mindX
Technology & Startup School

Check-point
Session 5: Lab

Video 1.1 Learn how to create a random number from 0 to 1

For example:
First run: 0.67
Second run: 0.03

Video 1.2 Learn how to randomly pick an item from an array

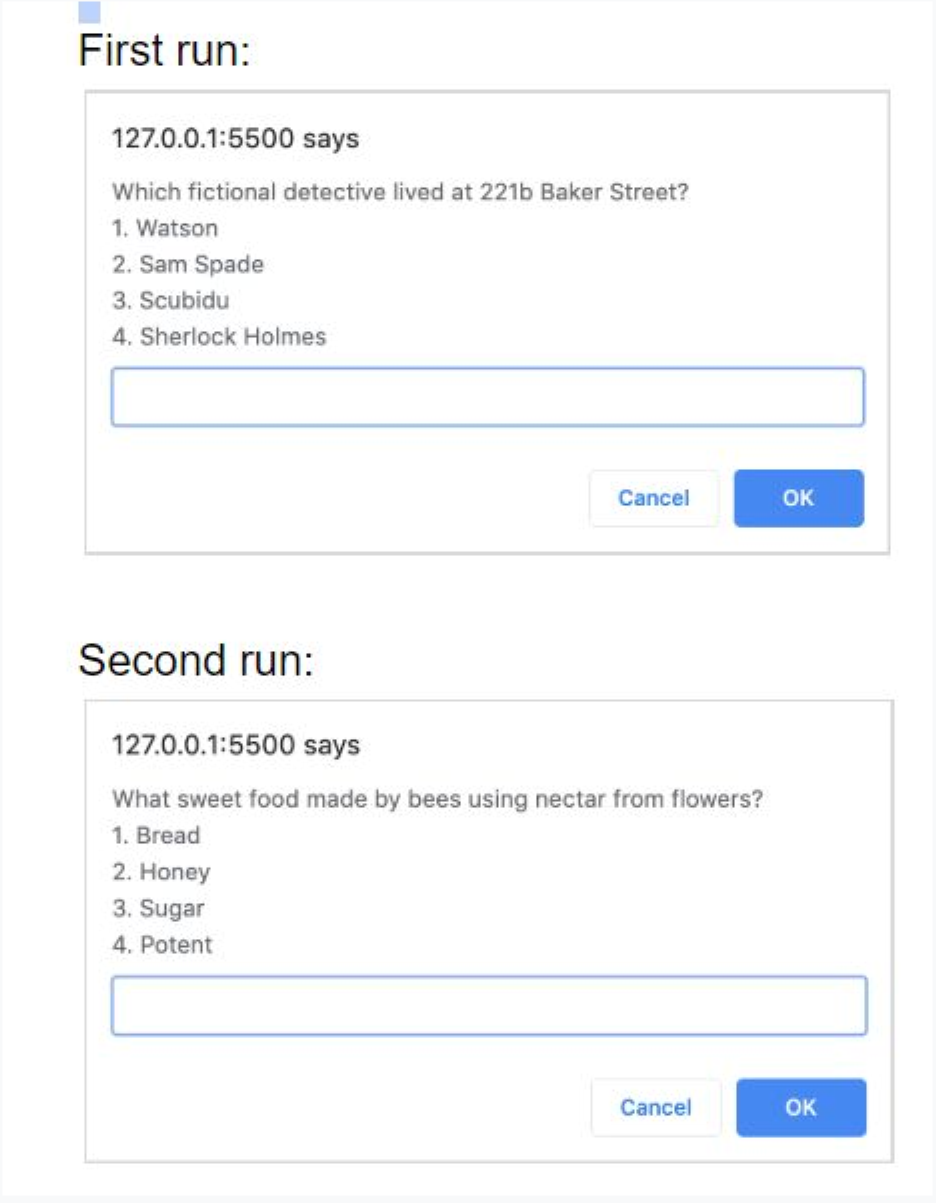
For example:
Array: [2, 5, 6, 9, 10]
First run: 5
Second run: 9

Video 1.3 C4EJSLab - Basic - part 3

Create a data structure to represent a list of quizzes, each quiz contains a question, 4 choices and rightChoice. Create it then ask your mentor to review your data before moving to the next exercise

Video 1.4 C4EJSLab - Basic - part 4

Write a script to randomly select a quiz from the list above, show them to users



First run:

127.0.0.1:5500 says

Which fictional detective lived at 221b Baker Street?
1. Watson
2. Sam Spade
3. Scubidu
4. Sherlock Holmes

Second run:

127.0.0.1:5500 says

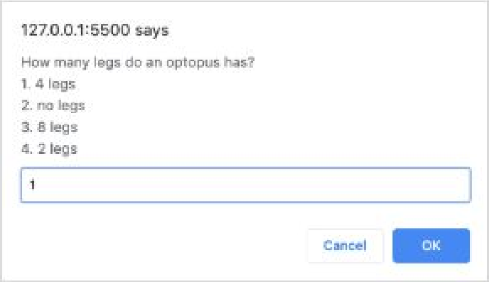
What sweet food made by bees using nectar from flowers?
1. Bread
2. Honey
3. Sugar
4. Potent

Video 1.5 C4EJSLab - Basic - part 5

Let users answer then let them know whether they are correct

Video 1.6 C4EJSLab - Basic - part 6

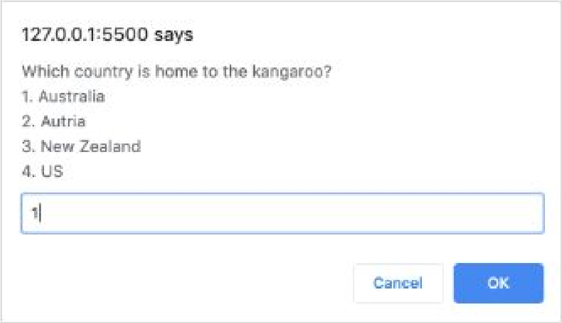
Let it run continuously, make sure each question only appears once, if the questions has run out, let users know (note that the result showing to users are omitted in the figure below)



127.0.0.1:5500 says

How many legs do an optopus has?
1. 4 legs
2. no legs
3. 8 legs
4. 2 legs

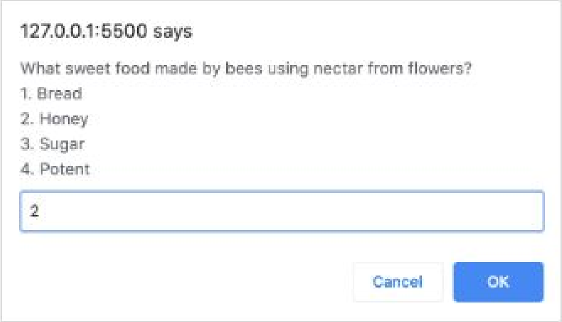
1



127.0.0.1:5500 says

Which country is home to the kangaroo?
1. Australia
2. Autria
3. New Zealand
4. US

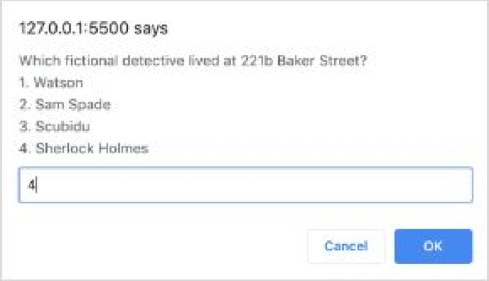
1



127.0.0.1:5500 says

What sweet food made by bees using nectar from flowers?
1. Bread
2. Honey
3. Sugar
4. Potent

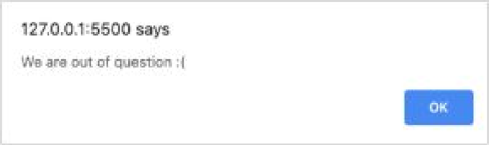
2



127.0.0.1:5500 says

Which fictional detective lived at 221b Baker Street?
1. Watson
2. Sam Spade
3. Scubidu
4. Sherlock Holmes

4

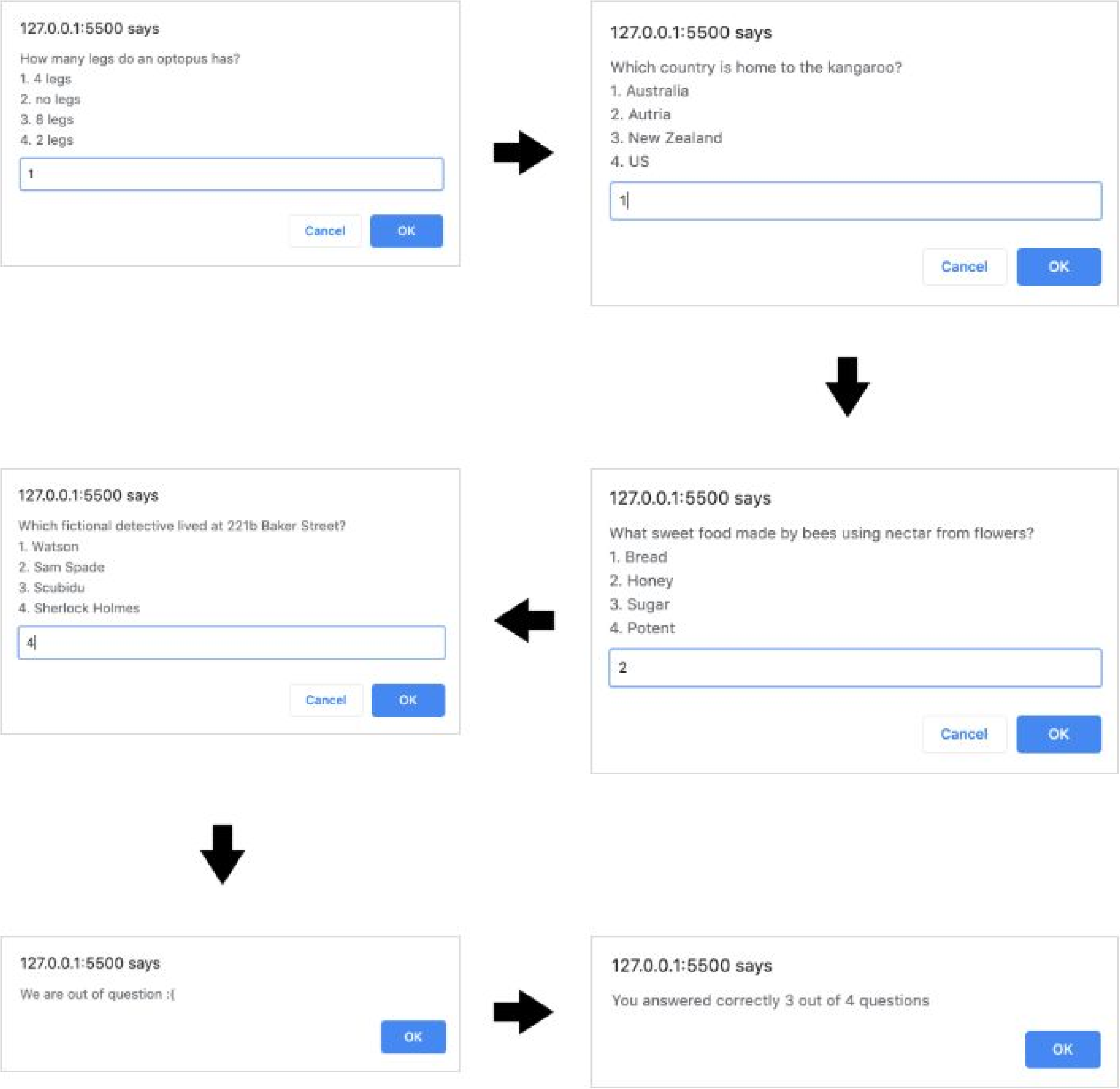


127.0.0.1:5500 says

We are out of question :(

Video 1.7 C4EJSLab - Basic - part 7

Calculate the total points of users



127.0.0.1:5500 says

How many legs do an optopus has?
1. 4 legs
2. no legs
3. 8 legs
4. 2 legs

1

127.0.0.1:5500 says

Which country is home to the kangaroo?
1. Australia
2. Autria
3. New Zealand
4. US

1

127.0.0.1:5500 says

What sweet food made by bees using nectar from flowers?
1. Bread
2. Honey
3. Sugar
4. Potent

2

127.0.0.1:5500 says

Which fictional detective lived at 221b Baker Street?
1. Watson
2. Sam Spade
3. Scubidu
4. Sherlock Holmes

4

127.0.0.1:5500 says

We are out of question :(

127.0.0.1:5500 says

You answered correctly 3 out of 4 questions

Video 1.8 C4EJSLab - Basic - part 8

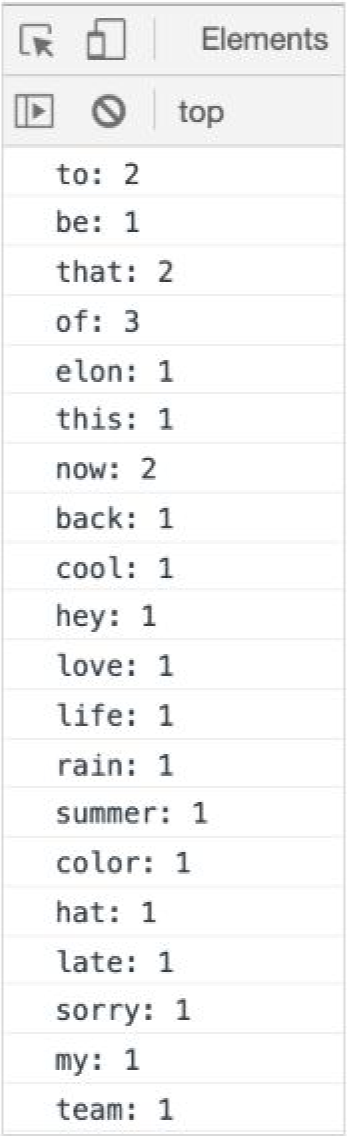
(Optional) Shuffle the choices each time you show users the quiz

Video 2.1 C4EJSLab - Basic - part 1

Here are the following list of words

['to', 'be', 'that', 'of', 'elon', 'to', 'this', 'now', 'back', 'cool', 'hey', 'love', 'of', 'life', 'that', 'rain', 'summer', 'color', 'now', 'of', 'hat', 'late', 'sorry', 'my', 'team']

Write a program to count the occurrences of the words



```
to: 2
be: 1
that: 2
of: 3
elon: 1
this: 1
now: 2
back: 1
cool: 1
hey: 1
love: 1
life: 1
rain: 1
summer: 1
color: 1
hat: 1
late: 1
sorry: 1
my: 1
team: 1
```

Video 2.2 C4EJSLab - Basic - part 2

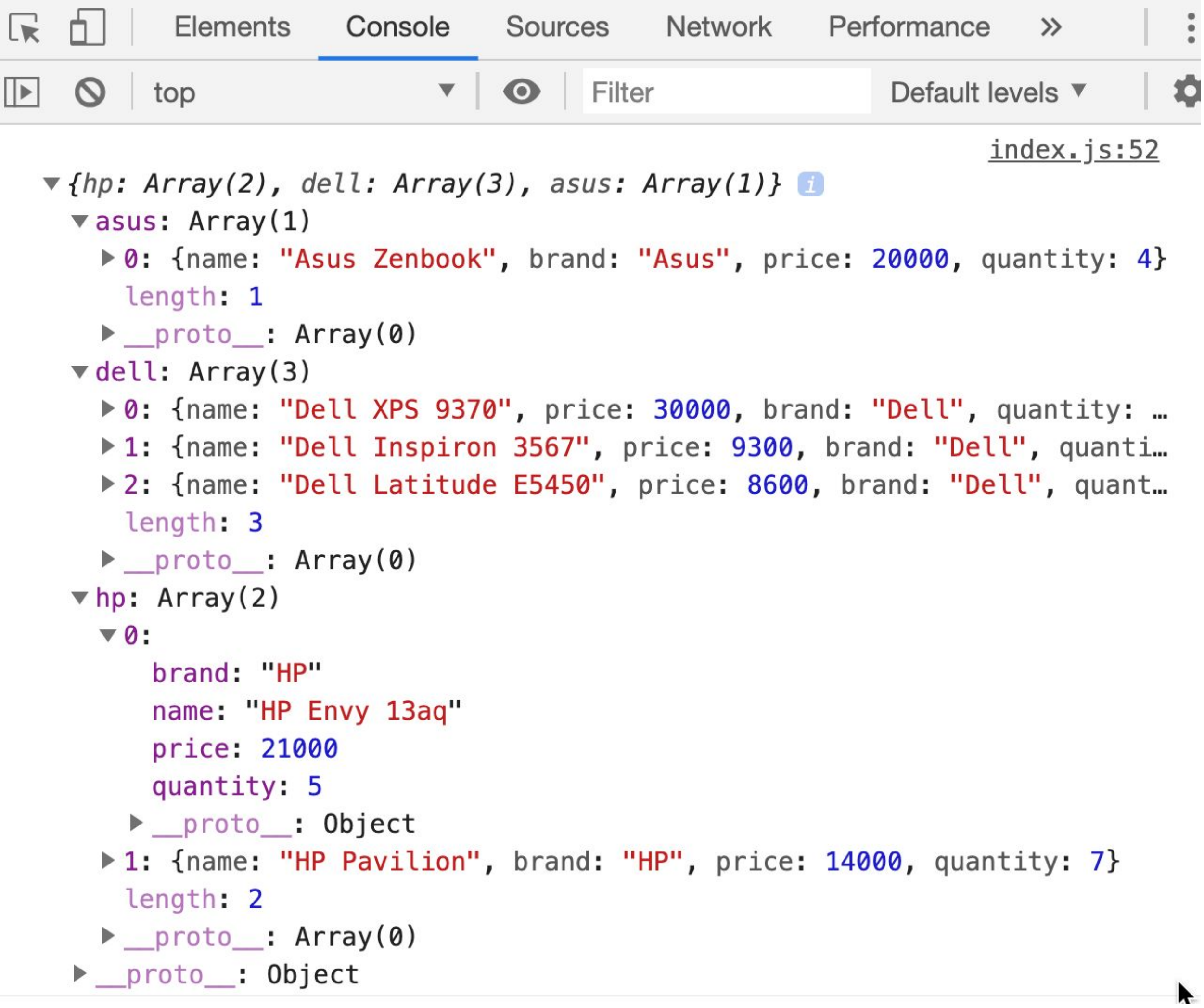
Create and array to store a list of laptops in inventory, the data is as follow

```
  const inventory = [
   {
       name: ‘HP Envy 13aq’,
       price: 21000,
       brand: ‘HP’,
       quantity: 5,
   },
   {
       name: ‘Dell XPS 9370’,
       price: 30000,
       brand: ‘Dell’,
       quantity: 1,
   },
   {
       name: ‘Dell Inspiron 3567’,
       price: 9300,
       brand: ‘Dell’,
       quantity: 12,
   },
   {
       name: ‘Dell Latitude E5450’,
       price: 8600,
       brand: ‘Dell’,
       quantity: 2,
   },

   {
       name: ‘Asus Zenbook’,
       brand: ‘Asus’,
       price: 20000,
       quantity: 4,
   },
   {
       name: ‘HP Pavilion’,
       brand: ‘HP’,

       price: 14000,

       quantity: 7,

   },]
```

Video 3.3 C4EJSLab - Basic - part 3

The above data is good to deal with all of the laptops equally, but when it comes to grouping the items by brand, it should be reshaped as below. Write a program to do the reshaping from inventory, from now, use the reshaped data to process

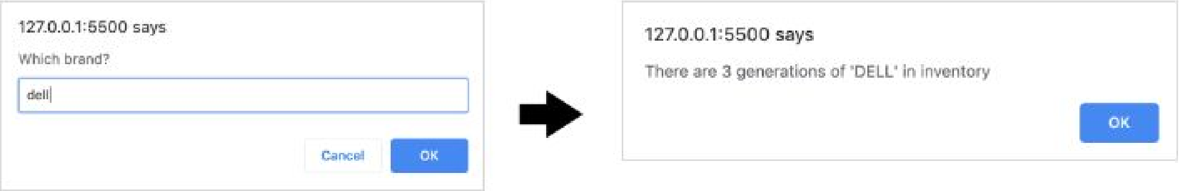
```
const inventory = [

 {

    name: ‘HP Envy 13aq’,

    price: 21000,

    brand: ‘HP’,

    quantity: 5,

 },

 {

    name: ‘Dell XPS 9370’,

    price: 30000,

    brand: ‘Dell’,

    quantity: 1,

 },

 {

    name: ‘Dell Inspiron 3567’,

    price: 9300,

    brand: ‘Dell’,

    quantity: 12,

 },

 {

    name: ‘Dell Latitude E5450’,
        price: 8600,
        brand: ‘Dell’,
        quantity: 2,
    },
    {
        name: ‘Asus Zenbook’,
        brand: ‘Asus’,
        price: 20000,
        quantity: 4,
    },
    {
        name: ‘HP Pavilion’,
        brand: ‘HP’,
        price: 14000,
        quantity: 7,
    },]

let inventoryByBrand = {}
// Your reshaping code here
console.log(inventoryByBrand);
// Result:
```



```
                                                                    index.js:52
▼{hp: Array(2), dell: Array(3), asus: Array(1)}
  ▼asus: Array(1)
    ▶0: {name: "Asus Zenbook", brand: "Asus", price: 20000, quantity: 4}
     length: 1
    ▶__proto__: Array(0)
  ▼dell: Array(3)
    ▶0: {name: "Dell XPS 9370", price: 30000, brand: "Dell", quantity: …
    ▶1: {name: "Dell Inspiron 3567", price: 9300, brand: "Dell", quanti…
    ▶2: {name: "Dell Latitude E5450", price: 8600, brand: "Dell", quant…
     length: 3
    ▶__proto__: Array(0)
  ▼hp: Array(2)
    ▼0:
       brand: "HP"
       name: "HP Envy 13aq"
       price: 21000
       quantity: 5
      ▶__proto__: Object
    ▶1: {name: "HP Pavilion", brand: "HP", price: 14000, quantity: 7}
     length: 2
    ▶__proto__: Array(0)
  ▶__proto__: Object
```

Video 2.4 C4EJSLab - Basic - part 4

From inventoryByBrand, write a program to count the generations of a certain brand in the inventory



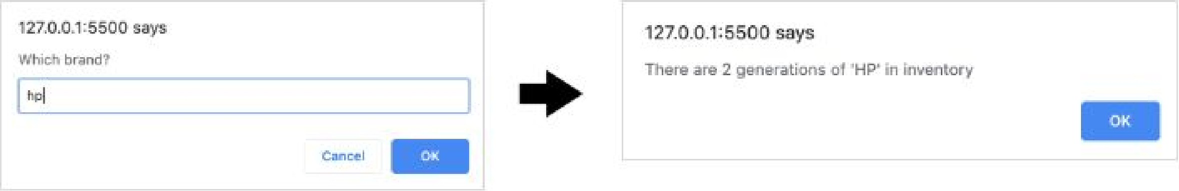
127.0.0.1:5500 says

Which brand?

dell

127.0.0.1:5500 says

There are 3 generations of 'DELL' in inventory



127.0.0.1:5500 says

Which brand?

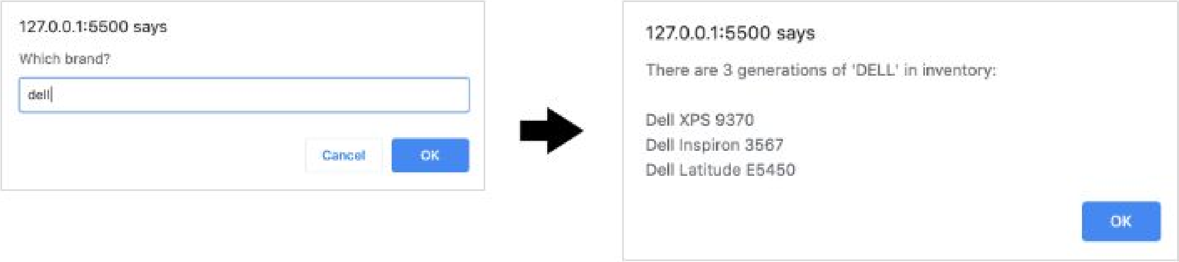
hp

127.0.0.1:5500 says

There are 2 generations of 'HP' in inventory

Video 2.5 C4EJSLab - Basic - part 5

Add more details in the statistics



127.0.0.1:5500 says

Which brand?

dell

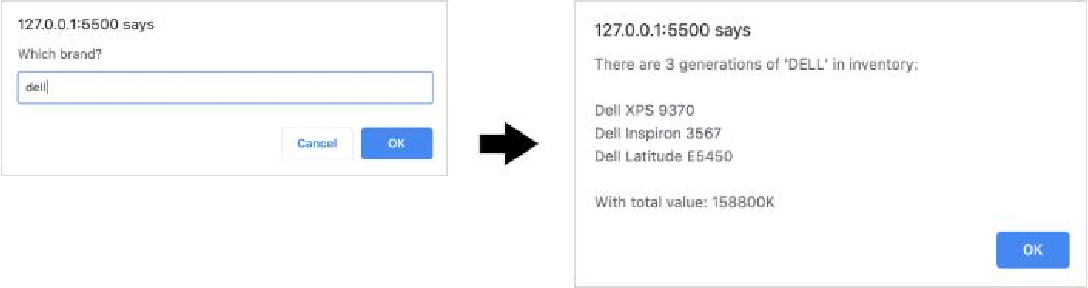
127.0.0.1:5500 says

There are 3 generations of 'DELL' in inventory:

Dell XPS 9370
Dell Inspiron 3567
Dell Latitude E5450

Video 2.6 C4EJSLab - Basic - part 6

Add more++ details in the statistics (30000 + 9300 * 12 + 8600 * 2 => 158800)



127.0.0.1:5500 says

Which brand?

dell

127.0.0.1:5500 says

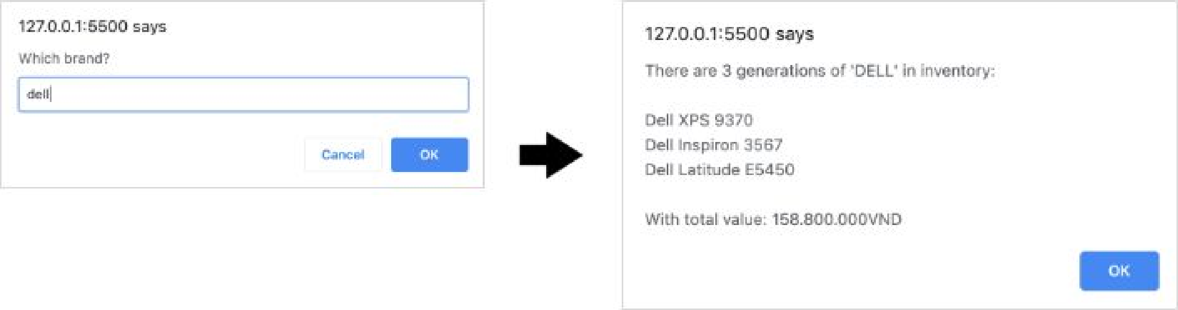
There are 3 generations of 'DELL' in inventory:

Dell XPS 9370
Dell Inspiron 3567
Dell Latitude E5450

With total value: 158800K

Video 2.7 C4EJSLab - Basic - part 7

Better concurrency display Google 'JS toLocaleString'



127.0.0.1:5500 says

Which brand?

dell

127.0.0.1:5500 says

There are 3 generations of 'DELL' in inventory:

Dell XPS 9370
Dell Inspiron 3567
Dell Latitude E5450

With total value: 158.800.000VND