

The Sudoku Solver Initial Write-Up

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1 History

In my continued pursuit of concurrency understanding, I continue to develop applications to leverage the process. I checked on programming sites on the web that concurrency would be required. A Sudoku Solver was suggested as one such application.

2 Abstract

A Sudoku Solver Application is an intriguing problem. It is an application that I have always wanted to make. There are two types of solutions that can be approached: the “Brute-Force” and the “Deductive Reasoning Type Algorithm”.

3 Concept

Create a Sudoku Solver Application. That uses a “Brute-Force” Algorithm to find a solution to the Puzzle. The puzzle is set either with direct User input or via a text file. The User should be able to input the puzzle directly via some type of User entry. If the User chooses to input the puzzle via a text field, the application needs to be able to put the values in the correct spots. When reading in a text file, any number less than 1 is to be considered an “open spot”, and shown as “empty”, or no value in the Sudoku—this would be a square that is solved. The User shall have the ability to clear the puzzle (same initial values, clear out the solution squares). The User shall have the ability to start a new game—a new puzzle with different initial values in different locations in the Puzzle. If a solution is not attainable, the Application shall indicate that to the User.

4 Intent

To create a Sudoku Solver as a way of practicing different “Brute Force” Algorithms and re-familiarizing recursion via the Sudoku “Engine”—different solution

Engines for different “Brute Force Algorithms”.

5 Stakeholder & Interests

Sudoku Players who want to see a solution.