Reviewing Test

JavaScript Midterm Exam

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JavaScript Midterm Exam **Total Grade: 59** **(of possible 60 points)**

You have 2 hours to complete this exam. Read each question carefully and follow the instructions. Don't make the questions harder than they are. Just do what the instructions ask you to do. This exam has only ONE submission, so be careful.

You may use your notes, the class web site and your book if you need to. Limit your use of code to what has been covered in class. It will take me a few days to grade the exam after it is due. I will post a notice in the Forum when you can check your grades.

Breathe deeply, think clearly and do your best. Good Luck!

Comments

Most people did quite well on this test. It's hard having to write code in a timed environment, but that is often what it's like in the real world, so this test was designed to give you insight into how you would do in a "real" situation.

Think about what happened during your test. Did you think it was fun. Were you in control? If so, that's a good sign!

If you were totally panicked - think about why? Were you unprepared? If so, study and practice more.

If you knew the stuff, but didn't do well, why not? Perhaps you need to think about ways to handle stress. Programming can be a very high stress life - so it's important to know how to handle stress.

Finally, I'd like to talk about the widget problem LOTS of people lost points on this 9and other) problems because they didn't **read the problem**. Here it is:

I have highlighted parts that were important...

Your company is selling a variety of widgets. The user has found the widget s/he wants and now wants to buy it. For testing purposes, assume the user wants to buy the green widget and that it costs 100.

Create a new document called widget.html.

* Write a JS function to
  - o **find out** the **name** and the **price** of the widget the user wants to buy.
  - o calculate the tax (based on 8%) and the final price.
* Create **another** JS function to
  - o tell the user (on the page) the name of the widget ordered, how much it costs, the tax and the final price.

Call the functions so that your output might look like this:

You want to buy the green widget.
It costs $100.
The tax is $8.
The total amount is $ 108.

Thank you

There were 2 functions required. Some students didn't use any functions. Others combined everything into one function.

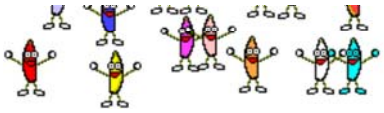
The first function asked you to find out the name and the price of the widget the user wants to buy. Some of you totally ignored that and just wrote the answer to the page. Others asked for the name but not the price - and then supplied their own price. Others used alerts for the whole output!

I gave you sample output for testing purposes - but I expected you to prompt the user for the name and the price of the widget. I could have said in the instructions: prompt the user for the name and price - but this is a test! You should be able to read the instructions (especially based on what we have done in class with our discussions of instructions and pseudocode) and realize that a prompt for both the name and price was needed.

In the future, please read instructions carefully and follow them for maximum points. If you didn't do as well as you would have liked on this test, ask yourself why not - and then keep practicing and take the steps necessary so you can improve.

BTW, I will be offering an extra credit assignment soon.

Finally, it's over!! Now, go relax and have some fun!



Part 1 of 4 Part I **Score: 29** **(of possible 30 points)**

This section contains a variety of questions; multiple choice, fill in the blank and true/false. Read each question carefully and choose the correct answer based on your work in class.

Question 1 of 16 **Score: 3** **(of possible 3 points)**

What will the value of the variable *moreDogs* be in the following example (assume the user enters 8).

```
var myDogs = prompt("Enter the number of dogs at your house…", "0");
var moreDogs = myDogs + myDogs;
```

- A. $16.00
- ✓ B. 88
- C. 16
- D. NaN

Answer Key: B

Feedback

Remember, prompts are entered as strings and strings concatenate - so the answer is 88.

Question 2 of 16 **Score: 3** **(of possible 3 points)**

Which of the following would be valid as the first line of a **FOR** loop?

- A. `for (x=1; x<6, x++)`
- B. `for (x==1; x<6, x++)`
- ✓ C. `for (x=1; x<6; x++)`
- D. `for (x=+1; x<6; x++)`

Answer Key: C

Feedback

`for (x=1; x<6; x++)` is the correct choice.

Question 3 of 16 **Score: 3** **(of possible 3 points)**

The **getDay()** method returns _____.

- A. the day of the month (the current date).
- ✓ B. a number from zero to six which indicates the weekday
- C. a number from zero to eleven which corresponds to the current month
- D. returns a four-digit year.

Answer Key: B

Feedback

getDay() returns a number from zero to six which indicates the weekday

These are easy to get mixed up, so you might want to review!

Question 4 of 16 **Score: 2** **(of possible 2 points)**

setInterval() lets you call a statement or function *repeatedly* every so many milliseconds.

- ✓ True
- False

Answer Key: True

Feedback

The answer is true.

Question 5 of 16 **Score: 2** **(of possible 2 points)**

Within JavaScript code, which of the following indicates that multiple lines of commentary will follow it ?

- A. //
- B. <!--
- C. */
- ✓ D. /*

Answer Key: D

Feedback

/* indicates that multiple lines of commentary will follow. This one is hard to remember!

Question 6 of 16 **Score: 4** **(of possible 4 points)**

What will be the value of the variable *c_bars* be in the following example (assume user enters 5)?

```
var bar = prompt("Enter the amount of the candy bar…", "0");
var bar = eval(bar);
var c_bars = bar + bar;
```

- A. NaN
- B. 5
- C. $10.00
- ✓ D. 10
- E. 55

Answer Key: D

Feedback

The correct answer is 10. The string is evaluated and converted to the number 10. 5 + 5 is 10.

Question 7 of 16 **Score: 2** **(of possible 2 points)**

In a regular **array**, access to an element is usually through the use of a(n) _____.

- A. random string
- B. random number
- C. string
- ✓ D. index number

Answer Key: D

Feedback

The usual method to access array elements is through their index number.
cups[1]

Question 8 of 16 **Score: 2** **(of possible 2 points)**

toString(), *concat()* and *join()* array methods modify the original array, while *reverse()* and *sort()* do not.

- ✓ True
- False

Answer Key: False

Feedback

No, it's just the opposite. Reverse and sort DO modify the original array!

Question 9 of 16 **Score: 3** **(of possible 3 points)**

How many times will the statement block execute in the following control structure?

```
for (i=4; i>0; i--) {
    document.write("loop ", i, "<br />")
     }
```

- A. Twice
- ✔ B. Four times
- C. Three times
- D. Once
- E. Zero times

Answer Key: B

Feedback

The loop will execute 4 times.

Question 10 of 16 **Score: 2** **(of possible 2 points)**

Which of the following will correctly access the fifth element of an array named ***cool***?

- ✔ A. cool[4];
- B. cool(5);
- C. cool.array[4];
- D. cool[5];

Answer Key: A

Feedback

Remember, arrays begin numbering with 0. So, to access the fifth element of an array named cool we use cool[4]

Question 11 of 16 **Score: 1** **(of possible 2 points)**

A ✘ (program) loop is a block of code that allows you to repeat a selection of code a certain number of times.

Answer Key: for loop

Feedback

A FOR loop repeats X number of times.

Comments

Be specific - a FOR loop allows you to repeat a selection of code a certain number of times.

Question 12 of 16 **Score: 2** **(of possible 2 points)**

The window method, **setTimeout()**, lets you call a statement or function *before* a specified number of milliseconds have elapsed.

- True
- ✔ False

Answer Key: False

Feedback

setTimeout() lets you call a statement or function *after* a specified number of milliseconds have elapsed so this question is false.

Part 2 of 4 Part II Short Answer Score: 5 (of possible 5 points)

Read this question carefully and answer in the space provided below.

Question 13 of 16 Score: 5 (of possible 5 points)

The user enters 5 and 10. Using the code below, write the output in the space.

```
function writeInfo (first, second)    {
    first = eval(first);
    second = eval(second);
    var answer = first * second;
    document.write("<p>The answer is " + answer + ".</p>");
    }

function getInfo()    {
    num1 = prompt("Enter the first number", "0");
    num2 = prompt("Enter the second number", "0");
    writeInfo(num1, num2);
    }

getInfo();
```

Answer

The answer is 50.

View Model Answer

Feedback

The answer to this question will be discussed in the Midterm Review in next week's Online Guide.

Part 3 of 4 Part III Coding Score: 5 (of possible 5 points)

Follow the insructions carefully as your write you code for this section of the test.

Question 14 of 16 Score: 5 (of possible 5 points)

Create a new XHTML document called *name.html*.

Using JavaScript, get the user's first and last name before the page loads.
On the page, welcome them by name.
Using an alert, tell the visitor how many letters are in their combined names.

Answer

name.html

Part 4 of 4 Part III Coding Continued Score: 20 (of possible 20 points)

Question 15 of 16 Score: 10 (of possible 10 points)

Create a new document called *animals.html*

- Prompt the user for her three favorite animals.
- Assign the results to an array.
- Write the animals to the page in alphabetical order beginning with A.

Answer

animals.html

Feedback

The answer to this question will be discussed in next week's Online Guide

Comments

Good but think about ways you could reduce your code when you populate your array and make your output easier to read. Use a for loop.

Question 16 of 16 **Score: 10** **(of possible 10 points)**

Your company is selling a variety of widgets. The user has found the widget s/he wants and now wants to buy it. For testing purposes, assume the user wants to buy the *green* widget and that it costs *100*.

Create a new document called *widget.html*.

- Write a JS function to
  - find out the name and the price of the widget the user wants to buy.
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  - tell the user (on the page) the name of the widget ordered, how much it costs, the tax and the final price.

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The total amount is $ 108.

Thank you

Answer

widget.html

Feedback

The answer to this question will be discussed in next week's Online Guide.

Comments

Martha - your program works, but be careful - you are using local variables and you don't pass the values when you call the writeInfo function - if JS weren't so loosely typed, your program would fail...

either use global variables or pass the values - don't depend on local variables being recognized in other functions.

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