Video Game AI, Spring 2013
HW #6
Due May 23 at 12 midnight

This assignment is to be done individually. You can talk to other students to understand the provided code, and to get ideas, but all new code should be your own.

In this assignment you will implement tactical pathfinding behavior for a girl carrying a cup of coffee in the winter who wants to avoid having her coffee freeze. Moving near the snow forts means that kids throw snow and her, and her coffee gets cold. Going close to the heaters warms her coffee up. **Please read all instructions carefully to make sure you fully complete the assignment.**

1. Re-factor the InfluenceMap. Put the code for the influence map (currently in the OverlayView) into the provided .cpp file in its own class. The influence map should allow you to set and query influences.
    a. The influence map needs to handle the effect radii properly.
        i. Each effect should be cut-off at a fixed distance of 5.
        ii. You may want to adjust the code to propagate distances instead of influences.
        iii. You may want to adjust the code to propagate negative and positive influences separately.
    b. Initialize a single global influence map inside the duViewController.
        i. Pass this to the units for computing their damage updates.
        ii. Pass this to the OverlayView for drawing (identical to how the map is passed in).
2. Implement the GCost function within the MyMapEnvironment class (inside the KidUnit).
    a. Use the cost space defined by the influence map to find the least-cost path to the goal.

Turn your final code into your SVN repository.