

The Sudoku Project

WEEK 1: 24/07/2021 to 31/07/2021

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Agenda

- Brief Overview
- Current Status
- Toolchain
- Difficulties
- Learnings

The goal of this project is to investigate a variety of algorithms (backtracking, brute force, stochastic search, depth first search) that are capable of solving standard Sudoku puzzles, of ranging difficulties, in order to learn more about Sudoku solving techniques.

We also wanted to create the sudoku solver using OpenCV that will read a puzzle from an image and solve it.

Current Status

- Researched about different types of algorithm that can be used and how we can proceed with the project.
- Used the backtracking algorithm to solve any type of sudoku grid.
- Generated solved sudokus using backtracking algorithm

- Languages: Python, Haskell, Elixir, C++, Java
- Open CV

- The backtracking algorithm took some time to implement because we had few challenges implementing the recursive function.

- learning about the backtracking Algorithm - Generating and Solving a Sudoku in Python
- Collaboration and understanding git commands, discovered about VSCode live share