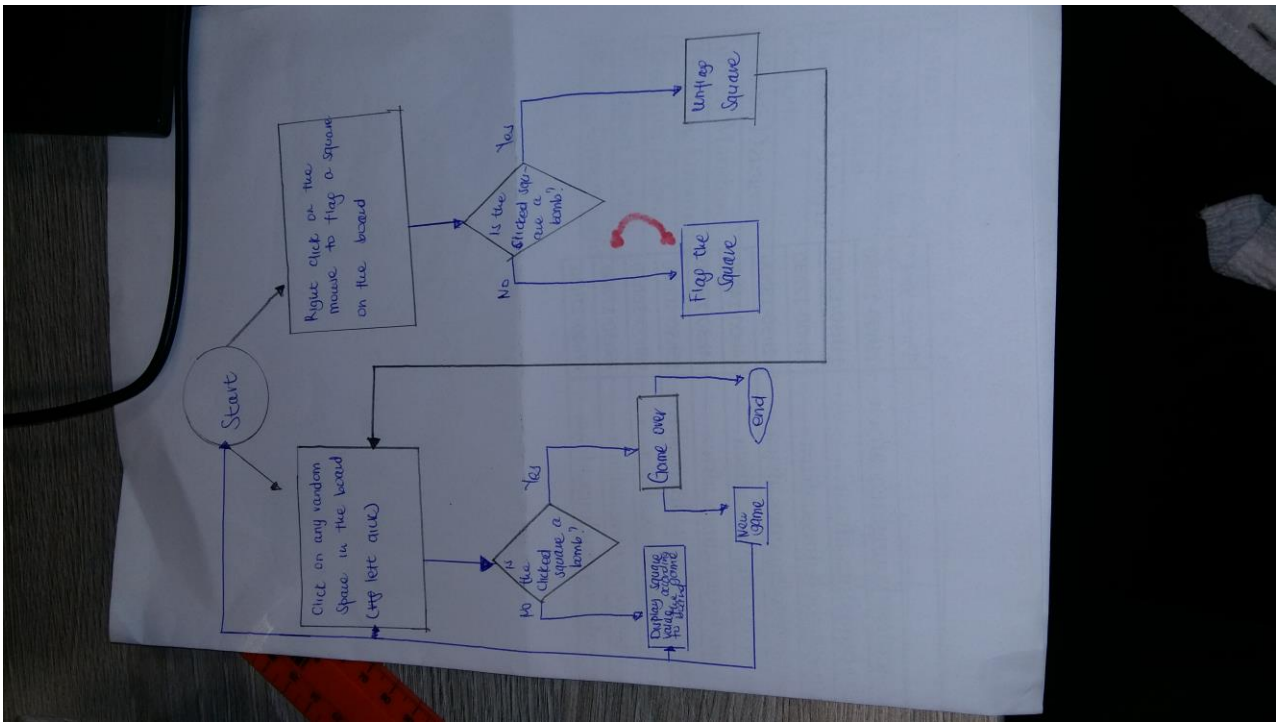
Amanda Mxi **13 April 2021**

LEVEL 1 (Easy)

Minesweeper flowchart



LEVEL 2 (Medium)

Sudoku Challenge

Pseudo code:

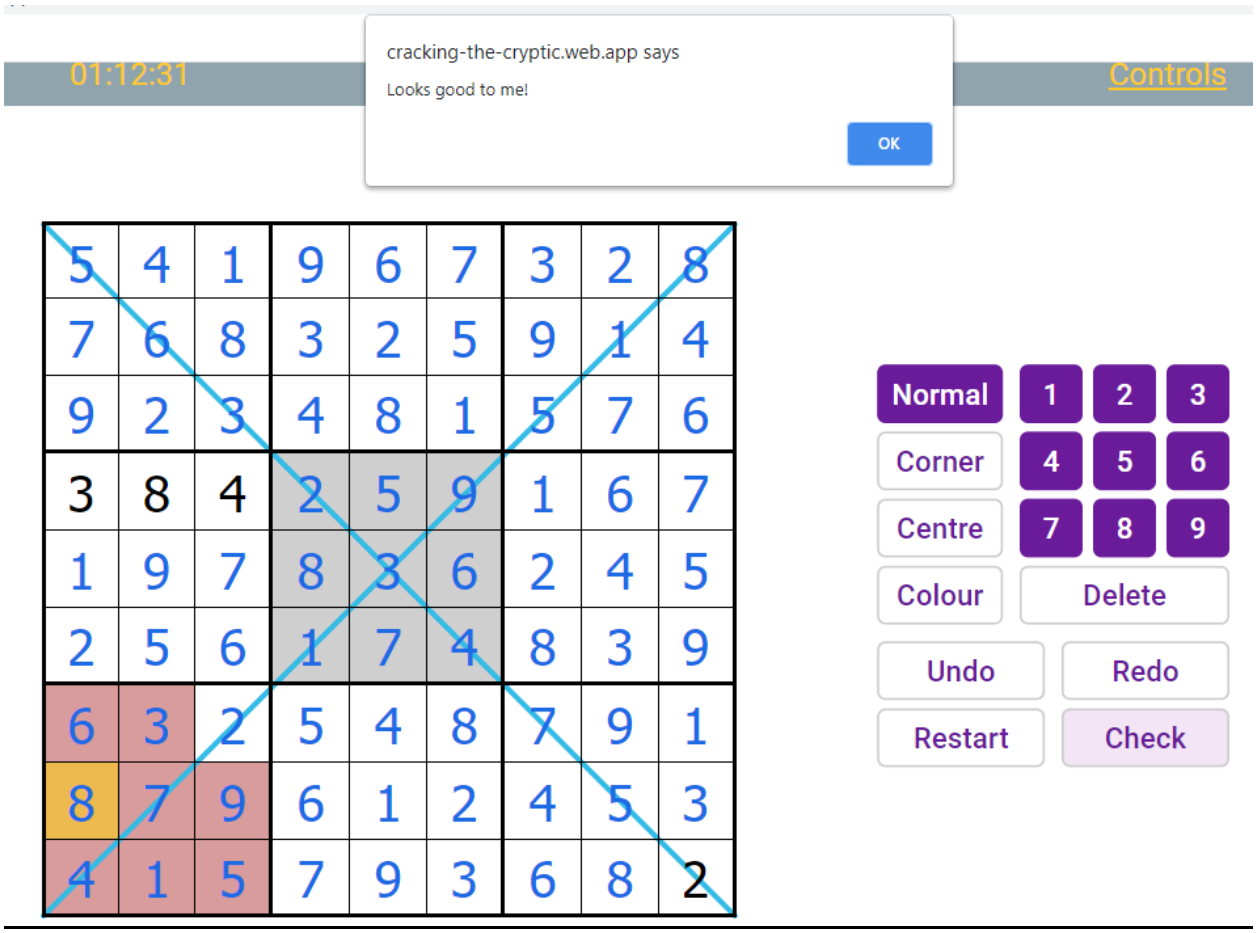
1. Here you are using a 9by 9 grid, containing a square called a cell.
2. It has 9 columns 9 in a row and columns.
3. It has a block / region which is a 3 by 3 grid (subgrids) that contains 3 columns and 3 rows.
4. We have 3 sets of horizontal blocks, called a rank (top, middle, and bottom).
5. It has 81 cells in total.
6. Fill in the 9*9 grid so that each column, each row and each boxes (3*3 subgrids) contain the digit from one to 9 without no repetition.
7. The most basic strategy to find the missing numbers is scanning and it consists of
    a) Cross-hatching
    b) Counting

I. **Cross-hatching-** is when you scan rows and columns to eliminate where the specific number can be in a given region.

II. **Counting-** You simply count all the different numbers that is in a row, column that connect to one cell.

III. if there is one number missing, then that's what should be in the cell.

BONUS



- Normal Sudoku rules applies
- The grid must be decomposed into different areas
- Each cell belongs exactly to one area
- Each area contains two clues
- The sum of all digits in the area lies between the two clues, but may not reach them.
- There are only four digits given,
- Both diagonals also should contain 1 to 9 in some order.
- The center box is a magic square, meaning that only the row, column adds up to the same amount.