

Tufts University
Department of Computer Science
COMP 20: Web Programming
Fall 2018
Practice Quiz 2. Closed Book.

Quiz 2 will cover the following topics:

- Document Object Model (DOM)
- JavaScript objects and data structures
- Event and event handling (e.g., `navigator.geolocation`)
- JSON and JSON parsing
- First-class functions
- XMLHttpRequest
- `var` scoping
- Labs 5, 6, and 7
- Assignment 2
- Cookies and local storage

Google Maps API and jQuery will not be tested.

Practice Questions

1. Consider the following JavaScript. Assuming there are no errors in the code, the web browser supports geolocation detection, and `getMyLocation()` is called via `<body onload="getMyLocation()">`, what is the *most likely* output in the JavaScript console?

```
<script>
  function getMyLocation() {
    found = 0;
    if (navigator.geolocation) {
      console.log(found);
      navigator.geolocation.getCurrentPosition(function(position) {
        found = 1;
        console.log(found);
      });
    }
    console.log(found);
  }
</script>
```

2 Consider the following JavaScript program, what is the output in the JavaScript console?

```
var a = 6;
var b = 5;

function foo(a) {
    console.log(a * b);
}

function bar() {
    var a = 5;
    for (b = 0; b < 3; b++) {
        console.log(b * a);
    }
}

foo(3);
bar();
console.log(a);
console.log(b);
```

For question 3, consider the following code snippet:

```
str = '{"Person":"Carmen Sandiego","LastSeen":"Sealand"}';
obj = JSON.parse(str);
```

3 (2 points). Assuming that the JSON string is correct and that it can be parsed correctly, how can you print the following message to the JavaScript console:

```
Carmen Sandiego was last seen in Sealand
```

NOTE: `console.log("Carmen Sandiego was last seen in Sealand");` is not acceptable!

4 (2 points). TRUE or FALSE (circle one): Ordering is preserved for key-value pairs in an object including local storage in JavaScript.

Answers

1.

0
0
1

2.

15
0
5
10
6
3

3.

```
console.log(obj["Person"] + " was last seen in " + obj["LastSeen"]);
```

or

```
console.log(obj.Person + " was last seen in " + obj.LastSeen);
```

4. False.

<https://stackoverflow.com/questions/5525795/does-javascript-guarantee-object-property-order>