

University of Central Florida

CIS 4004 Web Based Information Technology

Assignment 2 JavaScript

Due, Sunday March 12, 2023 for 100% credit

Monday, March 13, 2023 for 90% credit

Tuesday, March 14, 2023 for 80% credit

Wednesday, March 15, 2023 for 70% credit



Assignment scope

This assignment is focused on writing JavaScript and will create an electronic version of a Bingo board. This assignment will require students to randomly generate a Bingo board.

Deliverables

To complete this assignment you must execute the following tasks

1. To receive credit for the assignment upload to Webcourses as a compressed file (i.e. .zip, .rar, etc...) the following files:
 - a. bingo.html
 - b. bingo.css
 - c. bingo.js
 - d. bingo.jpg (or whatever image you used)
 - e. jquery-2.1.0.js

Files provided

1. JavaScriptAssignment_template.html
2. bingo.jpg
3. bingo_template.js
4. jquery-2.1.0.js

Tasks and Rubric

Activity
bingo.html
<head>
Use the <script> element to reference the jQuery jquery-2.1.0.js
Use the <script> element to reference the external JavaScript file bingo.js
Use the <link> element to reference the external cascading style sheet bingo.css
<body>
For each <td> add property id and set it equal to the value in format “ cell# ” so that it has cell0 through cell23 . (Note: Keep in mind that HTML tables are created in rows and a Bingo card is created in columns).
bingo.js
Create a var (i.e., usedArray) of type Array with declared size 76 for the used bingo numbers when generating the card
Create a global var (i.e., number) initialized to 0
Create a global var (i.e., base) initialize to 0
Call function init()
Write function init() to do the following <ol style="list-style-type: none"> 1. Write a loop that iterates 24 times and calls function fillCard() passing the loop control variable as an argument
Write function fillCard(i) to do the following <ol style="list-style-type: none"> 1. Update global variable base, set it equal to the element in array baseArray, use the passed in parameter i as the index, multiplied by the value 15 2. Update global variable number, set it equal to the value of global variable base added to a randomly selected number in the range of 1 – 15
Write function resetUsedNumbersArray() to do the following <ol style="list-style-type: none"> 1. Write a for loop that iterates for the length of the array of used numbers and set the value of each array element to false
jQuery selector.action \$('#newCard').click: <ol style="list-style-type: none"> 1. Call function resetUsedNumberArray to reset the used numbers 2. Call function init to generate a new bingo card
bingo.css
Set values for the properties that define the table data element <pre>td{ font-family: color: padding: width: height:</pre>

```

text-align:
border:
background-color:
}

```

Set the value for the property border for a tag element that has the class set equal to bingohead

```

.bingohead{
border:
}

```

Set values for the properties that define tag elements heading 1, heading 3, and heading 3 with an anchor tag

```

h1, h2, h3, a{
    font-family:
    text-align:
    padding:
    color:
    background-color:
    border:
}

```

Set the values for the properties of a tag element with id set to the word free

```

#free{
    background-color:
    color:
    cursor:
}

```

Test Cases

Test Case 1	Rendered HTML page looks similar to Figure 1
Test Case 2	When a Bingo square is clicked on, the HTML page should look similar to Figure 2
Test Case 3	Values under the B column include only 1 - 15
Test Case 4	Values under the I column include only 16 – 30
Test Case 5	Values under the N column include only 31 - 45
Test Case 6	Values under the G column include only 46 – 60
Test Case 7	Values under the O column include only 61 - 75
Test Case 8	When Click me for a new card is clicked, the Bingo card should update with different values than currently showing

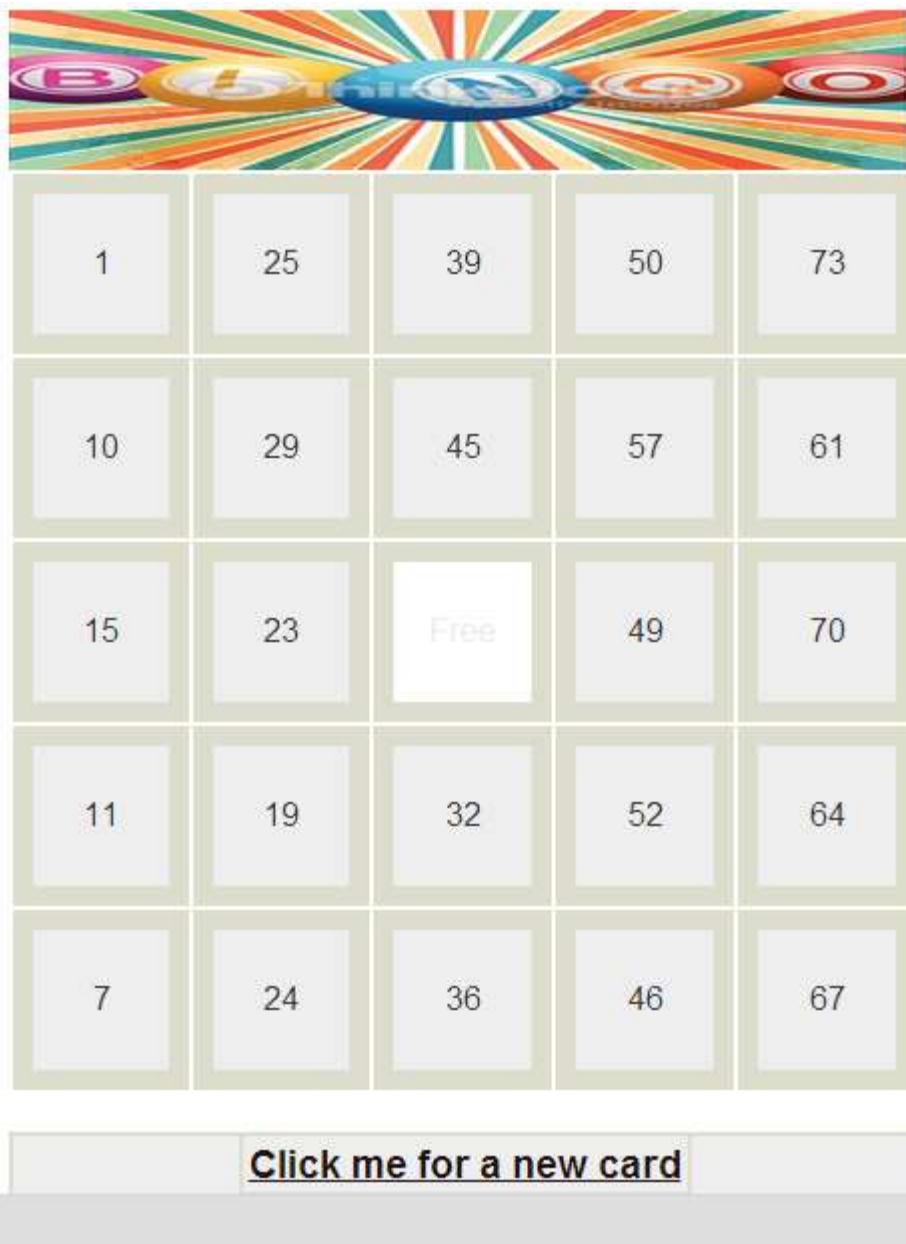


Figure 1 Bingo Card

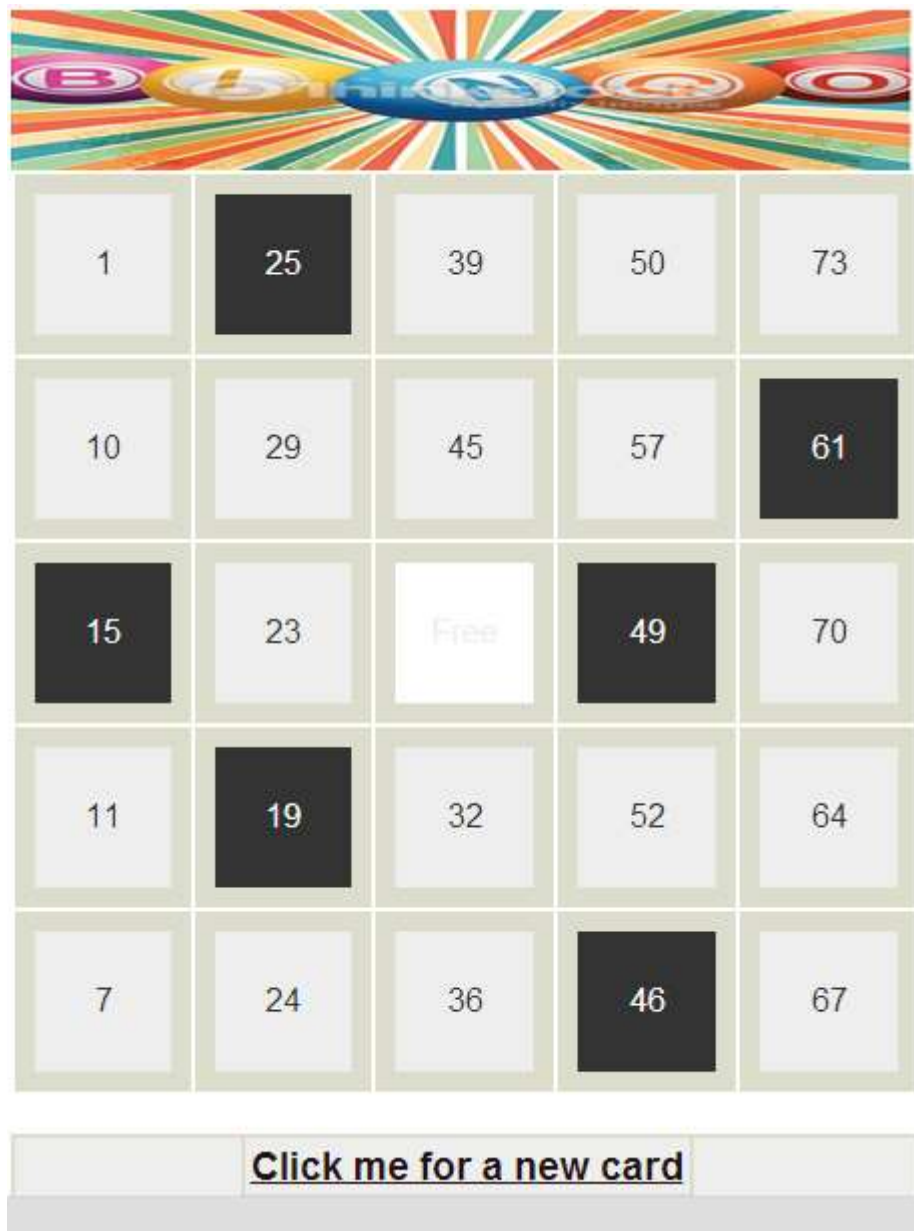


Figure 2 Bingo Card with dobbled squares