



Code Review Reflection

Names of the Reviewer: **Davis Allan**

Name of the developer being reviewed: **Mike Lasby**

Note: Please see Davis' review comments below.

Reflection:

Based on Davis' comments, I agree that the reviewed code should be refactored to eliminate several systematic code smells. For example, long, multi-responsibility function need to be refactored into clearly atomized functions. By breaking up these functions, my code will adhere to the single responsibility principal and be more maintainable should changes be required to the program.

Davis also uses a different IDE than me which helped identify some issues with my Javadoc strings where I had been using an extra colon between the meta tag and content (ie., @author:). These Javadoc strings should be fixed to remove the colon since the Javadoc program generates a hyphen between the meta tag and content automatically.

In general, this review process improved my understanding of SOLID principals and my future assignments will be tailored to meet the requirements of SOLID principals. I also have a better understanding of how Javadocs are generated and will be able to modify those to match what the Javadoc generation program expects as input.

Category	Comments /questions about of the reviewing group about the design documents	Responses by the developer (if any)
Spelling Mistakes	Board.java <ul style="list-style-type: none"> Line 92 – @return tag has a “:” that is not required. IDE flags it as “wrong tag” Line 179 – incorrect spelling of hyphens, was spelled as “hypens” 	<ul style="list-style-type: none"> Agreed and noted. Agreed and noted.
Naming issues	Variables and methods all have clear names and follow conventions, nice work!	
SOLID Principle Violations	Board.java <ul style="list-style-type: none"> checkWinner() is very long with quite similar loops, should look into refactoring this into smaller methods to ensure following the Single Responsibility principle. BlockingPlayer.java <ul style="list-style-type: none"> testForBlocking() is very long, consider factoring out the different loops into individual methods and this will also help get rid of duplicated code fragments SmartPlayer.java <ul style="list-style-type: none"> testForWinner() – same issue as above in BlockingPlayer.java Game.java <ul style="list-style-type: none"> create_player() is also very long, and has several responsibilities. Could investigate factoring out all the prompts/ input handling into various smaller methods, such as one method to get user input/handle errors, one to display menu options, etc. to ensure following Single Responsibility principle 	<ul style="list-style-type: none"> I agree. This should be split up. I agree. This should be split up. I agree. This should be split up. Agreed!

Lack of documentation	Board.java <ul style="list-style-type: none"> Line 127-165 – no comments inside the method explaining what the loops are doing Line 6 - @author tag has a “:” that is not required. IDE flags it as “wrong tag” Line 8 - @version tag has a “:” that is not required. IDE flags it as “wrong tag” Game.java <ul style="list-style-type: none"> IDE is flagging the class Javadoc comment as being “dangling”. Meaning it is not located directly above the class declaration Line 28 – throws tag description missing Line 73 – throws tag description missing SmartPlayer.java: <ul style="list-style-type: none"> @author, @since, and @version all have “:” that are not required. IDE flags it as “wrong tag” 	Noted and agree with all.
Clean Code	BlockingPlayer.java <ul style="list-style-type: none"> Line 34 – unnecessary return since it is the last line in a void method 	Noted.
Security	No issues	
Performance	No issues	
General	HumanPlayer.java: <ul style="list-style-type: none"> Line 36 – redundant call to printf, should just call print() since no string formatting is occurring 	Agreed! Thanks Davis!

Review aided by the following checklist: <https://dzone.com/articles/java-code-review-checklist>