**ADVANCE JAVASCRIPT**

**MODULE: 1 (Introduction and Code Quality)**

1.**Write a program to Show an alert**

* <!DOCTYPE html>

<html>

<head>

<title>Alert Example</title>

</head>

<body>

<script>

alert("This is an alert!");

</script>

</body>

</html>

**2.What will be the result for these expressions?**

**1. 5 > 4 🡺 true**

**2. "apple" > "pineapple" 🡺false**

**3. "2" > "12" 🡺true**

**4. undefined == null 🡺true**

**5. undefined === null 🡺false**

**6. null == "\n0\n" 🡺false**

**7. 7. null === +"\n0\n" 🡺false**

**3.** **Will alert be shown? if ("0") { alert( 'Hello'); }**

**🡺 yes**

**4.** **What is the code below going to output? alert( null || 2 || undefined );**

**🡺output is 2**

**5.** **The following function returns true if the parameter age is greater than 18. Otherwise it asks for a confirmation and returns its result:**

**function**

**checkAge(age)**

**{**

**if (age> 18) { return true; }**

**else**

**{ // ...return confirm (‘did parents allow you?'); } }**

**🡺function checkAge(age) {**

**if (age > 18) {**

**return true;**

**} else {**

**return confirm("Did parents allow you?");**

**}**

**}**

**6.** **Replace Function Expressions with arrow functions in the code below: Function ask(question, yes, no) { if (confirm(question))yes(); else no(); } ask("Do you agree?", function() { alert("You agreed."); }, function() { alert("You canceled the execution."); } }**

**🡺const ask = (question, yes, no) => {**

**if (confirm(question)) {**

**yes();**

**} else {**

**no();**

**}**

**};**

**ask("Do you agree?", () => {**

**alert("You agreed.");**

**}, () => {**

**alert("You canceled the execution.");**

**});**

**MODULE: 2 (Data Types and Objects)**

**1. Write the code, one line for each action:**

**a) Create an empty object user.**

**🡺let user = {};**

**b) Add the property name with the value John.**

**🡺user.name = "meet";**

**c) Add the property surname with the value Smith.**

**🡺user.surname = "panchal";**

**d) Change the value of the name to Pete.**

**🡺user.name = "meet";**

**e) Remove the property name from the object.**

**🡺delete user.name;**

**2.** **Is array copied? let fruits = ["Apples", "Pear", "Orange"]; // push a new value into the "copy" let shoppingCart = fruits; shoppingCart.push("Banana"); // what's in fruits? alert( fruits.length ); // ?**

**🡺**No, the array is not copied. When you do **shoppingCart = fruits**, you are not creating a new array; instead, you are creating a reference to the same array in memory. Therefore, any changes made to **shoppingCart** will also affect the **fruits** array.\

**3.Map to names**

**let john = { name: "John", age: 25 }; let pete = { name: "Pete", age: 30 }; let mary = { name: "Mary", age: 28 }; let users = [ john, pete, mary ]; let names = /\* ... your code \*/ alert( names ); // John, Pete, Mary**

**🡺** **let john = { name: "maical", surname: "jordan", id: 1 };**

**let pete = { name: "ethen", surname: "Hunt", id: 2 };**

**let mary = { name: "mical", surname: "jordan", id: 3 };**

**let users = [maical,ethen,michal];**

**let names = users.map(user => user.name);**

**alert(names);**

**4.** **Map to objects let john = { name: "John", surname: "Smith", id: 1 }; let pete = { name: "Pete", surname: "Hunt", id: 2 }; let mary = { name: "Mary", surname: "Key", id: 3 }; let users = [ john, pete, mary ]; let usersMapped = /\* ... your code ... \*/**

**🡺 let john = { name: "maical", surname: "jordan", id: 1 };**

**let pete = { name: "ethen", surname: "Hunt", id: 2 };**

**let mary = { name: "mical", surname: "jordan", id: 3 };**

**let users = [john, pete, mary];**

**let usersMapped = users.map(user => {**

**return {**

**fullName: `${user.name} ${user.surname}`,**

**id: user.id**

**};**

**});**

**console.log(usersMapped);**

**MODULE: 3 (Document, Event and Controls)**

**1**. **Create a program to hide/show the password**

**🡺** **<input type="password" class="password-input" id="password">**

**<button id="togglePassword">Toggle Password</button>**

**<script>**

**const passwordInput = document.getElementById('password');**

**const toggleButton = document.getElementById('togglePassword');**

**toggleButton.addEventListener('click', () => {**

**if (passwordInput.type === 'password') {**

**passwordInput.type = 'text';**

**} else {**

**passwordInput.type = 'password';**

**}**

**});**

**</script>**

**2. Create a program that will select all the classes and loop over and whenever i click the button the alert should show**

**🡺** **<!-- HTML -->**

**<button id="showAlertButton">Show Alert</button>**

**<div class="myClass">Element 1</div>**

**<div class="myClass">Element 2</div>**

**<div class="myClass">Element 3</div>**

**<div class="myClass">Element 4</div>**

**<script>**

**document.getElementById('showAlertButton').addEventListener('click', function () {**

**const elementsWithClass = document.querySelectorAll('.myClass');**

**elementsWithClass.forEach(element => {**

**alert(element.textContent); // Show alert with the content of each element**

**});**

**});**

**</script>**

**3. Create a responsive header using proper JavaScript**

**🡺** **<!DOCTYPE html>**

**<html>**

**<head>**

**<style>**

**/\* CSS for styling the header \*/**

**.header {**

**background-color: #333;**

**color: #fff;**

**padding: 10px;**

**display: flex;**

**justify-content: space-between;**

**align-items: center;**

**}**

**.logo {**

**font-size: 24px;**

**font-weight: bold;**

**}**

**.nav {**

**display: flex;**

**list-style: none;**

**margin: 0;**

**padding: 0;**

**}**

**.nav li {**

**margin-right: 20px;**

**}**

**/\* CSS for mobile navigation \*/**

**.mobile-nav {**

**display: none;**

**}**

**@media (max-width: 768px) {**

**.nav {**

**display: none;**

**}**

**.mobile-nav {**

**display: block;**

**}**

**}**

**</style>**

**</head>**

**<body>**

**<div class="header">**

**<div class="logo">Your Logo</div>**

**<ul class="nav">**

**<li><a href="#">Home</a></li>**

**<li><a href="#">About</a></li>**

**<li><a href="#">Services</a></li>**

**<li><a href="#">Contact</a></li>**

**</ul>**

**<div class="mobile-nav">**

**<button id="toggleMobileNav">Menu</button>**

**<ul id="mobileNavList" class="nav">**

**<li><a href="#">Home</a></li>**

**<li><a href="#">About</a></li>**

**<li><a href="#">Services</a></li>**

**<li><a href="#">Contact</a></li>**

**</ul>**

**</div>**

**</div>**

**<script>**

**// JavaScript for responsive header**

**const toggleMobileNavButton = document.getElementById('toggleMobileNav');**

**const mobileNavList = document.getElementById('mobileNavList');**

**toggleMobileNavButton.addEventListener('click', function() {**

**if (mobileNavList.style.display === 'block') {**

**mobileNavList.style.display = 'none';**

**} else {**

**mobileNavList.style.display = 'block';**

**}**

**});**

**</script>**

**</body>**

**</html>**