

## Iteration 1 Report

### User Stories

ID	Priority	User Stories	Requirements
03	High	As a mathematician, I want to choose different levels of difficulty so it will be more challenging.	<ul style="list-style-type: none"><li>• User chooses different level of difficulty (easy, medium, and hard)</li></ul>
04	Medium	As a consumer, I want to view the solution of the puzzle so that I know where I went wrong.	<ul style="list-style-type: none"><li>• User can view the solution of the puzzle</li><li>• User will be given a hint when requested</li></ul>
05	High	As a consumer, I want to generate new puzzles when I am stuck so I can try a different puzzle.	<ul style="list-style-type: none"><li>• User can generate new puzzles when stuck</li></ul>
11	High	As a consumer, I want a way to make changes to previous inputs so that I can correct my mistakes.	<ul style="list-style-type: none"><li>• User can change previous inputs</li></ul>

### Acceptance Tests

<b>ID</b>	03
<b>File Name</b>	03 - Difficulty.docx
<b>Requirements</b>	<ul style="list-style-type: none"> <li>User chooses different level of difficulty (easy, medium, and hard)</li> </ul>
<b>Description</b>	Increasing the difficulty should leave less numbers on the board, thus making it harder. Lowering the difficulty should leave more numbers on the board, making it easier.
<b>Setup</b>	Have an option for easy, medium and hard.
<b>Instruction</b>	<ol style="list-style-type: none"> <li>Open application</li> <li>Difficulty is selected at the startup menu</li> </ol>
<b>Expected Results</b>	The amount of numbers filled in will decrease in accordance to increasing difficulty.

<b>ID</b>	04
<b>Filename</b>	04 - Solver.docx
<b>Requirements</b>	<ul style="list-style-type: none"> <li>User can view the solution of the puzzle</li> <li>User will be given a hint when requested</li> </ul>
<b>Description</b>	Use sudoku puzzle solver and compare the answers with the solved puzzle.
<b>Setup</b>	Look for a Sudoku solver online and open it
<b>Instruction</b>	<ol style="list-style-type: none"> <li>Open application.</li> <li>Input values of generated Sudoku to a solver</li> <li>Click the "Solve" puzzle button</li> <li>Compare solutions of the solver and the application</li> </ol>
<b>Expected Results</b>	The application should have the same solution as the solver

<b>ID</b>	05
<b>Filename</b>	05 - New Game.docx
<b>Requirements</b>	<ul style="list-style-type: none"> <li>User can generate new puzzles when stuck</li> </ul>
<b>Description</b>	Each time a new puzzle is generated, different numbers should be filled in starting off.

<b>Setup</b>	'New Game' is selected at the startup menu.
<b>Instruction</b>	<ol style="list-style-type: none"> <li>1. 'New Game' is selected and Sudoku game starts.</li> <li>2. Application is closed.</li> <li>3. 'New Game' is selected.</li> </ol>
<b>Expected Results</b>	The puzzle generated should be different every time a new puzzle is created

<b>ID</b>	11
<b>Filename</b>	11 - User Input.docx
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• User can change previous inputs</li> </ul>
<b>Description</b>	Inputs made by the consumer can be changed at any time.
<b>Setup</b>	A value is entered into a single 'square'.
<b>Instruction</b>	<ol style="list-style-type: none"> <li>1. A number from 1-9 is inputted by the user.</li> <li>2. Clicking/Pressing the filled 'square'.</li> <li>3. Change the entry to different number.</li> </ol>
<b>Expected Results</b>	A previously entered value can be changed at any moment.

<b>ID</b>	12
<b>Filename</b>	12 - Check Button.docx
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• User can check the values inputted if it is right or wrong</li> </ul>
<b>Description</b>	Inputs made by the consumer can be changed at any time.
<b>Setup</b>	Generate a sudoku puzzle
<b>Instruction</b>	<ol style="list-style-type: none"> <li>1. User enters value</li> <li>2. User presses "Check" button</li> <li>3. Value is highlighted red if its wrong</li> <li>4. Change to the right value</li> </ol>
<b>Expected Results</b>	Value should be highlighted green