JavaScript 2

1. Why is it important to write clean code?
   1. To make sure that code is readable, maintainable, flexible, and expandable as development advances and more features are added.
2. What is the difference between good comments and bad comments?
   1. A good comment tells the reader why this particular code is doing whatever it is doing or explains what a section of code is about to do. A bad comment restates what a particular line of code is doing.
3. What is an array?
   1. An object that enables storing a collection of multiple items under a single variable name, and has members for performing common array operations
4. What are arrays useful for?
   1. Serve as a data structure or container, which can house any type of object
5. How do you access an array element?
   1. By specifying the index number of their position in the array
6. How do you change an array element?
   1. First by referencing it based on the corresponding index value and the using the = to assign or change the value of the element in that position.
7. What are some useful array properties?
   1. The array can grow or shrink depending on the number of elements inserted into the array. It also gives us a series of methods to transverse the array and organize our elements.
8. What are some useful array methods?
   1. indexOf(), append, push, pop, splice, shift
9. What are loops useful for?
   1. Going through a block of code a certain number of times depending on a condition.
10. 10.What is the break statement?
    1. Statement used to get out of a loop.
11. What is the continue statement?
    1. It doesn’t stop the whole loop. Instead, it stops the current iteration and forces the loop to start a new one
12. What is the DOM?
    1. Document Object Model
13. How do you target the nodes you want to work with?
    1. With the use of selectors
14. How do you create an element in the DOM?
    1. Document.createElement(tagName)
15. How do you add an element to the DOM?
    1. With the appendChild()
16. How do you remove an element from the DOM?
    1. Using the removeChild() method
17. How can you alter an element in the DOM?
    1. By using a reference to the element we can access its attributes and modify them.
18. When adding text to a DOM element, should you use textContent or innerHTML?
    1. textContent preferably since innerHTML can cause security concerns.
19. Where should you include your JavaScript tag in your HTML file when working with DOM nodes?
    1. In the head tag
20. How do “events” and “listeners” work?
    1. They are executed when a certain event happens, such as clicking on a button.
21. What are three ways to use events in your code?
    1. Inline, using a property, or in a listener
22. Why are event listeners the preferred way to handle events?
    1. Due to maintainability
23. What are the benefits of using named functions in your listeners?
    1. You can pass more data s parameters
24. How do you attach listeners to groups of nodes?
    1. We can get a nodelist of all of the items matching a specific selector with querySelectorAll('selector'). In order to add a listener to each of them we simply need to iterate through the whole list
25. What is the difference between the return values of querySelector and querySelectorAll?
    1. querySelector() methodcan only be used to access a single element while querySelectorAll() method can be used to access all elements which match with a specified CSS selector. To return all matches, querySelectorAll has to be used, while to return a single match, querySelector is used
26. What does a “nodelist” contain?
    1. NodeList is a collection of document nodes (element nodes, attribute nodes, and text nodes)
27. Explain the difference between “capture” and “bubbling”.
    1. Event capturing means propagation of event is done from ancestor elements to child element in the DOM while event bubbling means propagation is done from child element to ancestor elements in the DOM
28. What is the difference between objects and arrays?
    1. Objects are mutable data structure in javascript which is used to represent a ‘Thing’. This could be anything like cars, plants, person, community etc.
    2. Arrays are objects only in javascript. The major difference is that they store the data in an ordered collection in which the data can be accessed using a numerical index.They are also mutable and data can be modified at any index
29. How do you access object properties?
    1. Using dot operator or []