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| Sample Refactoring Documentation for Project “Baloons-Pop-5” Team "Manganese"   1. **Redesigned the project structure:**  * Renamed the project to **BalloonsPop.** * Introduced class **BalloonsPopGame**. * Renamed class **baloni** to **Playground**. * Renamed class **klasacia** to **TopScoresChart** * Renamed class **StringExtensions** to **TopScoresChartEntry** * Introduced class **RandomGenerator** and moved all related functionality in it. * Introduced class **GameManager** and moved all related functionality in it. * Introduced class **ConsoleInterface** and moved all related functionality in it. * Introduced class **ConsoleRenderer** and moved all related functionality in it. * Extracted each class in a separate file with a good name:  **BalloonsPopGame.cs, ConsoleInterface.cs, ConsoleRenderer.cs, GameManager.cs, Playground.cs, RandomGenerator.cs, TopScoresChart.cs, TopScoresChartEntry.cs .**  1. **Reformatted the source code:**    * Removed all unneeded empty lines.    * Inserted empty lines between the methods.    * Formatted the curly braces { and } according to the best practices for the C# language.    * Put { and } after all conditionals and loops (when missing).    * Character casing: variables and fields made camelCase types and methods made PascalCase. 2. **Renamed Methods (and refactored ):**    * gen -> GeneratePlayground    * change -> IsPositionEmpty    * searchedTarget -> searchedColor    * checkLeft -> CheckLeft    * doit -> ReorderPlayground    * checkRight -> CheckRight    * checkUp -> CheckUp    * checkDown -> CheckDown    * sortAndPrintChartFive -> **SortScores** and **DrawTopScoresChart** 3. **Extracted methods:**    * GenerateRandomGame() from the method Main().    * PopAtPosition    * IsOnPlayground    * DrowPlayground    * DrawRowContent    * DrawFirstRow    * DrawHorizontalBorder 4. **Renamed variables:**    * i -> row    * j -> col    * columnLenght -> rows    * Stack<byte> stek -> byte[] reorderedColumn    * searchedItem -> searchedColor    * matrix -> Playground    * row -> currentRow    * column -> currentCol 5. **Introduced constants:**    * PLAYGROUND\_ROWS = 5;    * PLAYGROUND\_COLUMNS = 10;    * BALLOON\_COLORS\_COUNT = 4;    * TOP\_SCORES\_DEFAULT\_CAPACITY = 5; 6. **try catch** -> replaced with-> **new method IsOnPlayground** 7. **.GetLongLength -> .GetLength** 8. **Bug fixed inTopScores logic.** 9. **Test Methods added** 10. Source code repository **GitHub:** [**https://github.com/MarioStoilov/Team-manganese.git**](https://github.com/MarioStoilov/Team-manganese.git) |