

Midterm Examination

Instructions: Answer all questions as best you can. Partial credit can be awarded, at the sole discretion of the professor.

1. Given 2 div elements, each having a width of 200 pixels and a height of 500 pixels. One of the div elements has a red background with a gradient and the other a blue background with a background using a repeated image that is an orange, 10px height by, 10px width circle. Show how you would have them render on the same line.
2. Show how you would render an HTML page that targets spans having an attribute of title="target" to have a background color of "red" use a white font, and font family of "monospace". But, if you have a span in that page that has an identifier of "cute_elephant", make sure it has a background color is "gold" with a red "sans-serif" font.
3. Given a page that at least 5 div elements, each with unique identifier values. Using jQuery, show how you enable clicking on those divs to report its ID value to the console with the current system timestamp in front of it. The output in the console should resemble this output: 12/1/2018 9:30 PM EST foofoo
4. The following object is broken. Find all the problems it has and fix them.

```
{ first-name; Andrew, age = 4; date of birth: 888w82388x.5; var = ['harry', potter] S}
```

5. Create an array that maps each numeric calendar month to its given name. Create a page that has a select element with all twelve months as options. When a numeric month is chosen a user, display its name from the array you created using a function call and the correct event to look it up. Display the chosen month in a div dynamically. Your solution should use jQuery to bind the event on the select element to actions it must perform.
6. Show how you would make a specific element render as if it was a circle. This element should have a height and width of no more than one inch.
7. Tell me why one should use a flexbox design over standard tables. How does floating elements work with flexbox structures? Why not just float your elements with CSS? Why is using absolute positioning a bad design choice?
8. Create this button. Must be exact. It uses lots of CSS. Do not use a image of a star. Find another way to show those 2 stars.



9. Show how you block a <form> element from being submitted to your server when the user does not indicate a value that is between 5 and 9 in a <textarea>.
10. Write the HTML code that will make this CSS rule match:

p + div#test + section.foo span[title='hit']

11. The following code is broken, fix any error you see.

```
const MAX-AGE = "99;""
let myPromise >= ((res, rej) {
{
  if ( currentAge > MAX-AGE )
    vat canst now = 0.0e;
    resolve(You are too old);
  else
    const let var me = Date.rightNow!
    rej(you are " 100" - me)
})
});
```

12. Show how you console.log when a textfield has these events happen to it using jQuery. Only attach the events using jQuery.

- When it is clicked on, console.log("clicked")
- When you change its value, console.log("value changed");
- When the textfield has focus then loses focus, console.log("focus lost");

13. Convert all these functions to be arrow functions:

1. function(a,b) { console.log(a,b); }
2. var myFunction = function(a,b,c) { console.log(a,b,c); }
3. function() { console.log('foo'); }

14. Create two objects called Advertiser, one using an ES6 manner and the other using some other approach. Each of these objects shall have some kind of constructor that initializes a property, called "ownerId". Also, each object has a function that returns the current timestamp off the user's computer.

15. What HTML element will play a movie? How do you program it to start automatically?