

Midterm #3 Practice Questions, CMSC198N

These questions will help you prepare for the midterm. Solutions will not be provided; however, you are welcome to discuss your solutions with TAs and your instructor during office hours. **Do not use a computer when writing JavaScript programs; write your solution on paper then verify your solutions with the computer.** That is the best way for you to prepare for the exam.

Miscellaneous

1. What is an event?
2. What is an event handler?
3. What is event-driven programming?
4. What is an object?
5. What is a property?
6. Mention one JavaScript object discussed in class.
7. What is a global variable?
8. Why do we want to avoid global variables?
9. What is the convention we want to follow for variable names?
10. The contents associated with a form can be sent using two methods: post and get. Describe each method, and describe pros/cons for each one.
11. Write the web page address (http...) for a student whose directory ID is batmanrobin.
12. What does document.getElementById allow us to do?
13. What is the DOM?
14. How are the DOM and JavaScript related?
15. What does NaN stands for?
16. What functionality is associated with parseFloat?
17. What functionality is associated with parseInt?
18. What functionality is associated with Number?
19. What is a cookie?
20. What is symmetric cryptography?
21. What is asymmetric cryptography?
22. Which colors are considered cool colors?
23. What is the color wheel?
24. What is a complementary color?
25. What is an analogous color?
26. Describe two approaches to assign colors in a web page.
27. What is https?
28. What is a digital certificate?
29. Describe three major aspects associated with usability?
30. In the domain of usability, what does it mean to create predictable links?
31. What are the disadvantages associated with frames?

Forms

1. Define a text field using the <input> tag that allows us to enter the name of a person. The size of the field is 20 characters.
2. What function can you use to retrieve the value associated with an <input> element?
3. Define a button using the <input> tag that allows us to call a function named "validate()" when the button is clicked on.
4. What is the purpose of the "action" attribute in the <form> tag?

Functions/Arrays

1. Write a function named **computeLetterGrade** that has the following specifications:

Prototype: function computeLetterGrade(score)

Parameter: score is a numeric value

Processing: the function will return a string representing a letter grade according to the following cutoffs:

score is 90 or above → “A”

score is less than 90 but higher than or equal to 80 → “B”

score is less than 80 but higher than or equal to 70 → “C”

other → “O”

2. Write a function named **sum** that has the following specifications:

Prototype: function sum(data)

Parameter: data is a one-dimensional array of integers

Processing: the function returns the sum of the values in the array

3. Write a function named **maximum** that has the following specifications:

Prototype: function maximum(data)

Parameter: data is a one-dimensional array of integers

Processing: the function returns the maximum value in the array.

4. Write a function named **linearize** that has the following specifications:

Prototype: function linearize(data)

Parameter: data is a two-dimensional array of strings

Processing: the function returns a one-dimensional array with all the elements in data. For example, if the two-dimensional array has the following values:

“Jose”, “Mary”

“Peter”

“Rose”, “Kathy”, “Jane”

the array returned by the function will be:

“Jose”, “Mary”, “Peter”, “Rose”, “Kathy”, “Jane”

5. Exercises associated with worksheets #5 and #6.