

Another properties and methods of array:

5 July 2024

Shifting Elements

Shifting is equivalent to popping, but work in go n the first element instead of the last.

Java Script Array shift():

The shift() method removes the first array element and "shifts" all other elements to a lower index.

The shift() method returns the value that was "shifted out".

```
let user = ["NAME=Amanpreetkaur", CRN=2215011, URN=2203398, "BRANCH=CSE", PhoneNo=9654532598]
console.log(user.shift());
console.log("Original list:", user);
```

Output:

```
PS C:\Users\dell\Documents\Javascript.js> node
"c:\Users\dell\Documents\Javascript.js\array1.js"
```

```
NAME=Amanpreetkaur
```

```
Original list:['CRN=2215011','URN=2203398','BRANCH=CSE','PhoneNo=9654532598']
```

JavaScript Array unshift()

The unshift() method adds a new element to an array (at the beginning), and "unshifts" older elements.

The unshift() method returns the new array length.

```

let user= [
"NAME:Amanpreetkaur","CRN:2215011","URN:2203398","BRANCH:CSE","PhoneNo:9654532598"
]
console.log(user.shift());// shift( shift at the front)
console.log("Original list:",user);
console.log("Pop:",user.pop());// pop (pop at the end)
user.unshift("ROOM:G13");//unshift(unshiftatthefront)
console.log(user);

```

Output:

PS C:\Users\dell\Documents\Javascript.js> node
"c:\Users\dell\Documents\Javascript.js\array1.js"

NAME:Amanpreetkaur

Originallist:['CRN:2215011','URN:2203398','BRANCH:CSE',
'PhoneNo:9654532598']

Pop:PhoneNo:9654532598

['ROOM:G13','CRN:2215011','URN:2203398','BRANCH:CSE']

Changing Elements

Array elements are accesse dusing their **index number**.

```

let user= [
"NAME:Amanpreetkaur","CRN:2215011","URN:2203398","BRANCH:CSE","PhoneNo:9654532598"
]
//console.log(user.shift());//shift(shiftatthefront)
//console.log("Originallist:",user);
//console.log("Pop:",user.pop());//pop(popattheend)
//user.unshift("ROOM:G13");//unshift(unshiftatthefront)
//console.log(user);
//user.push("LAB:DSLALB");//push(pushattheend) console.log(user);
console.log(user[0]);
console.log(user[1]);
console.log(user[2]);
console.log(user[3]);
console.log(user[user.length-1]);

```

Output:

PSC:\Users\dell\Documents\Javascript.js>nodearray1.js Debugger attached.

```
[  
  'NAME:Amanpreetkaur',  
  
  'CRN:2215011',  
  'URN:2203398',  
  'BRANCH:CSE',  
  'PhoneNo:9654532598'  
]  
NAME:Amanpreetkaur  
CRN:2215011  
URN:2203398  
BRANCH:CSE  
PhoneNo:9654532598
```

Splicing and Slicing Arrays

The splice() method adds new items to an array.

The slice() methods lices out a piece of an array.

Java Script Array splice()

The splice() method can be used to add new items to an array.

```
let user= [  
  "NAME:Amanpreetkaur", "CRN:2215011", "URN:2203398", "BRANCH:CSE", "PhoneNo:9654532598"  
]  
user.splice(2,2,"Lemon","Kiwi");  
console.log(user);
```

Output:

```
PS C:\Users\dell\Documents\Javascript.js> node  
"c:\Users\dell\Documents\Javascript.js\array1.js"[  
  'NAME:Amanpreetkaur',  
  'CRN:2215011',
```

'Lemon',

```
'Kiwi',  
'PhoneNo:9654532598'  
]
```

Java Script Array slice()

The slice() methods lices out a piece of an array into a new array.

```
let user= [  
"NAME:Amanpreetkaur","CRN:2215011","URN:2203398","BRANCH:CSE","PhoneNo:9654532598"  
]  
let citrus=user.slice(1,4);  
console.log(citrus);  
console.log(user)
```

Output:

```
PSC:\Users\dell\Documents\Javascript.js>node  
"c:\Users\dell\Downloads\array1.js"  
[ 'CRN:2215011','URN:2203398','BRANCH:CSE'] [  
  'NAME:Amanpreetkaur',  
  'CRN:2215011',  
  'URN:2203398',  
  'BRANCH:CSE',  
  'PhoneNo:9654532598'  
]
```

JavaScript Array map():

```
let user=[  
  {  
    NAME:"Amanpreetkaur",  
    CRN:"2215011",  
    URN:"2203398",  
    BRANCH:"CSE",  
    PhoneNo:"9654532598"  
  },  
  {  
    NAME:"Amanpreetkaur",  
    CRN:"2215011",  
    URN:"2203398",  
    BRANCH:"CSE",
```

```

        PhoneNo: "9654532598"
      },
      {
        NAME: "Amanpreetkaur",
        CRN: "2215011",
        URN: "2203398",
        BRANCH: "CSE",
        PhoneNo: "9654532598"
      },
      {
        NAME: "Amanpreetkaur",
        CRN: "2215011",
        URN: "2203398",
        BRANCH: "CSE",
        PhoneNo: "9654532598"
      }
    ]
  }
}

user.map((myusers)=>{
  //console.log(myusers.NAME,myusers.CRN,myusers.URN,myusers.BRANCH,myusers.PhoneNo);
  console.log(`Mynameis${myusers.NAME}CRNis${myusers.CRN}andURNis
  ${myusers.URN}MyBRANCHis${myusers.BRANCH}Phonenumberis
  ${myusers.PhoneNo}`);
});

```

Output:

PSC:\Users\dell\Documents\Javascript.js>nodearray1.js Debugger

attached.

Myname isAmanpreetkaurCRNis2215011andURN is2203398MyBRANCH is
CSE Phone number is 9654532598

Myname isAmanpreetkaurCRNis2215011andURN is2203398MyBRANCH is
CSE Phone number is 9654532598

Myname isAmanpreetkaurCRNis2215011andURN is2203398MyBRANCH is
CSE Phone number is 9654532598

Myname isAmanpreetkaurCRNis2215011andURN is2203398MyBRANCH is
CSE Phone number is 9654532598

Waiting for the debugger to disconnect...

Description

map() creates a new array from calling a function for every array element.

map() does not execute the function for empty elements.

map() does not change the original array.

Javascript Object literal:

An object literal is a list of property names:values inside the curly braces { }.

```
{  
  NAME: "Amanpreetkaur",  
  CRN: "2215011",  
  URN: "2203398",  
  BRANCH: "CSE",  
  PhoneNo: "9654532598"  
};  
console.log(user);  
console.log(user.NAME);  
console.log(user.BRANCH);
```