Sprint 2 Design Inspection, Code Inspection, and Unit Testing - Team 5
David Wood, Alexander Ferrard, Ayush Patel, Eric Vondrak, Sanjit Reddy Sama

Design Defect Log

Product	Battletracks Design Inspection		
Date	10/12/2018		
Author	Battletracks Development Team		
Moderators	David Wood		
Inspectors	Alexander Ferrard, Ayush Patel, Eric Vondrak		
Recorder	Sanjit Reddy Sama		
Defect #	Description	Severity	How Corrected
1	"My Board" and "Enemy Board" text were swapped on the game page.	2	Switched the loading of maps so they loaded in the proper place.
2	Your Move/Enemy Move notification does not update when player who needs to act changes.	3	Corrected the if statement in the front-end.
3	Players were able to attack when it was not their turn, allowing for multiple attacks in a row.	2	Disabled the Fire button when it is not the player's turn.
4	Trying to enter a multiplayer game via the host button sends the player into a hard single player game.	1	Changed the link in the multiplayer button so the Server loads the right game correctly.
5	If a player enters a key that matches that	3	Server now deletes

	of a previously forfeited AI game, the game is still running and they take over for the player that quit.		single player games that a player leaves before winning or losing.
6	AI functions module did not contain the necessary class variables and functions to properly interface with the Game Controller module	2	Add necessary variables and functions
7	The placing ships phase of single player was going on at the same time of attacking when it should come before.	2	Added necessary booleans and if-else logic

Code Defect Log

Product	Battletracks Code Inspection		
Date	10/12/2018		
Author	Battletracks Development Team		
Moderators	David Wood		
Inspectors	Alexander Ferrard, Ayush Patel, Eric Vondrak		
Recorder	Sanjit Reddy Sama		
Defect #	Description	Severity	How Corrected
1	User input invalid coordinates and attempted to attack, resulting in an SQL error.	2	If input is invalid, returned the user to the same page with an error saying that their input was invalid.
2	User can attack the same location more than once.	3	If attack targets previously targeted location, returned the user to the same page with an error saying that the spot was already attacked.
3	Attacking always caused an 'invalid input' error so progress couldn't be made.	1	Changed the if statement to not see

			all possible inputs as invalid.
4	Clicking on the board sends you back to the home screen, forcing the player to forfeit.	2	Removed the href from the image. Image is no longer clickable.
5	Reloading the page allowed the player to attack the same spot they attacked previously, causing the "already attacked" error to appear and making it so they could attack again without waiting for their opponent's turn.	3	Added reload protection so the page the player returns to is the same one they tried to reload.
6	Automatic build failed due to an improper function declaration because of a type on in the declaration	3	Fix typo: "addPlayerWins" changed to "addPlayerMPWins"
7	Layering of the board game and table cells were off so that hits and misses were not showing up on the game board, because the board game was covering the table cells.	2	Changed the table to be on top of the game board background and made it transparent.
8	When writing a unit test to test the hardAI, the test case did not run because normal syntax could not be used to compare array objects	3	Used "toEqual" method to compare arrays instead of "expect...toBe"

Testing Defect Log

Product	Battletracks Unit Test		
Date	10/12/18		
Author	David Wood		
Defect #	Description	Severity	How Corrected
1	Input: coordinates that hardAI will supposedly pick Expected output: (4, 6) Actual output: (4, 0)	2	The logic for the hardAI was flawed because it checking in areas of unhit ships

			instead of hit ships. A helper method was rewritten to fix this defect.

Product	Battletracks Unit Test		
Date	10/12/18		
Author	Ayush Patel		
Defect #	Description	Severity	How Corrected
1	The unit test that was testing the hardAI's ability to track and target segments of ships that it has already hit had a flaw. The coordinates that we entered as the expected value were actually wrong and it was causing the test to fail despite the hardAI actually producing the correct output Input: test map for the hardAI to use to find its next target location and the location expected Expected output as inputted: (4,6) Value that should actually be expected (5,7) hardAI output: (5,7)	2	Fixed the expected value of the unit test to check for the correct location output from the hardAI
2	The test case with the corrected expected value was still claiming that the output was wrong even though it was right because the comparison function used to compare the arrays was incapable of properly comparing arrays Input: test map and expected value Expected output: pass Actual output: test failed. Expected [5, 7] to be [5, 7]	2	Supplied a new comparison function that was able to properly compare arrays

Product	Battletracks Unit Test

Date	10/12/18		
Author	Alexander Ferrard		
Defect #	Description	Severity	How Corrected
1	Test case checking the connection function to add to a player's hit count was missing a parameter that the function needed and was causing the test to crash Expected input: (playerName, callbackFunction()); Actual input:(callbackFunction());	3	Test case was rewritten to include the other parameter that the function that it was testing needed