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AJAX PROGRAMS LIST

1. Write JavaScript program that uses AJAX to read XML file and display its contents.

----- index.html -----

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>AJAX to read XML file</title>
</head>
<body>
  <h1>AJAX to Read XML files</h1>
  <button onclick="myfun()">Click Me</button>
  <div>
    <p id="demo"></p>
  </div>
  <script>
    function myfun()
    {
      const xhttp = new XMLHttpRequest();
      xhttp.onload = function ()
      {
        document.getElementById("demo").innerHTML = this.responseText;
      }
      xhttp.open("GET", "Product.xml", true);
      xhttp.send();
    }
  </script>
</body>
```

</html>

-----Product.xml-----

<?xml version="1.0" encoding="UTF-8"?>

<breakfast_menu>

<food>

<name>Belgian Waffles</name>

<price>\$5.95</price>

<description>

Two of our famous Belgian Waffles with plenty of real maple syrup

</description>

<calories>650</calories>

</food>

<food>

<name>Strawberry Belgian Waffles</name>

<price>\$7.95</price>

<description>

Light Belgian waffles covered with strawberries and whipped cream

</description>

<calories>900</calories>

</food>

<food>

<name>Berry-Berry Belgian Waffles</name>

<price>\$8.95</price>

<description>

Belgian waffles covered with assorted fresh berries and whipped cream

</description>

<calories>900</calories>

</food>

<food>

<name>French Toast</name>

```
<price>$4.50</price>
<description>
Thick slices made from our homemade sourdough bread
</description>
<calories>600</calories>
</food>
<food>
  <name>Homestyle Breakfast</name>
  <price>$6.95</price>
  <description>
Two eggs, bacon or sausage, toast, and our ever-popular hash browns
  </description>
  <calories>950</calories>
</food>
</breakfast_menu>
```

2. Write JavaScript program that uses AJAX to read JSON file and display its contents

----- index.html -----

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>AJAX to read Json file</title>
</head>
<body>
  <h1>AJAX to Read JSon files</h1>
  <button onclick="myfun()">Click Me</button>
  <div>
    <p id="demo"></p>
```

```
</div>
<script>
    function myfun() {
        const xhttp = new XMLHttpRequest();
        xhttp.onload = function () {
            document.getElementById("demo").innerHTML = this.responseText;
        }
        xhttp.open("GET", "Student.json", true);
        xhttp.send();
    }
</script>
</body>
</html>
```

----- Student.json -----

```
{
  "Students":[
    {
      "rno":1,
      "name":"Keyur Pansuriya",
      "Class":"Sybca",
      "Div":1
    },
    {
      "rno":2,
      "name":"Chintan Dobariya",
      "Class":"Sybca",
      "Div":2
    },
    {
      "rno":3,
```

```
"name":"Mihir Donda",  
"Class":"Sybca",  
"Div":1  
}  
]  
}
```

JQUERY PROGRAMS LIST

1. Create a registration form as shown in following figure and use jQuery to
 - i) enable / disable the Signup button on selection of checkbox of "I agree on terms and conditions"
 - ii) display number of characters left for "password" field.
 - iii) on focus and on blur, change the color of all three input boxes.

The image shows a registration form for 'MyStore'. The form has a header with the store name and a navigation bar with links: Services, About Us, Contact Us, and Login/Signup. The form fields are: Name (text input), Email address (text input), and Password (password input). Below the password field, there is a red text label 'min 8 characters'. Below the password field, there is a checkbox labeled 'I agree on terms & conditions'. At the bottom of the form, there is a blue 'Signup' button.

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

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

```
<title>Login / Signup</title>

<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.min.css"
    integrity="sha384-
Vkoo8x4CGs03+Hhvx8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">

<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js"
integrity="sha512v2CJ7UaYy4JwqLDlrZUI/4hqeOQie0mAZNXBeQyjo21dadnwR+8ZalJVT8EE2iyI610V8e
6M8PP2/4hpQINQ/g=="crossorigin="anonymous" referrerpolicy="no-referrer"></script>

<style>

    .form-control:focus
    {
        color: #495057;
        background-color: #fff;
        outline: 0;
        border: 0px solid none;
        border-color: black;
        box-shadow: none;
    }

</style>
</head>
<body>

    <div class="container">
        <div class="text-center">
            <h1>My Store</h1>
        </div>
        <div class="my-4">
            <label>Name :</label>
            <input type="text" class="form-control name" />
        </div>
        <div class="my-4">
            <label>Email Address :</label>
            <input type="text" class="form-control email" />
        </div>
```

```
<div class="my-4">
  <label>Password :</label>
  <input type="password" class="form-control password" />
  <p></p>
</div>
<div class="my-4">
  <input type="checkbox" class="check" />
  <span>
    i Agree on
    <a href="#">
      terms & Condition
    </a>
  </span>
</div>
<div class="my-4">
  <button class="btn btn-primary">
    Signup
  </button>
</div>
</div>
<script>
$(document).ready() => {
  $(".btn").prop("disabled", true);
  $(".check").change(function () {
    if ($(this).is(":checked")) {
      $(".btn").prop("disabled", false);
    } else {
      $(".btn").prop("disabled", true);
    }
  });
  $('name').focus() => {
    $('name').css("background", "orange").css('color', "white");
  }
}
```



```
    })
    $('.email').focus() => {
        $('.email').css("background", "#007bff").css('color', "white");
    })
    $('.password').focus() => {
        $('.password').css("background", "green").css('color', "white");
    })
    $('.name').blur() =>
        $('.name').css("background", "white").css('color', "orange")
    )
    $('.email').blur() => {
        $('.email').css("background", "white").css('color', "blue")
    })
    $('.password').blur() => {
        $('.password').css("background", "white").css('color', "green")
    })
    $(".password").on("input", function () {
        let password = $(".password").val().length;
        if (password < 8) {
            var maxLength = 8;
            var currentLength = password;
            var remaining = maxLength - currentLength;
            $(".p").text("Min " + remaining + " characters left").css('color', 'red');
        }
        else
        {
            $(".p").text("Ok Good Job").css('color', 'green');
        }
    });
    $('.btn').click() => {
        let name = $('.name').val();
        let email = $('.email').val();
```

```

        let password = $('#password').val();
        if (!name || !email || !password) {
            alert("Please Feels backs")
        }
    })
})
</script>
</body>
</html>

```

2.Create a webpage that uses jQuery to display different animation effects with different HTML elements, on click of respective buttons.

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Different Animation Effects</title>
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.min.css"
    integrity="sha384-
Vkoo8x4CGsO3+HhXv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js"
    integrity="sha512-
v2CJ7UaYy4JwqLDlrZUI/4hqeoQieOmAZNXBeQyjo21dadnwR+8ZaIJVT8EE2iyl610V8e6M8PP2/4hpQIN
Q/g=="
    crossorigin="anonymous" referrerpolicy="no-referrer"></script>
<style>
    .box
    {
        background-color: #1fc8db;
        background-image: linear-gradient(140deg, #007bff, #6c757d , #dc3545 ,#28a745 );
        height: 13rem;
    }

```

```
        width: 30%;
    }
</style>
</head>
<body>
    <div class="container mb-5">
        <div class="text-center my-5">
            <h1>Different Animation Effects</h1>
        </div>
        <div class="d-flex justify-content-center">
            <div>
                <button class="btn btn-primary">Fade In</button>
                <button class="btn btn-secondary">Fade Out</button>
            </div>
            <div class="mx-1">
                <button class="btn btn-danger">Slide Up</button>
                <button class="btn btn-success">Slide Down</button>
            </div>
        </div>
        <div class="d-flex justify-content-center my-5">
            <div class="box">
            </div>
        </div>
    </div>
</div>
<script>
    $(document).ready(=>{
        $('.btn-primary').click(=>{
            $('.box').fadeIn(2000)
        });
        $('.btn-secondary').click(=>{
            $('.box').fadeOut(2000)
        });
    });
</script>
```

```
$('.btn-danger').click(=>{  
    $('.box').slideUp(2000)  
});  
$('.btn-success').click(=>{  
    $('.box').slideDown(2000)  
});  
});  
</script>  
</body>  
</html>
```

NODE JS PROGRAMS LIST

1. Write nodeJS program to split query string from url.

```
var http = require('http'); var url = require('url');  
console.log("Server running at port 8081");  
http.createServer(function (req, res)  
{ res.writeHead(200, {'Content-Type': 'text/html'});  
  var q = url.parse(req.url, true).query;  
  var txt = q.rollno + " " + q.name; res.end(txt); }).listen(8081);
```

2. Write nodeJS program to reads query string from url using req.url and sends appropriate response.

```
var http = require('http');  
var server = http.createServer(function (req, res) {  
  if (req.url == '/')  
  {  
    res.writeHead(200, { 'Content-Type': 'text/html' });  
    res.write('<html><body><h1>This is home Page.</h1></body></html>');  
  }  
});
```

```
res.end();
}
else if (req.url == "/student")
{
res.writeHead(200, {'Content-Type': 'text/html'});
res.write('<html><body><h1>This is student Page.</h1></body></html>');
res.end();
}
else if (req.url == "/admin")
{
res.writeHead(200, { 'Content-Type': 'text/html' });
res.write('<html><body><p>This is admin Page.</p></body></html>');
res.end();
}
else
{
res.end('<h1> Invalid request </h1>');
}}).listen(8081);
console.log("NodeJS Server is running, listening at port: 8081");
```

3.write nodeJS program to read URL, parse it to JS object and display it's properties.

```
//write nodeJS program to read URL, parse it to JS object and display it's properties.
//localhost:8081/hello.html?rollno=123&name=Vishal
var http = require('http');
var url = require('url');
http.createServer(function(req,res){
res.write("<h1> req.url= " + req.url + "</h1>");

q = url.parse(req.url,true).query;
res.write("<h1> your rollno is " + q.rollno + "</h1>");
res.write("<h1> your name is " + q.name + "</h1>");
```

```
h = url.parse(req.url,true).host;
res.write("<h1> host= " + h + "</h1>");

p = url.parse(req.url,true).pathname;
res.write("<h1> pathname= " + p + "</h1>");

s = url.parse(req.url,true).search;
res.write("<h1> search= " + s + "</h1>");
res.end();
}).listen(8081);
console.log("Node JS server running at 8081...");
```

4. Create user defined module in nodeJS that exports an object.

```
//this module exports an object – udm3.js
exports.student = {rno:"101",name:"Utsav"};
```

5. Create user defined module in nodeJS that exports a function.

```
// this module exports a function – udm2.js
exports.print = function(str){console.log(str)};

-----prg1.js-----
// this program requires - imports above modules
var udm2 = require('./udm2.js');
var udm3 = require('./udm3.js');
udm2.print("this msg is from UDM-2");
console.log("Now printing data from UDM-3");
console.log("Roll No=",udm3.student.rno);
console.log("Name=",udm3.student.name);
```

6. Write nodeJS program that

i. creates one file

ii. writes one line to the file

iii. appends one line to the file

iv. read the file

v. delete the file

-----create a file and write some text -----

```
var fs = require('fs');
fs.open('file2.txt', 'w', function (err, file) {
  if (err)
  {
    console.log("Error");
    throw err;
  }
  fs.write("hello");
  console.log('Saved!');
});
```

----- read data from file -----

```
var http = require('http');
var fs = require('fs');
console.log("Server running at 8081...");
http.createServer(function (req, res) {
  console.log("Request received");
  fs.readFile('file1.html',function(err, data) {
    if(err)
    throw(err);
    else
    {
      res.writeHead(200, {'Content-Type': 'text/html'});
      res.write(data);
      return res.end();
    }
  });
});
```

```
});});  
}).listen(8081);
```

-----append one line to the file -----

```
fs.appendFile('new.txt', ' Written using append file ', function (err) {  
  if (err)  
  {  
    console.log("Error");  
    throw err;  
  }  
  console.log('Saved!');  
});
```

-----delete the file -----

```
fs.unlink('file2.txt', function (err) {  
  if (err)  
  {  
    console.log("Error") ;  
    throw err;  
  }  
  console.log('File deleted!');  
});
```