User stories: Sudoku web app

# Sudoku Functionality

## User Story 1:

As a user, I want to click a button to generate a new (full/of the same difficulty level)) sudoku, so that I don’t have to reload the page for a new sudoku.

* There is a “Generate new sudoku” button below the sudoku grid
* Clicking the button results in a new (full/of the same difficulty level) sudoku grid being generated

## User Story 2:

As a user, I want to be able to choose a difficulty level for my sudoku, so that I can get an unsolved sudoku grid according to my ability.

* Three difficulty levels: Easy, Medium, Hard
* By clicking one of the difficulty levels, an unsolved sudoku grid corresponding to that level of difficulty is generated (and displayed)
* Button corresponding to each difficulty level

## User Story 3:

As a user, I want to enter numbers into the empty fields, so that I can attempt to solve the sudoku.

* Ability to select an empty field (only empty fields can be selected)
* Buttons ranging from 1 to 9 that can be clicked once an empty field is selected and fill the field with the chosen number
* An ‘erase’ button to empty the field again

## User Story 4:

As a user, I want the grid to show an error when I enter an invalid number, so that I know when I make a mistake.

* For each entered number, a row, column and square check is carried out and the number is marked red/red font-colour when there is a conflict with the sudoku rules
* The user can continue with the sudoku however the error is made very prominent to them

## User Story 5:

As a user, I want there to be a stopwatch which starts when I start a new sudoku and stops once I fully solved it, so that I know how long it takes/took me to solve the sudoku.

* Stopwatch starts when starting a new sudoku (define if it starts once a new sudoku is generated, if there is a manual start button and only after that numbers can be entered, or if it starts once the first number is entered)