**Структура на проекта: класове, енумерации, конструктори и методи:**

1. **class Board**
   1. public Board(int rows, int columns, int minesCount) – 22 реда (6. София)
   2. public enum Status { SteppedOnAMine, AlreadyOpened, SuccessfullyOpened, AllFieldsAreOpened } – 4 реда (6. София)
   3. private int GenerateRandomNumber(int minValue, int maxValue) – 5 реда (2. Йордан)
   4. private int ScanSurroundingFields(int row, int column) – 57 реда (2. Йордан)
   5. private void SetMines() – 16 реда (2. Йордан)
   6. private bool CheckIfWin() – 21 реда (6. София)
   7. public void PrintGameBoard() – 47 реда (5. Добромир)
   8. public Status OpenField(int row, int column) -29 реда (5. Добромир)
   9. public void PrintAllFields() – 51 реда **(3. Жико)**
   10. public int CountOpenedFields() – 16 реда **(3. Жико)**
2. **class Field**
   1. public Field() – 5 реда (6. София)
   2. public enum FieldStatus { Closed, Opened, IsAMine } – 4 реда (6. София)
3. **class Game**
   1. private static void InitializeGameBoard() – 4 реда (4. Ладислав)
   2. private static void InitializeTopPlayers() – 5 реда (4. Ладислав)
   3. private static bool CheckHighScores(int score) – 17 реда (4. Ладислав)
   4. private static void topadd(ref Player player) – 14 реда (4. Ладислав)
   5. private static void top() – 8 реда (4. Ладислав)
   6. static void Main(string[] args) – 4 реда (4. Ладислав)
   7. private static void Menu() – 112 реда (1. Иржи)
4. **class Player : IComparable**
   1. public Player(string name, int score) – 5 реда (6. София)
   2. public int CompareTo(object obj) – 10 реда (6. София)
   3. public override string ToString() – 6 реда (6. София)

**Общо 462 реда код в методи в методи и конструктори.**

# Documentation for Project “ Minesweeper-5”

Текста в черно е това което е извършено до момента.

Текста в червено е изваден от заданието

1. Renamed the solution to Minesweeper-5.

## Redesigned the project structure:

* Renamed the project to Minesweeper.
* Renamed the main class Program to GameFifteen.
* Extracted each class in a separate file with a good name: GameFifteen.cs, Board.cs, Point.cs.
* …

## Reformatted the source code:

* Removed all unneeded empty lines, e.g. in the method PrintGameBoard()
* Inserted empty lines between the methods.
* Split the lines containing several statements into several simple lines, e.g.:

public enum FieldStatus { Closed, Opened, IsAMine }

to:

public enum FieldStatus

{

Closed, Opened, IsAMine

}

* 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; constants, types and methods made PascalCase.
* Formatted all other elements of the source code according to the best practices introduced in the course “High-Quality Programming Code”.
* Remove unused directives
* Put all using directives inside of the namespace
* Put constructors after fields
* Put private methods after all public methods
* Add 'this.' prefix to indicate that the items are members of the class
* Add access modifiers of all classes and methods
* …

## Renamed variables:

* In class Fifteen: number
* numberOfMoves.
* In Main(string[] args): g
* gameFifteen.

## Introduced constants:

* GAME\_BOARD\_SIZE = 4
* SCORE\_BOARD\_SIZE = 5.

## Extracted the method GenerateRandomGame() from the method Main().

## Introduced class ScoreBoard and moved all related functionality in it.

## Moved method GenerateRandomNumber(int start, int end) to separate class RandomUtils.

## …

## Change if statements in method ScanSurroundingFields () with two nested for cycles

## Extracted the method IsMineInPosition () from the method ScanSurroundingFields ().