Exercise 3: A Silly Game

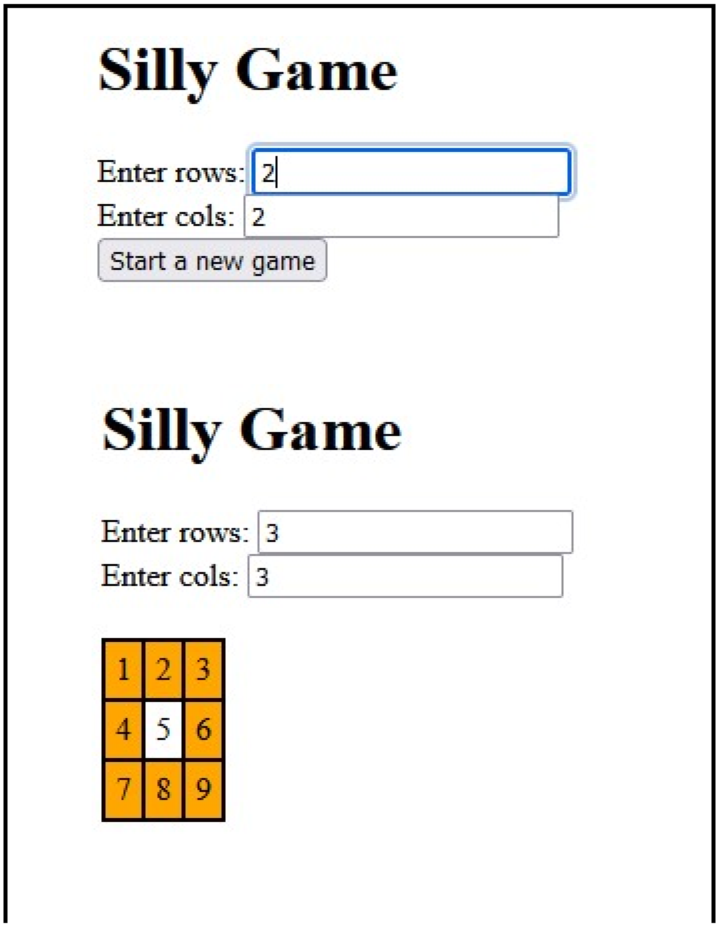
Due: Sep 29, 2024 11:59 PM

In this exercise, you will develop a very silly game using DOM properties and events. Starter html file can be found here (sillyGame.html). All the required additional elements should be added using JavaScript only. Do not type the html elements in the body.

Specifications:

1. The user should be able to enter the number of rows and columns.
2. The default values for rows and columns should be 2, and it should be shown on the input fields.
3. The user then can click the button 'Start a new game'.
4. Once the button is clicked, a table with the specified number of rows and column should be rendered, and the button should disappear.
5. Each cell should display the number corresponding to thier position in the table.
6. When the user clicks on a cell, the cell background color should be changed to orange.
7. Once the last cell is clicked, the background color of all the cells should be changed to red. After this clicking on any cell should have no effect. The game is over, and the button should reappear for the user to start a new game.
8. When a new game is started, the table should be cleared before rendering the new table.

The images below illustrate the progression of the game. The style provided is very basic (silly!). Please add some styling such that the fields are aligned and there is a reasonable amount of space between elements. No need to spend a lot of time on styling. Styling is not a goal of this exercise.



Silly Game

Enter rows: 2

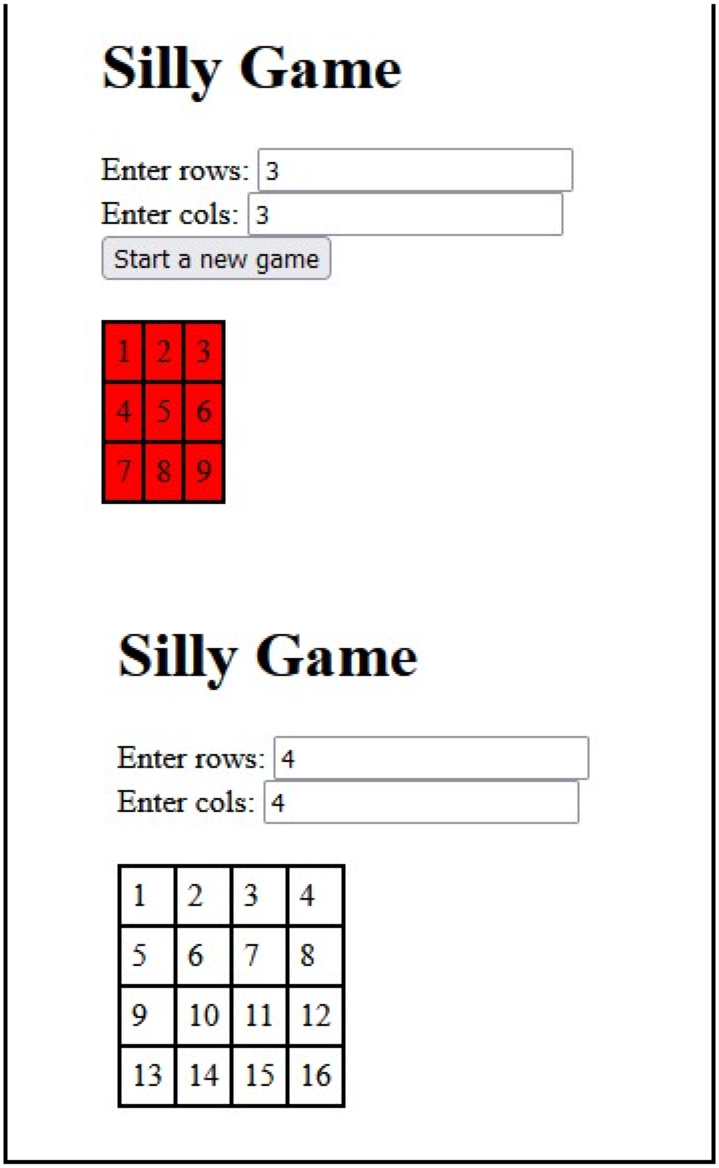
Enter cols: 2

Silly Game

Enter rows: 3

Enter cols: 3

1	2	3
4	5	6
7	8	9



Silly Game

Enter rows: 3

Enter cols: 3

1	2	3
4	5	6
7	8	9

Silly Game

Enter rows: 4

Enter cols: 4

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Hints

You need not set the handler in < td >. Make use of event bubbling. You may find the following methods/properties useful

- querySelector()
- querySelectorAll()
- createElement()
- innerHTML()
- remove()
- addEventListener()
- removeEventListener()
- parseInt()
- hidden
- event.target
- forEach()

Submission Procedure

Create a folder with your netid as the name. Place completed file `sillyGame.html` in the folder. Zip the folder and submit it on elearning. Note the folder should not contain any unrelated files, and the name of the folder should be exactly as specified. Failing to follow the submission procedure will result in loss of points.