

Sudoku Rubric

1. Appearance (View Component(s)) - (**5pts** matching appearance i.e. 9x9 grid):
 - At least one custom Frame that extends from QWidget's class
 - (**3pt**) In the constructor load the sudoku file
 - (**2pt**) The values must be set on the associated buttons, and locked so that they cannot be changed
 - Bind the buttons:
 - (**1pt**) Left-Click Goes Up (can check which button via mouse events)
 - (**1pt**) Right-Click Goes Down
 - (**1pt**) Cycle if at 9 or 1
 - (**3pt**) Change to next available number (i.e. not used or violate rules)
 - (**2pt**) If no number valid for button make red(bad color) and blank
 - (**2pt**) If change to a valid number and all other positions set - win(change to good color)
2. Game Logic (Model Component(s)) - (**5pts** matching behavior)
 - Checking if number is valid in a spot
 - (**2pt**) Checks the row
 - (**2pt**) Checks the column
 - (**3pt**) Checks the 3x3 grid
 - (**3pt**) Detect no more valid spots when none exist
 - (**3pt**) Detect win
3. Controller and Other requirements
 - (**1pt**) Must use external QtWidgets module
 - (**1pt**) Must use either a list or dict to store the buttons/values