3. Specific requirements

* Project must be completed fully in Java
* Project must run well on machines capable of Java 7

3.1 External interface requirements

3.1.1 User interfaces

* Interface should be user friendly

3.1.2 Hardware interfaces

* Input should be based on US QWERTY standard keyboard
* Hardware is limited to computers that are able to completely run Java 7’s JVM
* Display or Resolution should be Full Screen to avoid issues with lower and higher end resolutions.
* Menus may include input via mouse for ease of use.

3.1.3 Software interfaces

* Code should be completed using Standard Java Libraries for which there exists an API.
* Teams on Graphics should create functions that will allow Team Backbone to fully implement all graphics options.
* Currently there are no constraints on software components, or data sharing. Simply follow standard Java programming.

3.1.4 Communications interfaces

* Java JVM

3.2 Functional requirements

3.2.1 Menu or “Pregame” Mode

* The function of this Menu is to provide the user an option to Start, and an Option to Quit. The other purpose is to give the user the ability to pause, or ease themselves into the game. This menu should show at game start, and when “ESC or Q” key is used.
* Score Board tallying up all points gained by the player throughout his “life”, this will also show high scores of other players(meaning that all scores should be saved with a name for the top 3 players)
  + this can kept by an algorithm that compares players high score and displays the top 3, and whenever a new player is added, it should be replaced accordingly.
* After some input such as a keystroke, should then revert/loop to initial Menu Mode which would then offer the player a choice to quit or start new game.
* How-to/Instructions, outlines the instructions to how the game works, and the objective of the game. What keystrokes to be used, and the point system.

3.2.2 Actual Game Mode

* This mode is simply the actual game.
* Bots/A.I the bots that players will shoot at using the keyboard.
* Graphics & Sound:

Based on what was provided by Professor Gross.

Bosses which include CUNY staff, and others provided by Professor Gross.

Weapons: Pens,Pencils etc… Provided by Professor Gross.

(Possibly final Boss President Donald J Trump).

Note: Most of these requirements were provided in class via Professor Gross, refer to him for more information.

3.3 Performance requirements

* Should run “smoothly” on any machine capable of installing and running Java 7 JVM.
* Should not consume unnecessary memory(hard drive, RAM).

3.4 Design constraints

* Game should be designed using standard programming practices
* Java Standards may be read here: <https://google.github.io/styleguide/javaguide.html>.

3.5 Software system attributes

* All code should be done on a machine currently running Java 7 JVM or better.