**CLASS ASSIGNMENT SEPTEMBER 19**

**CODE SNIPPET**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Understanding "this" in JavaScript</title>

    <style>

        body {

            font-family: Arial, sans-serif;

            margin: 20px;

            display: flex;

            flex-direction: row;

        }

        button {

            margin: 10px;

        }

    </style>

</head>

<body>

    <div>

        <h1>Understanding "this" in JavaScript</h1>

        <h3>1. "this" inside an object method</h3>

        <button onclick="obj.showThis()">Click to see 'this' in an object method</button>

        <h3>2. "this" by itself</h3>

        <button onclick="showGlobalThis()">Click to see 'this' by itself</button>

        <h3>3. "this" inside a regular function</h3>

        <button onclick="regularFunction()">Click to see 'this' in a function</button>

        <h3>4. "this" in a function under strict mode</h3>

        <button onclick="strictModeFunction()">Click to see 'this' in strict mode</button>

        <h3>5. "this" in an event handler</h3>

        <button id="eventButton">Click me to see 'this' in an event handler</button>

        <h3>6. Reassigning "this" using call(), apply(), and bind()</h3>

        <button onclick="useCall()">Click to see 'this' with call()</button>

        <button onclick="useApply()">Click to see 'this' with apply()</button>

        <button onclick="useBind()">Click to see 'this' with bind()</button>

    </div>

    <div>

        <img src="image.png" height="700px">

    </div>

    <script>

        var globalObject = 'This is the global object';

        // 1. this inside an object method

        const obj = {

            name: 'Inside of an object method',

            showThis: function () {

                console.log(this);  // 'this' refers to the obj itself

                alert(this.name);

            }

        };

        // 2. this by itself

        function showGlobalThis() {

            var globalObject = 'This is the local object';

            alert(`This by itself refers to the global object which is: ${this.globalObject} but the local object is: ${globalObject}`);

        }

        // 3. this inside a regular function

        function regularFunction() {

            var globalObject = 'This is the local object inside function';

            function innerFunction() {

                alert(`This inside a function refers to the global object which is: ${this.globalObject} but the local object is: ${globalObject}`);

            }

            innerFunction();

        }

        // 4. this inside a function in strict mode

        function strictModeFunction() {

            'use strict';

            function innerFunction() {

                alert(`In strict mode, "this" is: ${this}`);

            }

            innerFunction();

        }

        // 5. this inside an event handler

        document.getElementById('eventButton').addEventListener('click', showEventThis);

        function showEventThis() {

            alert(`In an event, "this" refers to the element: ${this.id}`);

        }

        // 6. Reassigning this using call(), apply(), and bind()

        const usingCall = {

            name: 'Object used for call()'

        };

        const usingApply = {

            name: 'Object used for apply()'

        };

        const usingBind = {

            name: 'Object used for bind()'

        };

        function showThisReassigned() {

            alert(`"this" is reassigned to: ${this.name}`);

        }

        function useCall() {

            showThisReassigned.call(usingCall);

        }

        function useApply() {

            showThisReassigned.apply(usingApply);

        }

        function useBind() {

            const boundFunction = showThisReassigned.bind(usingBind);

            boundFunction();

        }

    </script>

</body>

</html>

**GitHub:** [**https://github.com/DMegatron/Full-Stack-Assignment-September-19**](https://github.com/DMegatron/Full-Stack-Assignment-September-19)