UCS 2611 Internet Programming Lab
Exercise 3: OMG: Online Memory Game for Kids

Date of Exercise: 10.02.2024

Goal

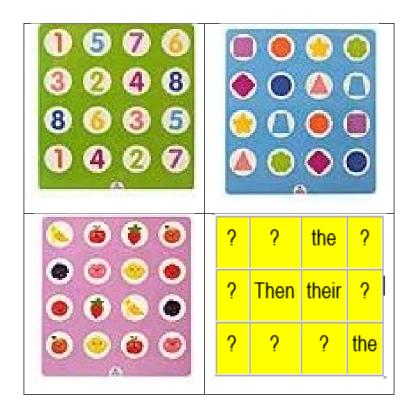To design an interactive online memory game for the kids to play with.

Impact

Memory games for kids build thinking skills, concentration, attention and persistence.

Technologies to be Used

HTML 5, CSS 3, Javascript

Kids can choose different boards with the options for choosing number, shape, picture or word. Various instances of OMG boards are as follows:

How the Game Works?

The game uses a grid of images that all begin by showing question marks. The table must have an even number of squares.

?	?	?	?
?	?	?	?

When the user clicks on one of the squares marked with a ? the question mark is replaced with a word or image. Clicking on another square will reveal another word or image. If the images match they remain visible for the duration of the game. If they do not match, no further hidden squares can be seen unless at least one of the revealed images is turned over again by clicking on it. In other words, only two non-matching images can be seen at one time. In the following illustration

?	?	the	?
?	Then	their	?
?	?	?	the

clicking on additional ? squares has no effect because two non-matching squares (then and their) are showing. Clicking on either square with the word "the" in it has no effect because these squares are matched. Clicking on the "then" or the "their" square will "turn them over" so that only a ? is displayed. When all the squares are matched the game is over and the number of clicks on ? squares to reach the end is reported For Every new Game the image or word matching the square has to be randomly changed.

Rules to be enforced for this game:

- No more than two unmatched squares can be turned over at any time;
- Matched squares cannot be turned over;
- Every click on a question mark that results in a square being turned over must be counted as a "turn";
- The game is over when all the squares are matched and therefore visible on the board.