I decided to create a class to represent the grid because most functions needed to be able to access the state of the grid.

One possible way to represent the state of the grid was to use a 2d array and have each entry be 0 if it is dead and 1 if it is live. However, just using a 2d array would require copying of the array or creating a new array because the live cells in the next generation need to be determined before actually updating the grid, so that the neighbors calculation won’t be affected. Thus, instead of just have a 0 or 1 in each entry, I created a Cell class, which also keeps track of the number of live neighbors each cell has. This allows us to find the number of neighbors first without changing the state of the grid and then actually update the cells.