| CRITERION | MARK |
|--|------------|
| Code execution / observed functionality. Mostly works, but during one game I received an IndexOutOfBoundsException (index -1) from JavaFX, which makes me suspect you have race conditions from failing to use Platform.runLater() when needed. | |
| 1. Appropriate division of responsibilities among threads/tasks. | 4/4 |
| 2. Appropriate use of a blocking queue and other thread communication mechanisms as needed. | 4/4 |
| 3. Appropriate use of a thread pool and other thread-creation logic. 34 is a suspiciously arbitrary number of threads. | 2/3 |
| Also, while I can see the logic behind starting a new 'robotThread', there is a risk that this sort of approach will introduce race conditions, because it's a two-step process of starting the task and (separately) supplying its data via a BlockingQueue. It would be more robust to do this via a method parameter in some way. | |
| 4. Appropriate use of threading mechanisms in general to prevent race conditions and deadlocks. | 2/3 |
| There is a race condition somewhere in your GUI handling code. | |
| Also, though it's a minor point in this case, I'd have launchMissile() throw InterruptedException, and give responsibility to the calling code for catching it. (In the general case you want InterruptedException to propagate as far as it can.) | |
| 5. Your code follows best practice in terms of readability and maintainability. | 3/3 |
| FYI, having a class called "Threading" is a bit of a red flag in terms of design structrure. It doesn't really say what the class's actual purpose is. | |
| 6. Your actual design is thoroughly explained. | 3/3 |
| 7. You convincingly identify a range of relevant issues that would need to be solved, in order for a multi-player version of the system to be created. | 4/5 |
| It is likely that you'll need separate threads on the clients to handle network communication; it's generally not wise to do this in the GUI thread. | |
| 8. You convincingly explain what architectural decisions could be made to solve the issues identified. | 2/5 |
| Making the application distributed doesn't in itself address make it cross-platform. | |
| Having the server control the information is sensible, but the clients need this information too at some level. Overall I'd just like to see a bit more depth on this. | |
| Total | 24 / 30 |