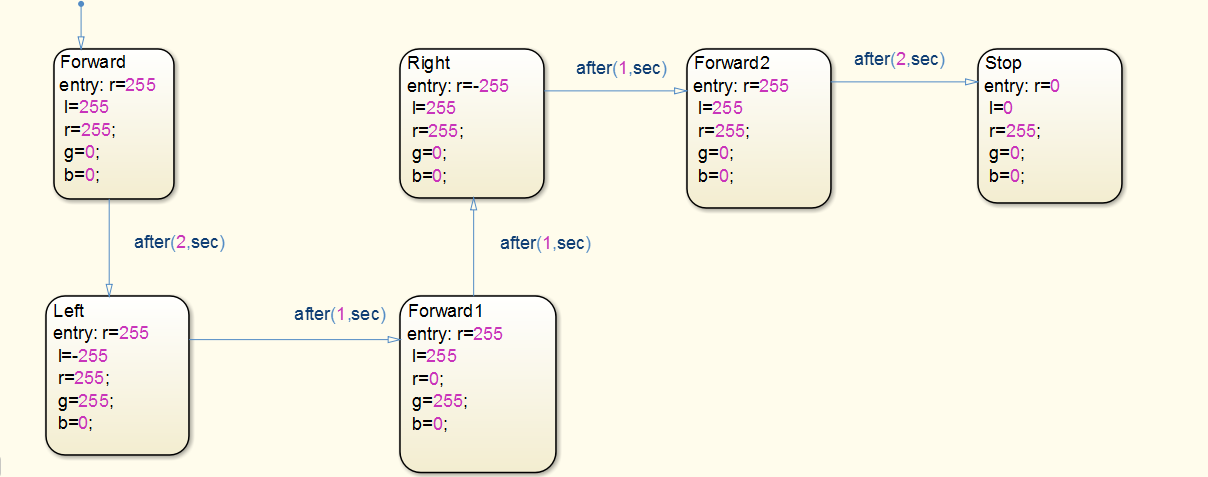
Sequence:

1. Expand the template SimulinkDeadReckoningWithCharts.slx:



1. So the robot outputs different colored lights on the robot according to the “after(1,sec)” time function. The Simulink chart above would have to be adjusted so it also outputs additional variables for the colors on the red, green and blue RGB LED. *(30 min)*

Reference: SimulinkDeadReckoningWithChartsColor.slx



1. Activity: Dead reckoning activities such as those done during lesson 1 should be set up. However, this time the robot needs to ride to an elevated position and then stop, signal “SOS” in Morse Code and then return back to a specified position. Simulink charts for this are likely to be much more complex and the course for this activity can be scaled up or down for the purposes of a class period. *(60+min)*

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