

A decorative border at the top of the slide consisting of a grid of squares. Some squares are light gray, while others are white, creating a pattern that resembles a portion of a Sudoku grid.

Sudoku

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A decorative border at the bottom of the slide, identical to the one at the top, featuring a grid of light gray and white squares.

What is Sudoku?

Sudoku is a grid based puzzle game involving a 9x9 square. Players place the numbers 1-9 so that each number only appears once in each column, row, and 3x3 square.

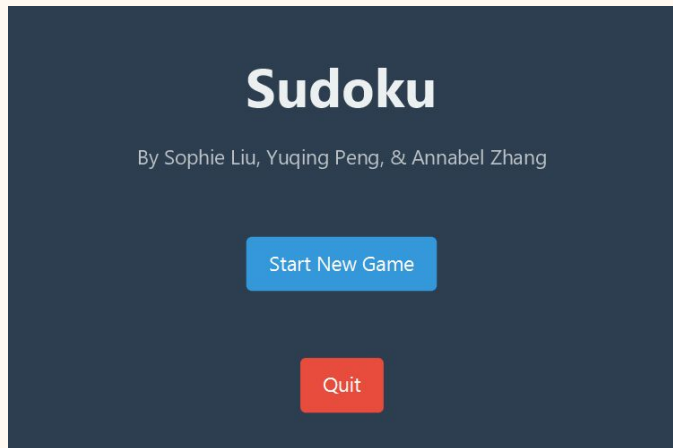
1								3
		7	2	6		4	8	
4			9	3	5			6
	3		4	8		2		
	4	1	6		9	3		
		6				8	9	
5	7	8		4				2
			3				7	
2								5

Our Implementation

To generate Sudoku, we created a class that stores the 9x9 board in as a two-dimensional array. Both the shown board and the actual solution are stored separately.

- 3 of the subgrids are filled out along a diagonal using a shuffled array of numbers in order to force the locations of the rest of the numbers. After, the rest of the grid is filled out using our solving algorithm.

JavaFX



We utilized the Model-View-Controller (MVC) software design pattern for our stack.

Controller	SudokuController class
Model	Sudoku class
View	SudokuViewer class

Features

- **Puzzle Generation** - Create a complete board using our **solver**, and removing cells for the player to input
- **Puzzle Checker** - Checks current board against the correct result and shows if the inputs are right or wrong
- **Timer** - Displays how long the game is taking

7	7	7	7	3	7
8	7	8	7	6	1

A decorative border at the top of the image consisting of a grid of squares. Most squares are light beige, while some are a darker gray, creating a pixelated or mosaic-like effect.

DEMO!

A decorative border at the bottom of the image, identical to the one at the top, featuring a grid of light beige and dark gray squares.



THANK YOU

QUESTIONS?

