Homework July 31, 2021

MongoDB for Developers

1. What is MongoDB?

It’s a document oriented database.

2. What is a MongoDB Collection?

It’s where documents are held.

3. What is a Document and how do you use them in Mongodb?

It’s key value pairs. You use them to store your data.

4. What is the find() method used for?

It returns the first occurrence of the specified value.

5. What is the .pretty used for?

It makes code more readable.

6. What is the difference between SQL databases and Mongodb?

Mongodb is document oriented.

7. How would you add a document in a Mongodb database?

You use the insert() method.

8. How would you use a projection?

Use the $ in the projection document of the find() method or the findOne() method when you only need one particular array element in selected documents.

9. How do you run a local instance of mongo?

Type mongnd in the cmd prompt.

10. How would you delete a document?

Use the db.collection.deleteOne() method.

Introduction to JavaScript

1. How do you set variables in Javascript?

Using var, const, or let.

2. What is Javascript hoisting?

It’s how Javascript lifts certain code to run first.

3. List 3 Javascript datatypes.

Integer, Boolean, String.

4. What is the order of operations in Javascript?

PEMDAS like everything else.

5. How do you use conditionals in Javascript?

Begin with an If statement then else or elseif.

6. What is a switch statement, and how would you use one?

Use the switch() statement. Here’s an example from w3schools:

```

switch(expression) {  
  case x:  
    *// code block*    break;  
  case y:  
    *// code block*    break;  
  default:  
    // code block  
}

```

7. What is a ternary operator?

It’s a shortcut for an if statement that uses question marks, colons, and a semicolon at the end.

8. What is a function?

It’s a statement that performs a task when given input. It delivers and output.

9. What is a function argument?

They are the values passed to a function.

10. What is the "this" keyword in Javascript?

It refers to the data in the object it is in.

11. What is a Javascript array?

It’s an ordered list of values.

12. What is a Javascript object?

It is a container with key value pairs.

13. List 3 types of Javascript loops.

For if, For in, For each.

Modern JavaScript

1. Explain the const variable.

It is the variable type used when you do not want the variable to change.

2. What do you use for modern string interpolation in Javasript?

Backticks to signal the start and end of a string and ${} to put expressions into.

3. Explain an arrow function and how you might use one.

An arrow function expression is a compact form of a traditional function expression. It is used most times unless you’re wanting to point to a variable outside an object.

4. What is array destructuring?

It is unpacking values from arrays.

5. What is the Javascript spread operator what is it used for?

It expands all elements from an object or an array into a list.

6. What is Variable Deconstruction in Javascript?

It is destructuring.

7. How does the this keyword work with arrow functions?

It is like self in Python. It signals the data in the object it is in.

8. How do you pass a Javscript object as function arguments by leveraging decontruction?

You can do it using an arrow function. Here’s the example given in the lesson.

```

const user = {

name: 'Kristine',

email: 'kristine@devcamp.com'

}

const renderUser = ({ name, email }) => {

console.log(`${name}: ${email}`);

}

renderUser(user);

```

Diner Project so far

```

console.log ("Welcome to HotHamTawk!")

console.log ("Where there are only three options and a few sides but that's it because it's dirt cheap and we don't care. And we don't make change!")

console.log ( "Now pick your first item already, people are waiting!")

const render = type => {

const output = [`${type} Menu:`];

Object.values(menu[type]).forEach(({name, price}) => {

output.push(`${name} => $${price.toFixed(2)}`);

});

return output.join('\n');

}

const main = {

hotdog : {name : "Hotdog" , price : 1},

hamburger : {name : "Hamburger" , price : 2},

taco : {name : "Taco" , price : 1}

};

const side = {

beans : {name : "Beans" , price : 1},

chili : {name : "Chili" , price : 1},

soda : {name : "Soda" , price : 1}

};

const menu = {

'Main' : main,

'Side' : side

};

prompt(render('Main'));

// console.log(render('Side'));

function response (){

"Hamburger" || "hamburger" ? "Hotdog" || "hotdog" ? "Taco" || "taco" : "Hamburger got it. Now pick a side." : "Hotdog got it. Now pick a side." : "Taco got it. Now pick a side." : "Sure I'll decide for you. You'll get a hotdog. Now pick a side and try not to mess up again." ;

}

prompt(render('Side')

function response {

"Beans" || "beans" ? "Chili" || "chili" ? "Soda" || "soda" : "Beans got it. Now pick another side." : "Chili got it. Now pick another side." : "Soda got it. Now pick another side." : "Sure I'll decide for you. You'll get a soda. Now pick another side and try not to mess up again." ;

}

prompt(render('Side')

```