

<div><div></div><div>SudokuBoard</div></div>
<div>- cells : ArrayList<ArrayList<Integer>></div>
<div><div><div>+ SudokuBoard()</div><div>+ SudokuBoard(board : String)</div><div>+ SudokuBoard(other: SudokuBoard)</div></div><div><div>+ getCell(row : int, col : int) : int</div><div>+ getCell(coord : Coordinate) : int</div></div><div><div>+ setCell(row : int, col : int, cell : int)</div><div>+ setCell(coord : Coordinate, cell : int)</div></div><div><div>+ getRow(numRow : int) : ArrayList<Integer></div><div>- clearBoard()</div></div><div><div>+ generateBoard()</div><div>+ generatePuzzle() : SudokuBoard</div><div>- solvePath(path : Deque<Coordinate>)</div></div><div><div>- solved() : SudokuBoard</div><div>- getRandomNumbers(n : int) : int[]</div><div>+ getContradictions() : ArrayList<Coordinate></div><div>+ isValid() : boolean</div><div>+ isFull() : boolean</div></div><div><div>- isValidCell(row : int, col : int) : boolean</div><div>- isValidCell(coord : Coordinate) : boolean</div></div><div><div>- isValidRow(row : int, col : int) : boolean</div><div>- isValidRow(coord : Coordinate) : boolean</div></div><div><div>- isValidCol(row : int, col : int) : boolean</div><div>- isValidCol(coord : Coordinate) : boolean</div></div><div><div>- isValidBox(row : int, col : int) : boolean</div><div>- isValidBox(coord : Coordinate) : boolean</div></div><div><div>- flip()</div><div>- mirror()</div></div><div><div>+getUnsolvedNums() : ArrayList<Integer></div><div>+ toString() : String</div></div></div>

<div><div></div><div>SudokuPuzzle</div></div>
<div>- puzzle : SudokuBoard</div> <div>- solution : SudokuBoard</div>
<div><div><div>+ SudokuPuzzle(numbersLeft : int)</div><div>+ SudokuPuzzle(puzzle : Sudoku Board, solution : SudokuBoard)</div></div><div><div>+ guess(row : int, col : int, cell : int) : boolean</div><div>+ validGuess(row : int, col : int) : boolean</div><div>+ isSolved() : boolean</div></div><div><div>- flip()</div><div>- mirror()</div></div><div><div>+ toString() : String</div><div>+ solveToString() : String</div></div></div>

<div><div></div><div>CommandLineUI</div></div>
<div><div>+ millisToClock(milliseconds : long) : String</div><div>+ getNumber(scanner : Scanner, message : String, min : int, max : int) : int</div><div>+ main(args : String[])</div></div>

<div><div></div><div>Coordinate</div></div>
<div>- row : int</div> <div>- col : int</div>
<div><div><div>+ Coordinate(row : int, col : int)</div><div><div>+ getRow() : int</div><div>+ getCol() : int</div><div>+ equals(other : Object) : boolean</div><div>+ toString() : String</div></div></div></div>