Student Score:	out of	30	points
otaaciit ocoi ci		50	Ponits



King Abdulaziz University
Faculty of Computing & Information Technology
Department of Computer Science

Course Code:	CPCS 655	Course Name:	Internet Technologies
Course Instructor:	Professor Arwa Al-Aama	Time:	12:30 p.m. – 2:00 p.m.
Date:	26/ 10 /2020	<b>Duration:</b>	90 minutes
Total Grade:	30 points		
Student ID:			
Student Name:			

## **INSTRUCTIONS:**

- Complete your Name, Student ID, etc. on the cover of the page.
- This is an open book exam. However, you are not allowed to discuss anything with your classmates
  or any other people. Any similarity of your answers to any of your classmates' answers will cause
  you and her to lose the mark for that question.
- Read the question carefully.
- Make sure to answer all parts of the question.
- When you are done, upload your work to Blackboard in a zip file. If you have trouble uploading
  your files due to safety features in BB blocking your JavaScript code, save your JavaScript file in
  word format instead of a JavaScript format. Name your zip file:
  YourName\_StudentID\_655\_Midterm.
- Upload to your Github account.
- Email me your answers and the Github link.to <a href="mailto:aalaama@kau.edu.sa">aalaama@kau.edu.sa</a> \_ before the due time. Late replies will not be accepted.
- Good luck!

## Question:

You are requested to develop a game, using only pure HTML, CSS and JavaScript. (No Bootstrap or JQuery or Alike).

The user will first get a page with two options:

(2 Points)

- Random Color
- <u>Disappearing Numbers</u>

The user then chooses one of the options and goes to the page corresponding to the choice.

## A. Random Color:

The game will display an image such as the one in Figure 1.

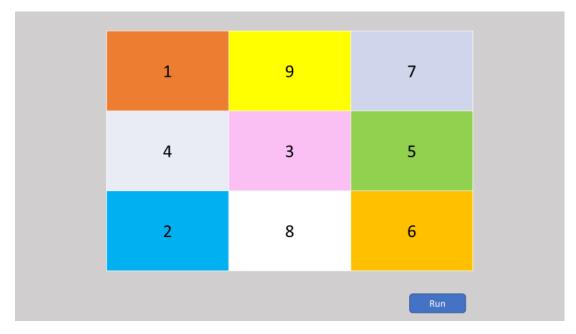


Figure 1. Random Color

It will produce random colors and random numbers (integers 1-9) every time the user presses the Run button. There are 9 possible colors (Red, Orange, Yellow, Green, Light blue, Blue, White, Gray, Pink).

(10 Points)

Make sure you make the page look as close as possible to the design in Figure 1.

(3 Points)

Figure 2 shows another example, after the user clicked Run one more time.

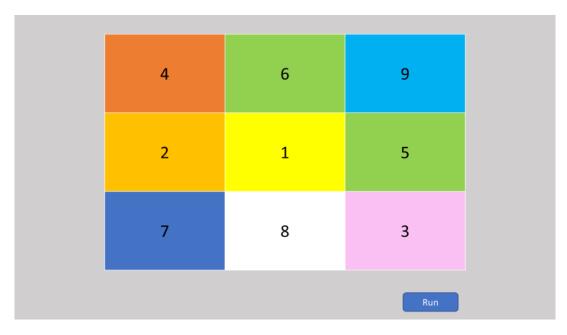


Figure 2. Random Color example after pressing the Run button again

## **B.** Disappearing Numbers:

Now, Design the second option of the game. Where the user will see an image such as the one in Figure 3. Every time a user moves over a number it disappears. So, for example, if I move over the number 3, the number 3 will disappear. Then I move it over 5, 5 will disappear, and so on. (10 Points)

Once all numbers disappear, a list of the order they disappeared in will pop up on the screen, as in Figure 5. (5 Points)

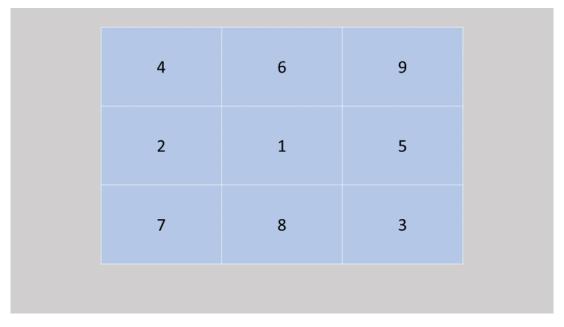


Figure 3. Disappearing Numbers Initial Stage

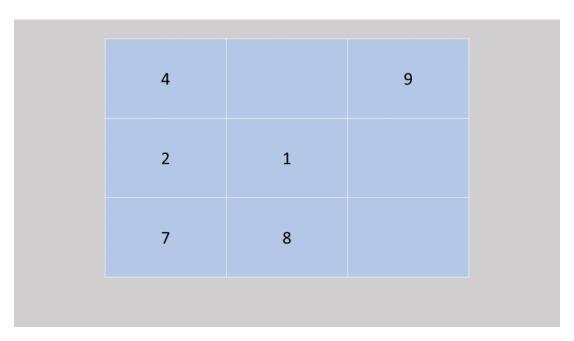


Figure 4. Disappearing Numbers – After moving the mouse over 3, 5, 6

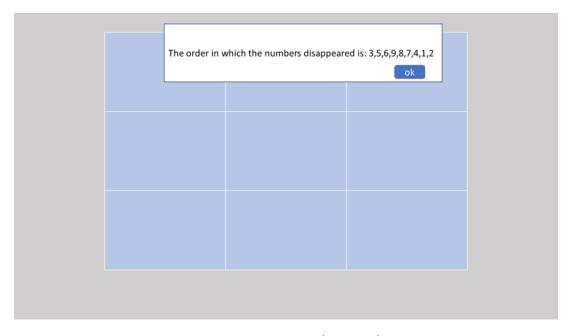


Figure 5. Disappearing Numbers Final Stage