Zach Forster

CS 335

Graph Coloring

This assignment was fairly short, but definitely took me more time than the last one. There wasn’t really much left to do after figuring out how to draw a connection between the N-Queens state and the Graph Coloring state. I actually ended up adding a method to the State interface called getLevel. This method simply returned the private nextNode variable (nextRow in N-Queens), and I used it in the comparator class that I wrote for the purpose of placing states in order into the priority queue. I also had to switch some of the conditional logic around in my framework methods in order to cut out immediately after pruning the first node in best-first search, although this was also simple. I did end up counting the very first node that I pruned in best-first search as an expansion, bringing my total number of expansions to 7 instead of 6 for the fully connected 3-node graph.

The way that we used different data structures to manipulate the way that we moved through our computational tree was incredibly interesting to me. I also thought that the way we simulated the behavior of these data structures using only a list was interesting.





