TRAILHEAD

TECHNOLOGY PARTNERS

.NET and C# Training

Session 6

Overall Agenda

Session 1 – 6:	Basic and Advanced C# and VS
Session 7:	Classes available in .NET BCL
Session 8:	Data Access Basics (ADO.NET)
Session 9 - 10:	C# Advanced concepts
Session 11 – 12:	Data Access with Entity Framework 6
Session 13 – 14:	Version Control with TFVC and Git
Session 15 – 16:	ASP.NET (RESTful) Web APIS

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Today's Agenda

1. Review Assignment 5 (45 min)
2. Remaining C# and VS topics (3 hr)
3. Assignment 6 (15 min)

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Review Assignment 5

Assignment 5

- Demos

https://github.com/jonathantower/learning-dotnet

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Advanced Visual Studio

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Demo

Visual Studio Panes: Documents, Solution Explorer, Toolbox, Properties, Output, Object Browser

Demo

Bookmarks, Breakpoints and Conditional Breakpoints, Stack Trace, Immediate, Watch, dotnet cli

Advanced C#

Demo

Partial Classes

Demo

Extension Methods

Demo

Async / Await

Demo

Casting vs “As”

Demo

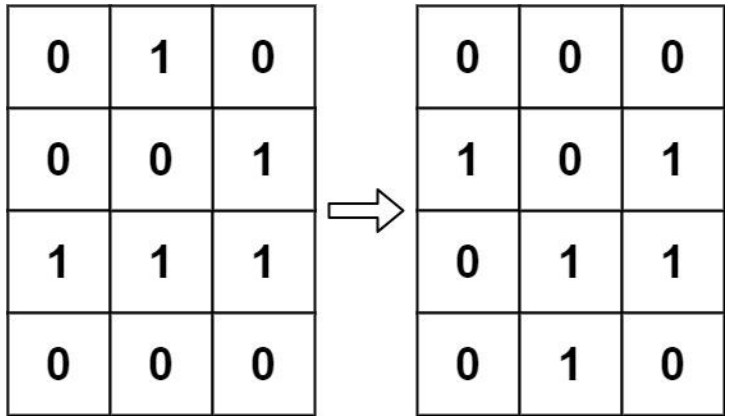
Multi-dimensional arrays

Assignment 6

- Implement the famous “Conway’s game of life” as a C# console application
- Choose a board size 80x25 or smaller
- Rules:
  1. Any live cell with fewer than two live neighbors dies as if caused by under-population.
  2. Any live cell with two or three live neighbors lives on to the next generation.
  3. Any live cell with more than three live neighbors dies, as if by over-population.
  4. Any dead cell with exactly three live neighbors becomes a live cell, as if by reproduction.

Challenge: Allow different pre-defined starting condition from a file (or random)

Example



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