Instead of the tedious task of writing each input file we have made, using STL containers and algorithms, which produce the files each time the game is run.

Tower

The starting power of the towers are randomized in the range of [100,150] and the maximum number the tower can attack at each time step in the range of [1,30].

Enemy

We have randomized the number of each enemy type to be as follows:

Around 80% are fighters and around 20% are healers, and around of this 80% of the fighters throw fire and the other 20% throw ice.

The health of the enemies is in the range of [65,100]

The power of the enemies is in the range of [70,100]

The reloading time of enemies is in the range of [1,4]

The arrival time of the enemies is in the range [0,25] so in the step number 25 all enemies are drawn and engaged in the simulation

Simulation

We have randomized the the spawning regions of the enemies to make the game less repetitive and boring and not have regions we the same number of enemies in it.