

Mini-Project: Siege Weapon Simulation

Overview

The goal of this project is to practice basic Java programming by building a simple simulation of a battle between two siege weapons. The project will be built up from the work we already did in class.

What You Need To Do

Rename your class to SiegeWeapon (but see below). You will need to rename the file and the constructor as well.

Decide on one or more enhancements to the basic simulation we already coded. You will need to add new properties to the class and new arguments to the constructor, and you will also need to add any code that uses these enhancements. At a minimum, you should code once enhancement that involves adding at least one new property and using it in the code.

Here are some suggestions:

- Have both minimum and maximum range. (Easy)
- Add an accuracy property and use it in the FireShot() method. (Easy)
- Add “hit points” to the siege engine and implement some notion of damage inflicted. (Medium)
- Add a simple loop to the code so that the weapons keep firing until one is destroyed. (Hard)
- Change the simulation so that instead of siege weapons you are simulating some other activity. In this case the name of your class and its properties and methods will need to change to reflect what you are doing. (Medium to Hard)

There are lots of other things you could try. Talk to me if you have some other idea.

Nuts and Bolts

Your mini-project is due on Tues., Sept. 19th, at the end of class.

Please do your own work and try to think of something that not everyone else is doing.

The project is worth 10 points. A minimal project (one Easy feature) will be worth only 8 points, so you will need to do more to get a 10. If you implement substantial enhancements (Medium plus or Hard) you can get up to 1 point of extra credit (i.e., an A+).