Quality Assurance Concept

Constructive Quality Management

Whenever a method or a class is being created, it should thoroughly be tested on its own before it is implemented into the larger network of code. If this is not possible as testing requires integration, it must be ensured that that integration can be reversed easily and fully.

Finally, before pushing the new feature, it should be thoroughly tested while implemented into the whole game as well has the game generally should be tested, even in part the new feature should seemingly not be affecting anything.
All error must be fixed before pushing a commit.

If a bug is found it should if possible be fixed immediately. If that is not possible the person who found the bug should immediately report it to the team with the following information:

- ➢ What happened?
- ➢ What error / logs did you produce?
- ➢ What did you do?
- ➢ What version was the bug found in?
- ➢ Can the bug be replicated?

- Javadoc
  At the beginning of each **class** there should be a Javadoc explaining the general functionality of the Class.

  At the beginning of each **method** there should be a Javadoc explaining the general functionality of the method as well as explain how / in what circumstances this method should be called.
  Within the method itself, sections of the method should be further documented if its complexity warrants it.

  Each Javadoc should contain the following info in the following order:
    - o Author
    - o Explanation of the parameters
    - o Explanation of the functionality

Analytical Quality Management

- The team is to double check others code whenever working on or with that code to ensure quality, functionality, and completeness.
- The team is to regularly sit together to perform an informal review to walk all the team members through important code, particularly after a big update or ahead of a big work effort.
- The team is to preform Black-Box testing regularly, particularly while editing some method or class.
- The team is to preform White-Box testing regularly, particularly while debugging or learning another team member's code.

Team culture

- In meetings, tasks are assigned to a team member to supervise. This means that that team member will make sure the task will be completed on time, according to specifications and with sufficient quality.
  This assigning of reasonability should be documented in a Responsibility Assignment Matrix or a list.
- Each team member is to ask help from the author when working on their method or class to ensure that nothing will break, or no important lines deleted.
- The team is to meet regularly and particularly before a deadline to discuss the plan going forward any current issues and questions.
- Each team member is to ask a question repeatedly until they have fully understood the issue. If the other team members can't explain it either, they have probably also not understood the problem and they are to ask someone else or work to understand it.
- The team is to regularly check the code, even if they are not working on it, to keep up with any updates and check the others work for quality.