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| Refactoring Documentation for Project “BattleField-1” Team “Strontium”   1. Redesigned the project structure:    * Renamed the project to **BattleField**.    * Renamed the class **Methods** to **GameEngine**.    * Renamed the default namespace and assembly name to **BattleField**    * Created class **Board** that holds the method for creating the game board with all mines and empty cells.    * Moved method **ReadInput()** from the **Main()** method to class **GameEngine.** Renamed **ReadInput()** to **ReadBoardSize()**    * Created class **ExplosionHandler** that holds the methods for detecting and handling with explosions of mines.    * Created method **HitMine** in class **ExplosionHandler** which handles the hit mine coordinaties and detects hit mine size.    * Created a Unit testing project. Created tests to test all the public interfaces of the **GameEngine** class. **GameEngine** class code coverage is 96,6%.    * Redesigned the **Board** class, now **gameBoard** representation stored as string array. Created a **ToString** method to convert the **gameBoard** to its previous view.    * Created **GenerateGameBoard** method for initial creation of the **gameBoard** in the **Board** constructor.    * Created an **IConsole** interface to represent an input/output system.    * Created a class **ConsoleUI** as abstraction for Console. Needed for mocking purposes in unit testing. 2. Reformatted the source code:    * Run StyleCop and reformatted the source code according to the recommendations. There were 77 recommendations that were fixed.    * Run Resherper toll to reformat and clean the code.    * Refactored all **HitMineOfSizeXXX** methods, according to the new logic for building the game board.    * Refactored method **PlayerTurn**: joined repeating parts of the code into one. Removed code that is not relevant to the logic and has unclear meaning.    * Moved initialization of **detonatedMinesCounter** from **Main** method into **GameEngine**. Changed the **detonatedMinesCounter** variable into static field for the class.    * Moved **AddBombs** method from **GameEngine** to **Board** class.    * Extracted **Board** creation as **GenerateGameBoard** method.    * Fixed all methods and tests to work with better representation of the **gameBoard** 3. Renamed variables:    * In class **Methods**: **workField** 🡪 **gameBoard**.    * In class **ExplosionHandler**: **hitCoordinate** 🡪 **mineSize**    * In method **Main** and class **GameEngine**: **countPlayed** 🡪 **detonatedMinesCounter**    * In method **PlayerTurn** (class **GameEngine)**: **coordinates** 🡪 **mineCoordinates** 4. Renamed methods  * In class **Methods**: **HitOne, HitTwo, HitThree, HitFour, HitFive** 🡪 **HitMineOfSizeOne, HitMineOfSizeTwo, etc.** * In class **GameEngine** renamed method **PlayerTurn** to **PlayGame**. |