**Sudoku – Think Better**

SE-3-5

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Sudoku is a popular game that requires a solution taking into account constraints. Sometimes, a player stops playing before finishing a game due to the difficulty of the board. We present a sudoku app that includes hints, based on an SAT optimization algorithm that allows us to guide the player if he has difficulty in the solution process. In doing so, we encourage the player to complete the puzzle without looking at the full solution. The project was done using the React native JavaScript programming language in the Visual Studio Code workspace and Firebase as a database in Android Studio.

**Keywords:** Sudoku, SAT, hinting, optimization, gameplay.