Memory Game

Meomory Game

this is a challenge to find the pairs

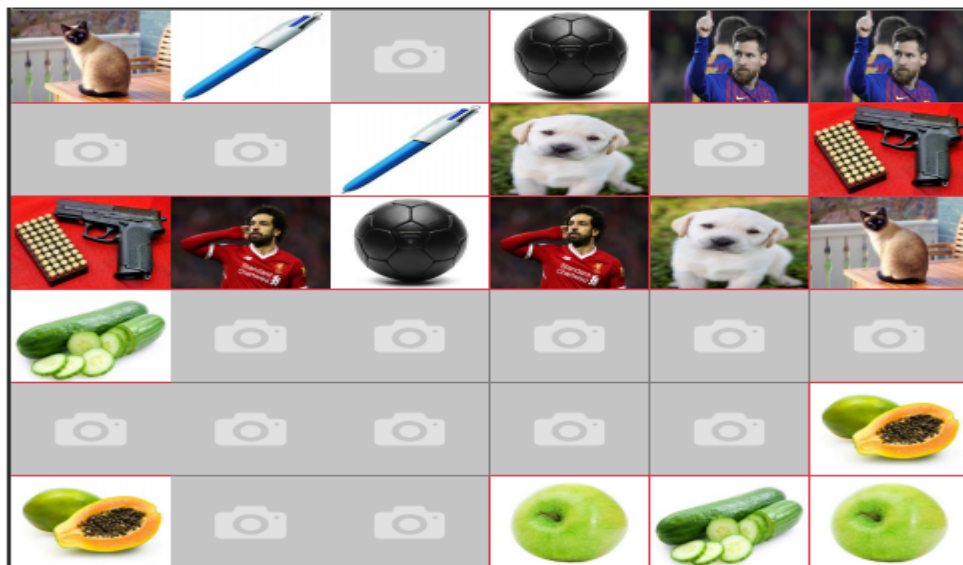Size OF Grid

| 6*6 | ▼ |

time

| 5 minute | ▼ |

| Apply |

score : 20

SOLVE

Time :1 : 39   Remain :3 : 21

Design:

Data structure

array :

1-mainArr: which contains all cells in grid (contains all of objects which cantain images)

2-images:which contain path to each imgae

3- tempArray: it contains cells for one row only and it is used to built mainArr

object:

1-mainObject: (size n*m /2) which contains all information about each image and it is used to ditrbute images randamly all over the grid

2-OB: which contain the reference number of image and the image it'self and it is used to built tempArray

3-tO : it contains a- (item -- which means the number of images connected to this object)

b- (full -- defult is false but it wii be true when the item is 2)

c - (num-- reference for number of image)

and it is used to build mainObject

Function:

1-addEventListener:this is a built-in function in javascript used in

1- button "Apply"

2- each single cell in grid
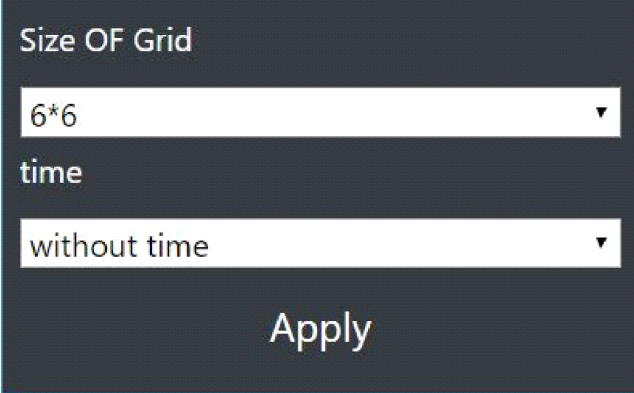
3- button "solve"

2-win(): it make h1 "Well done Apeer" and play sounds

3- sleep(time): which wait specific time and it used after choseing two no-match photo to

wait 1 second then they turned over

4- setInterval(function(),time): which change the timer every second

User Manual:

starting the game ,user will find box which consist of two lists and button "Apply "

- first list to determine the size of grid and there are 11 diffrenet sizes

(6*6 - 6*7 - 6*8 -6*9- 6*10 -7*8- 7*10 - 8*9 - 8*10 - 9*10 - 10*10)

- second list to determine time and there are 5 option

(without time - 5 minute - 10 minute - 15 minute -20 minute)

- then press on the button "apply " to make the grid

-then the grid apeers
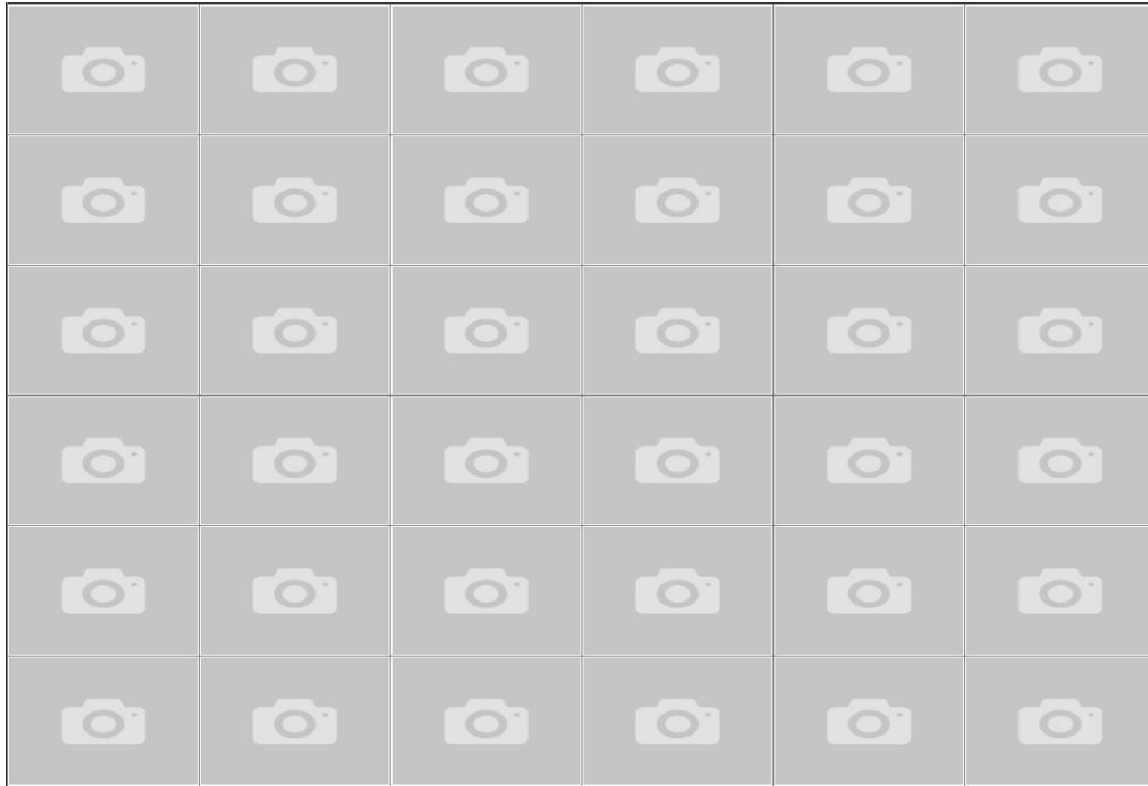
pressing on any of the cells the image will apeer and the press on the second cell , if both of image are the same it will still apeer and the score will increase by 2 , else the two images will turned over in 1 second

- player will win if he finds all pairs , lose when the time ends (if he choose the option "without time " the game will continue to infinity)

-To play again (or start anther game even is the first doesn't finish yet) just determine the size and the time then press apply

Exmple For The Game

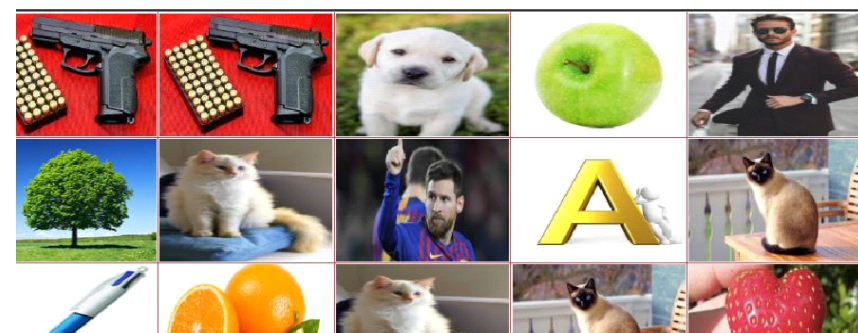## Finding pairs
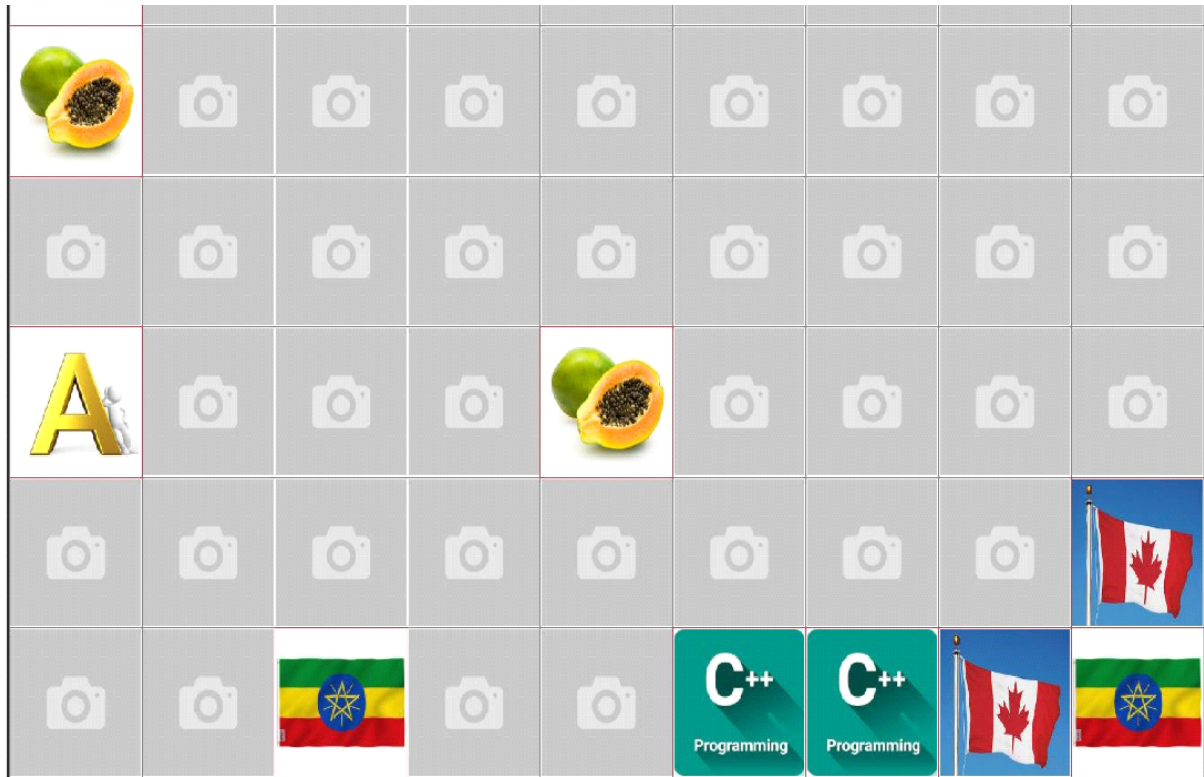
Time :2 : 24   Remain :12 : 36

pressing on button solve (all pairs appear and the time stop)

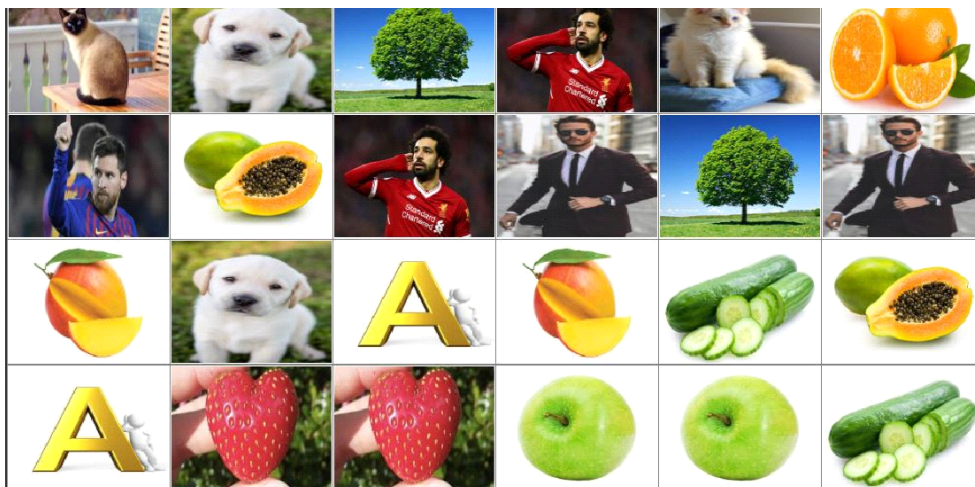**After finding all pairs**

WELL DONE !!!!

score : 36

TWO TIMER

if time finishes all images will apears

SOLVE

Time :5 : 0   Remain :0 : 0

Extra

1- playing sounds (using library HOWL)every time

choosing cells

and other sound for finding pairs

and other sound when the player wins

2- using Bootstrab 4 (beside using css) to Design the site

3- dynamic size which allows 11 Different sizes

4-Descending time and the game is off if this time finishes