

## **Coding Standards**

Coding standards are a set of perspective rules that pertain to how code is to be written. The coding standard is concerned in the following areas:

- File organization: how the files are distributed among folders which enforce loose coupling.
- Indentation: how the code is indented in order to maximize readability.
- Comments: how the code files are commented for better understanding of parts.
- Declaration: how the variables, methods, etc. has been declared for understanding.
- Naming: how the names of entities have been declared which conveys the meaning or functionality or type of the entity.

These standards may vary from company to company and also from language to language, e.g. Java has some conventions which may not be similar to the conventions that of C. These standards are also enforced by many certification organizations such as "ISO", "CERT", "MISRA", etc. Some certification organizations may specialize in one particular language or many. Following a standard convention has many advantages which are mentioned below:

1. Maximize productivity: by making code more readable and understandable.
2. Maintenance: code can be easily maintained.
3. Cost minimizing: maintaining standards means new programmer does not have to spend time in understanding the functionalities.
4. Convenience: code review becomes much easier.
5. Integration: Code can be easily integrated.

In our project we have used the following conventions:

- Separation by folder and separation by concern: Our code has been separationed as per functionality of the code inside the file by folder. Which makes the game more scalable in terms of upgradation and ease of access.
- Naming conventions
  - Folders: All the folders use lower camel case.
  - Classes: All class names starts with upper camel case.
  - Methods: All method names starts with lower camel case.
  - Global / Static Variables: All static / global variables use all uppercase.
  - Enums: static enums use all uppercase while command line argument enums use all lowercase.
- Comments: All comments follow JavaDoc type commenting standard.
- Commented out code: all commented out codes have been removed prior to submission.