|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **المــمـــــــــلكــــة العـربية الســــــعودية**  **بــينبع الـــــــهـــــــــــيـــــئة الملــــــكـــــــية**  **قــــطـــاع الـكــــــــــــلــيات والـمــعــاهـد** | Description: YUC | **Kingdom of Saudi Arabia**  **Royal Commission at Yanbu**  **Colleges & Institutes Division** | | **كـــــلية ينبع الجــــــــــــــــامـــــــــــعية**  **قسم علوم وهندسة الحاسب الآلي** | **Yanbu University College**  **Computer Science & Engineering Dept.** |   LAB Submission |
| **ACADEMIC YEAR**  1442/1443 H(2021/2022 G)**,** SEMESTER II (212) |

|  |
| --- |
| CS 381  web application development |

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| --- | --- | --- | --- |
| **DATE:** | **Wednesday, May 11, 2022** | **TIME** | 10:00 AM |

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| --- | --- | --- | --- |
| **STUDENT NAME:** | Issam Fiaz\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| **STUDENT ID:** | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 3 | 8 | 1 | 0 | 4 | 8 | 4 |  |  |  | | **SECTION:** | 1 |

|  |  |
| --- | --- |
| **FOR INSTRUCTOR USE ONLY** | **GENERAL INSTRUCTIONS** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **CLOs** | **MAX MARK** | **MARKS OBTAINED** | * Write your name and I.D. number in the space provided above. * Support materials are not allowed in the examination Hall except those provided by instructor. * Do not use digital or printed dictionary. * Do not use pencils for answering except for drawing. * Read each question carefully before answering. * Number shown on the right-hand side against each question is the mark allocated. |
| **1** | **2.01** | **10** |  |
|  |  |  |  |
| **TOTAL MARKS** | | **10** |  |

|  |  |
| --- | --- |
| **MARKED BY:** | **Signature:** |
| **CHECKED BY:** | **Signature:** |

JavaScript labs

<html><head><title>Checking Scope Test</title></head><body>

<script>

test()

if( typeof a != 'undefined') document.write('a = " + a +" '<br>')

if( typeof b != 'undefined') document.write('b = + b + " '<br>')

if( typeof c != 'undefined') document.write('c = " '+ c + " '<br>')

function test(){

a = 123

var b = 456

if (a == 123) var c = 789

}

</script>

</body></html>

<html><head><title>Reading URL</title></head>

<body>

<a id="mylink" href="http://www.rcyci.edu.sa/en/"> Click me </a><br>

<script>

var url = document.Iinks.mylink.href

document.write('The URL is ' + url)

document.write( "<hr> Number of items in the current session = "+ history.length )

</script>

</body> </html>

<html><head><title>onerror Test</title></head> <body> <script>

window.onerror = disErr; // assign a function to onerror event document.writ("Welcome"); // deliberate error

function disErr(message, url, lineNo) {

alert(message + "\nInURL:\n" + url + "\n\nLine:\n" + lineNo + "\n"); return true; i/ true: prevents the firing of the default event handler.

</script> </body></html>

<html><head><title>Try Catch </title></head><body>

<p>Enter a number between 50 and 100</p>

<input type="text" id="number" >

<button onclick="check()">Enter</button>

<p id="message"></p>

<script>

function check() {

var n = document.getElementByld("number").value;

var msg = document.getElementByld("message");

msg.innerHTML = "";

try {

if (n == "") throw "Empty";

if (isNaN(n)) throw "not a number";

if (n > 100) throw "too high";

if (n < 50) throw "too low";

}

catch (err) { msg.innerHTML = "Input is " + err; }

finally{ // execute code, after try and catch, regardless of the result. }

}

</script>

</body></html>

}

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<html><head><title>Variable Arguments Functions</title></head><body>

<script>

var words = fixNames("tHe", "DALLAS", "CowBoys");

for (j = 0; j < words.length; ++j)

document.write(words[j] + "<br>");

function fixNames()

{

var args = fixNames.arguments;

var str = new Array();

for (j = 0; j < args.length; ++j)

str[j] = args[j].charAt(0).toUpperCase() + args[j].substr(1 ).toLowerCase();

return str;

}

</script>

</body></html>

<html><head><title> Class Method Separately </title></head><body><script>

function User(name, username, password) // functions are objects in JavaScript

{

this.name = name;

this.username = username;

this.password = password;

this.showUser = showUser;

}

function showUser()

{

document.write("Name: " + this.name + "<br>");

document.write("Username: " + this.username + "<br>");

document.write("Password: " + this.password + "<br>");

}

var name = prompt("Name:");

var u = new User(name. name+"user", name+"pass");

u.showUser();

</script></body></html>

<html><head><title> Class using prototype </title></head><body><script>

function User(name, username, password)

{

this.name = name;

this.username = username;

this.password = password;

User.prototype.showUser = function()

{

document.write("Name: "+ this.name + "<br>");

document.write("Username: " + this.username + "<br>");

document.write("Password: " + this. password + "<br>");

}

}

var name = prompt("Name:");

var u = new User(name, name+"user", name+"pass");

u.showUser;

</script>

</body></html>

<html><head><title> Class </title></head><body>

<div id='v'></div>

<script>

class Person

{

#firstName;

#lastName;

constructor(firstName, lastName)

{

this.#firstName = firstName;

this.#lastName = lastName;

}

getfullName() { return this.#firstName + " " + this.#lastName; }

}

var p = new Person('Tom', 'Hanks');

document.getElementByld('v').innerHTML = p.getfullName();

</script></body></html>

<!DOCTYPE html>

<htm1><head><title> Class Extending JavaScript objects </title></head>

<body>

<p><button onclick="runShow()">My Show</button></p>

<H1 ><p ic1='p1'>do not do that</p></H1>

<script>

document.addEventListener("dblclick". runShow);

function runShow()

{

var myP1 = document.getElementByld('p1');

myP1.innerHTML = myP1.innerHTML.myReplace();

}

String.prototype.myReplace= function()

{

return this.replace( )

}

</script> </body></html>

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<!DOCTYPE htm1><htm1><head><title> Form Validation </title>

<style>.signup { border: 1 px solid #999999; font: normal 14px helvetica;color: #444444;}</style>

<script src="FormValidation.js">

function validate(form)

{

fail = validateName(form.name.value)

fail += validateUsername(form.username.value)

fail += validatePassword(form.password.value)

fail += validateAge(form.age.value)

fail += validateEmail(form.email.value)

if (fail == '') return true

else { alert(fail); return false }

</script></head><body>

<table class="signup" border="0" cellpadding="2" cellspacing="5" bgcolor="#eeeeee">

<form method="post" action="#" onsubmit="return validate(this)">

<th colspan="2" align="center"> Signup Form </th>

<tr><td>Name </td><td> <input type="text" maxlength="32" name="name"></td></tr>

<tr><td>Username></td><td> <input type="text" maxlength="16" narne="username"></td></tr>

<tr><td>Password </td><td> <input type="password" maxlength="12" name="password"></td></tr>

<tr><td>Age </td><td> <input type="text" maxlength="3" name="age"></td></tr>

<tr><td>Email </td><td> <input type="text" maxlength="64" name="email"></td></tr>

<tr><td colspan="2" align="center"> <input type="submit" value="Signup"></td></tr>

</form>

</table></body></html>

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//FormValidation.js

function validateName(field) { return (field == "") ? "No Forename was entered.\n" :""}

function validateUsername(field){

if (field == "") return "No Username was entered\n"

else if (field.length < 5) return "Usernames must be at least 5 char\n"

else if (/[^a-zA-Z0-9\_-]/.test(field)) return "Only a-z. A-Z, 0-9. - and \_ allowed in Usernames\n"

return ""

}

function validate Password(field) {

if (field == "") return "No Password was entered\n"

else if (field.length < 6) return "Passwords must be at least 6 char\n"

else if (!/[a-z]/.test(field) || ![A-Z]/.test(field)) return "one each of a-z. A-Z and 0-9\n"

return ""

}

function validateAge(field) {

if (field == isNaN(field)) return "No Age was entered\n"

else if (field < 18 || field > 110) return "Age must be between 18 and 110\n"

return""

}

function validateEmail(field) {

if (field == "") return "No Email was entered. \n"

else if (!((field.indexOf(".")> 0) && (field.indexOf("@")> 0)) || /[^a-zA-Z0-9.@\_-].test(field))

return "The Email address is invalid.\n"

return ""

}

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<IDOCTYPE html><html>

<head><title> Dynamic User Interface</title> </head><body>

<script>

const body = document.querySelector('body');

body.setAttribute('align', 'center');

const div = document.createElement('div');

div.setAttribute('class', 'mydiv');

body.append(div);

const img = document.createElement('img');

img.setAttribute('src', 'DUI.png');

div.append(img);

const a = document.createElement('a');

a.innerHTML = "Students Information System";

a.setAttribute('href','https:iisis.rcyci.edu.sa/');

body.append(a);

</script></body></html>

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<!DOCTYPE html><html> <head> <title>JSON</title>

</head>

<body>

<div id='mydiv'></div>

<script>

var output = document.getElementByld('mydiv');

var jsonArrayString = '[ {"x": 7, "y": 42}, {"x": 0, "y": 0}, {"x": 2.7, "y": 3.14}]';

var pointsArray = JSON.parse(jsonArrayString);

for(var i = 0; i < pointsArray.Iength; i++)

{

var point = pointsArray[i];

output.innerHTML +=" <br>Point: " + point.x + ", "+ point.y;

}

</script> </body </html>

<!DOCTYPE htm1><htm1><head><title>JSON and AJAX</title></head>

<body>

<p><button type="button" onclick="getDisplay()"> Get Info </button></p>

<div id='mydiv'></div>

<script>

function getDisplay()

{ var r = new XMLHttpRequest();

r.open('GET', 'https://support.oneskyapp.com/hc/en-us/article\_attachments/202761627/example\_l json', true);

isend();

r.onreadystatechange = function()

{ if( r. readyState == 4 && r.status == 200) // the response is ready

{

var output = document.getElementByld('mydiv');

var data = JSON.parse( r.responseText );

output.innerHTML += "<br><br>Fruit: "+ data.fruit + "<br>Size: " + data.size + "<br>Color: " + data.color;

}

}

}

</script></body></html>