**Frame and CLI Error Cases:**

1. User tries to enter a number that is already in it’s respected column, row, or box: error message pops up, value not entered into game.
2. User tries to enter a in a coordinate that already has a value in it: error message pops up, value not entered into game
3. File not found, message pops up, asked to re-enter a proper file name.
4. Error with file contents, message pops up, asked to re-enter a proper file
5. File doesn’t have the correct number of rows/columns, error message pops up and asks for a different file name
6. File missing a delimiter between two numbers/has two delimiters in a row, error message pops up and asks for a different file name.
7. User tries to undo more than one move back to back: error message pops up
8. User tries to save the game to a corrupt file, or a file that does not exist, error message pops up, user allowed to re-enter

**CLI only error cases:**

1. User tries to enter numbers coordinate outside of range (0 and 10): error message pops up, value not entered into game.
2. User enters a anything other than a number from 1-9 inclusively: error message pops up, user allowed to re-enter
3. User enters 10 or 0 for coordinates, error message pops up, user allowed to re-enter
4. User enters a non-integer number: error message pops up, user allowed to re-enter
5. At any point, a char is entered other than S/s, Q/q, or U/u: error message pops up saying invalid command, user allowed to re-enter

**Frame and CLI Success Cases:**

1. Value entered with no row, column or square containing the same number: Value entered correctly, no message displayed.
2. If board completely entered correctly, pop-up message displaying that the player has won, and that game is over
3. User saves game, message pops up saying that game was successfully saved
4. User undoes move, move is undone successfully, board Is updated
5. User presses on the help or about box, respective box pops up.
6. User presses on the Quit game menu item, thank you box pops up, game exits
7. No Value is entered for the file name, default of sodoku.txt applies, board gets displayed
8. A correct file name gets entered: board gets displayed.
9. User opens a previously saved game: board gets displayed

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