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

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

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

# Documentation for Project “ Minesweeper-5”

## Redesigned the project structure:

* Extract current row and column from **InitializeGameBoard**() method and make them class private variables and initialize them.
* **New** method **Engine** - an engine for the Game.
* **New** method **CheckBoardStatus** - extract part of the code from method Menu.
* Create a **new Menu** of the Game.
* Use ‘switch’ instead of ‘if-else’ conditional statements.

## Reformatted the source code:

Method’ **Menu’**:

* Remove unnecessary comments and empty lines.
* Add comments and empty lines where it is necessary.
* Add comments to the methods.
* Character casing:

= variables made camelCase;

= constants made UPPER\_CASE.

* Amend some messages’ text.
* Add the final ‘else’ option to an ‘if-else’ conditional statement.
* Cleaning up a repeating code.
* **Temporary** extract a repeated code in a new method **AddIfTopPlayer**.

## Renamed variables:

Method ‘**Menu’**:

- Variables made camelCase:

-> ‘**str’** renamed to ‘**gameState’**

-> ‘**name’** renamed to ‘**playerName’**

-> ‘**score’** renamed to ‘**playerScore’**

-> ‘**choosenRow’** renamed to ‘**chosenRow’**

-> ‘**status’** renamed to ‘**boardStatus’** ??? -> тук нещата може би ще е добре да се разлят на **field status** и **board status**, защото в момента са смесени...

- Constants made UPPER\_CASE:

-> **MaxRows** renamed to **MAX\_ROWS**

-> **MaxColumns** renamed to **MAX\_COLUMN**

-> **MaxMines** renamed to **MAX\_MINES**

-> **MaxTopPlayers** renamed to **MAX\_TOP\_PLAYERS**

## Introduced constants:

## Other amendments: