



Amrutvahini College of Engineering, Sangamner
Department of Electronics and Telecommunication Engineering
Subject: JavaScript (Elective-III) (BE, E&TC)

Experiment No.: 07

Date of Performance:

TITLE: Program for appending an object to an array and will check if an object is an array.

Aim: Program for appending an object to an array and will check if an object is an array.

Problem Statement:

Write a JavaScript program that will append an object to an array and will check if an object is an array

Objective:

1. Learn methods to insert object in array
2. Learn method related to object
3. Apply different methods to manipulate array elements

Hardware Requirement:

Any CPU with Pentium Processor or similar, 256 MB RAM or more, 1 GB Hard Disk or more

Software Requirement:

- **IDE Software:** Visual Studio Code / Sublime Text3
- **Web Browser:** Google Chrome / Firefox/ Internet Explorer.
- **Operating System:** Windows 7/10, Linux or MAC OS

Theory:

There are 3 popular methods which can be used to insert or add an object to an array.

push()

splice()

unshift()

Method 1: push() method of Array

The push() method is used to add one or multiple elements to the end of an array. It returns the new length of the array formed. An object can be inserted by passing the object as a parameter to this method. The object is hence added to the end of the array

Syntax:

array.push(objectName)

Method 2: splice() method

The splice method is used to both remove and add elements from a specific index. It takes 3 parameters, the starting index, the number of elements to delete and then the items to be added to the array. An object can only be added without deleting any other element by specifying the second parameter to 0.

The object to be inserted is passed to the method and the index where it is to be inserted is specified. This inserts the object at the specified index.

Syntax:

```
arr.splice(index, 0, objectName)
```

Method 3: unshift() method

The unshift() method is used to add one or multiple elements to the beginning of an array. It returns the length of the new array formed. An object can be inserted by passing the object as a parameter to this method. The object is hence added to the beginning of the array.

Syntax:

```
arr.unshift(object);
```

Conclusion:

Review Questions:

1. Write any three-method related to array manipulation
2. Explain the use of isArray() method related with Array object.
3. How to convert two-dimensional array into an object in JavaScript?
4. How to create an object from two arrays in JavaScript?

REFERENCES:

1. Jon Duckett, "JavaScript & JQuery: Interactive Front-End Web Development", Wiley, ISBN-13. 978-1118531648
2. David Flanagan, "JavaScript: The Definitive Guide", O'Reilly, 6th Edition, ISBN: 9781491952023.
3. Mike Mackgrath, "Javascrpts in easy steps" Dreamtech