Goal: Make a simple map

\* array, double array

\* Key handler

\* createElement/ setAttribute

\* appendChild/ removeChild

Statement:

Supposed that you had a big back yard and it were one of your responsibilities as a house member to mow the lawn. You need to visit every corner of the back yard and cut the grass. Whenever you passed with a lawn-mower on the filed, you can see that the color of grass had been changed (because the grass had been cut). But, the mowing is not always easy - there are some flowers your mother asked you not to cut. If you accidently passed on that flower and cut (or touch) the flower, your mower will stop (= end of the game, lose). If you can successfully visit every place without touching the flowers, you will get a big prize from your mother (=end of the game, win).

- cell size 30x30; you can use image or background color (dark green, yellow green) for grass

- use lawnmower.png and flower.png; but you can have your own images (30x30) or drawing

- Your lawn-mower will start from bottom-right corner (mapWidth-1, mapHeight – 1)

- the flower’s positions can be pre-fixed (you can decide where to put when you create the map), but the number of flowers should be ¼ of the total number of cells (round up when needed). If you can randomize the flower’s positions, you will get extra credits.

- the map size can be fixed (such as 300 x 300) but if you can make it flexible according to your input (width, height), you will get extra credits.

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Rubrics:

(3 points) show the map, the lawn-mower, and flowers by using double array

(3 points) move the lawn-mower with the up/down/left/right key event

(1 point) change the color of the grass on the cell visited by the lawn-mower

(1 point) end the game when the gamer touches the cell with the flower

(1 point) end the game when the gamer successfully visited every cells but the flowers

(1 points) display the message when the game ends

(extra 2 points) randomize the flower positions

(extra 2 points) create a map by the user input of width and height

\* Please submit your zip file (html, js, css, image folder) and the active URL of your work.