# Refactoring Documentation for project “Balloon Pops” Game v.5

# Team “TIAMAT”

1. Redesigned the project structure
   1. Renamed the namespace to BalloonPopsGame
   2. Renamed the solution to BalloonPopsGame
   3. Class klasacia renamed to RankList. Change in the implementation of class RankList
   4. Class StringExtensions deleted
   5. Class baloni renamed to Balloons
2. Renamed variables
   1. temp => userInput
   2. matrixToModify => matrix in the change method
   3. rowAtm and colAtm => row, col in the change method
   4. klasirane => rankList (in the static method Print)
   5. Skilled => skilled (in the static method SignIfSkilled)
   6. worstMovesChartPostion => worstMovesRankPosition (in the static method SignIfSkilled
   7. Method change => IsBalloonPopped
   8. Method doit =>NormalizeBalloonField
3. Introduced constants

а. MaximumNumberOfTopResults in class RankList

1. Introduced classes
   1. Class BalloonsField extracted
   2. Class BalloonsPopper extracted
2. Extracted methods
   1. DrawMatrix(byte[,] matrix)
   2. PopBalloons(byte[,] matrix, int row, int col)
   3. GameOver(string[,] topFive, ref byte[,] matrix, ref int userMoves)
   4. IsValidInput(string userInput)
   5. IsWinner(byte[,] matrix)
   6. indexer for BalloonsField implemented
   7. DrawMatrix renamed to Draw()
3. Moved methods
   1. Method gen renamed to GenerateRandomField and moved to class BalloonsField
   2. Method signIfSkilled renamed to SignIfSkilled and moved to class RankList.
   3. Method sortAndPrintChartFive renamed to Print and moved to class RankList.
   4. DrawMatrix moved to class BalloonsField
   5. GenerateRandomField moved to class BalloonsField
   6. IsWinner moved to class BalloonsField
   7. NormalizeBalloonField moved to class BalloonsFields
4. Methods Optimization
   1. CheckUp, CheckDown, CheckLeft & CheckRight from class BalloonPopper => removed redundant return statements
   2. Draw from class BalloonField => changed Console.Write/Line with StringBuilder