

**Use Case 1: Play Game****Scope:** Sudoku Solver**Level:** Player Goal**Primary Actor:** Player**Scenario:** N/A**Related Use Cases:** None**Stakeholders & Interests:**

- Player: Wants a solution to the puzzle

**Preconditions:** Game is started**Postconditions:** Sudoku Puzzle completely solved**Success Guarantees:** A Solution to the initial Sudoku Puzzle found and displayed to the Player**Main Success Scenario:**

Player	Sudoku Solver
1. Play A Game (Solve a new puzzle)	
	2. Request Player to enter a new puzzle
3. Enters a new puzzle via: 1. Text File 2. Manual Entry (Player Input)	
	4. Displays Unsolved Puzzle
5. Play the Game (Solve the Puzzle)	
	6. Solve the Puzzle
	7. Displays the “evolving” solution
	8. Stops when solution completely solved
	9. Display completed solution

**Extensions (Alternative Flows):**

3.1a. If the text file cannot be opened then the System indicates that to the Player, giving the player the choice to:

1. Open a different unsolved puzzle in a different text file
2. Perform 3.2 and Manually enter an unsolved puzzle

6a. If there is no solution to the puzzle, then the System alerts the Player

**Special Requirements:**

- None

**Technology & Variatios List:**

- There are several different Sudoku Solvers available, future incarnations of the Sudoku Solver plan to employ the different type Solvers.