

Class Descriptions

1. **ApplicationController** – Class which displays welcome menu to the player and starts the game, prompting the player for coordinate inputs which are then used in GameBoard. ApplicationController has a Fortress and GameBoard object. It uses the InputValidity class to ensure correct coordinate input, otherwise prompts an error and re-asks for input. The game ends when all tanks are destroyed, or when the fortress's health reaches 0.
2. **GameBoard** – Class which displays the grid board (10 x 10 grid of "~"s) for the game, containing hidden coordinates where the tanks are placed. It takes user input to check if a tank is placed on those coordinates. GameBoard has a TankPlacement object to randomly generate different cell coordinates for each tank, and has a total of five Tank objects which use these assigned coordinates. After a player enters a coordinate, the targeted cell changes to a "." for a miss or unveils an "X" if a tank cell is hit.
3. **Tank** – Class for the tank object of the game. Each tank will have four cell coordinates assigned by GameBoard (generated by TankPlacement), which allows its health and firepower to be modified after player "hits" the tank by entering one of the tank's cell coordinate. Tank's firepower against the fortress remains constant unless being hit upon, and decreases along with its health. After all four cells have been hit, the tank is "destroyed" and does not fire against the fortress.