* Project separated to two projects – class library KingSuvival.Common and console application KingSuvival.UI. Only the main method stays in the KingSuvival.UI project and all other methods go to KingSuvival.Common. The methods are separated in classes to follow the OOP design.
* Structure RC renamed to MatrixCoordinates structure, which stays internal for the KingSuvival.Common library to protect it. Public fields “r” and “c” renamed to “row” and “column”, made private and encapsulated with public properties “Row” and “Column”. It is used in the Pawn class which represents the pawns A, B, C, D and King. The class have public properties for name of the pawn, x-coordinate and y-coordinate of the pawn it represents.
* Methods “PE4AT\_DASKA” and “find” moved to class Board and refactored as follows:
  + Introduced the constants “HorizontalBorderSymbol”, “VerticalBorderSymbol”, “BlackCellSymbol”, “WhiteCellSymbol”, “WhiteSpaceSymbol” holding the needed symbols for the image of the board
  + Introduced private fields “image”, “boardRows” and “boardColumns”
  + Introduced properties “BoardRows” and “BoardColumns” which hold the size of the board
  + Method “PE4AT\_DASKA” renamed to “GetImage” made testable (now it returns a string) and separated to small private methods which get the image of the board at the moment. The private methods are: “AppendRowsLine”, “AppendBoard”, “AppendBorder”. They use the constants described above implement the logic to construct the image of the board.
* Reformatted the source code
  + In class GameManager: method proverka()
  + Split the lines containing several statements into several simple lines
  + Formatted the curly braces **{** and **}** according to the best practices for the C# language.

|  |
| --- |
| if (notOverlapedRow == overlap1.Row && notOverlapedColumn == overlap1.Column) return true;  else if (notOverlapedRow == overlap2.Row && notOverlapedColumn == overlap2.Column) return true;  else if (notOverlapedRow == overlap3.Row && notOverlapedColumn == overlap3.Column) return true;  else if (notOverlapedRow == overlap4.Row && notOverlapedColumn == overlap4.Column) return true;  else  return false; |
| ↓ |
| if (notOverlapedRow == overlap1.Row && notOverlapedColumn == overlap1.Column)  {  return true;  }  else if (notOverlapedRow == overlap2.Row && notOverlapedColumn == overlap2.Column  {  return true;  }  else if (notOverlapedRow == overlap3.Row && notOverlapedColumn == overlap3.Column)  {  return true;  }  else if (notOverlapedRow == overlap4.Row && notOverlapedColumn == overlap4.Column)  {  return true;  }  else  {  return false;  } |

* Renamed method
  + In class GameManager
    - method proverka() → method IsAvailableNextPosition()
* Reverse logic
  + in method IsAvailableNextPosition() – return **true** when next position is available