MIS2402 - Exam 2 - Study Guide

The format of the exam

The exam will be a hands-on programming challenge. The exam is composed of two programming challenges (A and B). You will have the entire class in which to complete the exam.

The exam is a closed book exam. Students will be permitted reference a single 8.5 x 11 page of handwritten notes. (You may use both sides of your 8.5 x 11 sheet of paper.)

Each question is meant to assess your comprehension of topics we have learned up to this point in time. Here's a list of topics we have covered so far:

1. JavaScript – Variables and Expressions
2. JavaScript – Functions
3. JavaScript – Conditional Statements
4. JavaScript – Numbers
5. JavaScript – Loops
6. JavaScript – Strings

You should complete your work on a lab/classroom computer and then upload it to the class server. You must do this before the end of the exam. Each challenge will be in its own folder – exam2a and exam2b. You should upload each folder as you complete it.

Be sure to put your work into your `wwwroot` folder and make sure that you can access your work by calling it up in a browser. This is called "testing".

Only your work uploaded to the class server will count towards your exam grade. Students providing missing / misplaced / misnamed work will receive significant point deductions.

Study tips

If you haven't been following along with the class, it is difficult to "catch up" and compensate for a lack of practice. Below is a list of the skills and concepts that the exercises and challenges were developing.

1. Basic proficiency with VS Code
2. Publishing work to the class server using BitVise or FileZilla
3. JavaScript Fundamentals
    a) Data types: numbers, strings, Booleans
    b) What are valid / invalid variable names? How to declare and assign a variable using `let`.
    c) Math operators: `+, -, *, /, %`
    d) Print the value to the console using `console.log()`
    e) Useful functions: `isNaN(), parseInt(), parseFloat()`
    f) Comparison operators: `==, !=, >, <, >=, <=`
    g) Logical operators: `!, &&, ||`
    h) The syntax of "`if`" statements (As in: "`if (){} else if (){} else{}`"). This includes the ability to compare variables and/or literal values.
    i) The syntax of a "for" statement. This includes the use of the "++" operator to add one to a variable. (As in: "`i++`").

j) Passing values into a function with parameters and sending a result back with return.
k) String variables as objects: the `.length` property, the `.toUpperCase()` method and the `.toLowerCase` () method
l) String variables manipulated like arrays. For example: if `sentence` has the value "Go Owls" then `sentence[0]` has the value "G".
m) Number variables as objects: the `.toFixed()` method.

4. Other
   a) The Google Developer Tools – what's a breakpoint? Use the F9 key to step through code.

Advisories

1. Transferring your exam work to another student, either deliberately or through negligence, will be considered cheating and result in a zero for the exam. **Incidents of academic dishonesty will be escalated to the University Disciplinary Committee**.
2. Only one screen per student will be permitted. Students found using more than one electronic device will earn a grade of zero on the exam.
3. You have the whole class period in which to complete the exam. If you do not upload your solution before the end of class, you will receive a zero on the exam.

How will your exam be graded?

For Part A. (50 points)

- If your work is uploaded to the right location, named correctly, and generates **all output** correctly, you will earn **50** points.
- Your instructor will test your code with multiple tests. If your work generates **almost all output** correctly (**only one** bad output), you will earn **45** points
- If your work fails multiple tests, ***or is uploaded to the wrong location on misdemo.temple.edu***, ***or if it is named incorrectly*** your score will **be 40** points **maximum** and may decrease from there based on the code you provided.
- Your instructor will deduct points in 5-point increments based on what is found/not found in your code.

For Part B (50 points)

Same as above

Your exam grade will be the sum of points earned in part A and part B