

TRAINING REPORT (TR-102)

DAY: -20 (5 JULY 2024)

Another properties and methods of array: -

Shifting Elements: - Shifting is equivalent to popping, but working on the first element instead of the last.


JavaScript 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".

EXAMPLE: -

```
1 let user= ['NAME=GURSHARAN KAUR','CRN=2215052','URN=2203441',"BRANCH=CSE"]
2 console.log("Before Shifting:-",user);
3 console.log(user.shift()); console.log("After Shifting",user);
4 |
```

Generate 

OUTPUT: -

```
Before Shifting:- [ 'NAME=GURSHARAN KAUR', 'CRN=2215052', 'URN=2203441', 'BRANCH=CSE' ]
NAME=GURSHARAN KAUR
After Shifting [ 'CRN=2215052', 'URN=2203441', 'BRANCH=CSE' ]
```

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.

EXAMPLE: -

```
1 let user= [ "NAME:GURSHARAN KAUR","CRN:2215052","URN:2203441","BRANCH:CSE","PhoneNo:8803837266 " ]
2 console.log(user.shift());// shift( shift at the front)
3 console.log("After Shifting:",user);
4 console.log("Pop:",user.pop());// pop (pop at the end)
5 console.log("After Pop:",user);
6 user.unshift("ROOM:G13");// unshift(unshift at the front)
7 console.log("After Unshift:",user);
8
9
```

OUTPUT: -

```
NAME:GURSHARAN KAUR  
After Shifting: [ 'CRN:2215052', 'URN:2203441', 'BRANCH:CSE', 'PhoneNo:8803837266 ' ]  
Pop: PhoneNo:8803837266  
After Pop: [ 'CRN:2215052', 'URN:2203441', 'BRANCH:CSE' ]  
After Unshift: [ 'ROOM:G13', 'CRN:2215052', 'URN:2203441', 'BRANCH:CSE' ]
```

Changing Elements: - Array elements are accessed using their **index number**

EXAMPLE: -

```
1 let user= [ "NAME:GURSHARAN KAUR","CRN:2215052","URN:2203441","BRANCH:CSE","PhoneNo: 8803837266"]  
2 console.log(user[0]); console.log(user[1]); console.log(user[2]); console.log(user[3]);  
3 console.log(user[user.length-1]);  
4
```

OUTPUT: -

```
NAME:GURSHARAN KAUR  
CRN:2215052  
URN:2203441  
BRANCH:CSE  
PhoneNo: 8803837266
```

Splicing and Slicing Arrays: -

- The **splice ()** method adds new item to an array.
- The **slice ()** method slices out a piece of an array.

JavaScript Array Splice (): -

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

EXAMPLE: -

```
1 let user= [ "NAME:GURSHARAN KAUR","CRN:2215052","URN:2203441",]  
2 user.splice(3, 2, "BRANCH:CSE","PhoneNo:8803837266 ");  
3 console.log(user);  
4
```

OUTPUT: -

```
[  
  'NAME:GURSHARAN KAUR',  
  'CRN:2215052',  
  'URN:2203441',  
  'BRANCH:CSE',  
  'PhoneNo:8803837266 '  
]
```

JavaScript Array slice (): -

The slice () method slices out a piece of an array into a new array.

EXAMPLE: -

```
1 let user= [ "NAME:GURSHARAN KAUR","CRN:2215052","URN:2203441","BRANCH:CSE","PhoneNo:9654532598 "  
2 let citrus = user.slice(1, 4); console.log(citrus);  
3 console.log(user)  
4
```

OUTPUT: -

```
[ 'CRN:2215052', 'URN:2203441', 'BRANCH:CSE' ]  
[  
  'NAME:GURSHARAN KAUR',  
  'CRN:2215052',  
  'URN:2203441',  
  'BRANCH:CSE',  
  'PhoneNo:9654532598 '  
]
```

JavaScript Array map (): -

EXAMPLE: -

```
1 let user= [  
2 {  
3   NAME:"GURSHARAN KAUR", CRN:"2215052", URN:"2203441", BRANCH:"CSE",  
4 },  
5 {  
6   NAME:"GURSHARAN KAUR", CRN:"2215052", URN:"2203441",BRANCH:"CSE",  
7 },  
8 {  
9   NAME:"GURSHARAN KAUR", CRN:"2215052", URN:"2203441", BRANCH:"CSE",  
10 },  
11 {  
12   NAME:"GURSHARAN KAUR", CRN:"2215052", URN:"2203441", BRANCH:"CSE",  
13 }  
14 ]  
15 user.map((myusers) => {  
16   //console.log(myusers.NAME,myusers.CRN,myusers.URN,myusers.BRANCH,myusers.PhoneNo);  
17   console.log(`NAME: - ${myusers.NAME} CRN: - ${myusers.CRN} URN: -  
18   ${myusers.URN} BRANCH: - ${myusers.BRANCH}`);  
19 });  
20
```

OUTPUT: -

```
NAME: - GURSHARAN KAUR CRN: - 2215052 URN: -2203441 BRANCH: - CSE  
NAME: - GURSHARAN KAUR CRN: - 2215052 URN: -2203441 BRANCH: - CSE  
NAME: - GURSHARAN KAUR CRN: - 2215052 URN: -2203441 BRANCH: - CSE  
NAME: - GURSHARAN KAUR CRN: - 2215052 URN: -2203441 BRANCH: - CSE
```

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 Objects Literal: -

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

EXAMPLE: -

```
1 let user = {  
2   NAME: "GURSHARAN KAUR",  
3   CRN: "2215052",  
4   URN: "2203441",  
5   BRANCH: "CSE",  
6   PhoneNo: "8803837266"  
7 };  
8  
9 console.log(user);  
10 console.log(user.NAME);  
11 console.log(user.BRANCH);
```

OUTPUT: -

```
{  
  NAME: 'GURSHARAN KAUR',  
  CRN: '2215052',  
  URN: '2203441',  
  BRANCH: 'CSE',  
  PhoneNo: '8803837266'  
}  
GURSHARAN KAUR  
CSE
```