Use Case

“Play Game”

User Input	System Response	Variation
1). User enters to play the game	System does some preprocessing: 2) System generates a **NxM** field in front of the fortress 3) System randomly places **T** number of tanks (Tetromino) on the grid	
	System displays game settings: 4) System shows structural strength of fortress 5) System shows the battle-field map 6) System shows damage taken from previous turn	
	7) System speaks prompt: “Press any key to begin your turn”	
8). User presses a key	9) System speaks prompt: “Type in a location in the field to fire”	
10). User types a location to fire his gun	11) System maps user input to a field location	**Input Validation:** 11.1 User types an invalid not within the range of the board’s row and/or column 11.2. System tells user “location out of bounds” error and back to step 8. **or** 11.1 User types an empty location 11.2 System displays “Please enter a location” error and back to step 8.

	12) System has two responses: System tells user “HIT” if a tank is hit System marks the location with “X” System reduces the tanks damage **or** System tells user “MISS” if missed System marks the location with “.”	**<u>Player Wins:</u>** 12.1 There are no more undamaged tank cells left in the field 12.2 System tells user “You Won” 12.3 System exits the game.
	13) System speaks prompt: “Press any key to end turn”	
14. User presses a key	15) System shoots the fortress with all its tanks with X amount of damage	
	16) System reduces structural strength by X and tells user the damage done	**Player Loses:** 16.1 User loses all its structural strength, player loses 16.2 System tells user he lost 16.3 System shows system perspective of gameboard without fog 16.4 system shows user perspective of board with fog and markers to show where user missed 16.5 System exits the game
	17) back to step 4	