

1. Question

Question 1

Design and develop AJAX web program to retrieve the XML document data from the given XML file planes.xml and display the selected parameters such as Year, Make, Model, Colour in a table when click on a button.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Ajax HTML</title>
</head>
<body>
  <div id="table-container"></div>
  <br/><br/>
  <button onclick="loadDoc()">Load Data</button>
  <script type="text/javascript">
    function loadDoc(){
      let xhttp,xmlDoc,txt;
      xhttp = new XMLHttpRequest();
      xhttp.onreadystatechange = function(){
        if(this.readyState === 4 && this.status === 200){
          xmlDoc = xhttp.responseXML;
          let year = xmlDoc.getElementsByTagName("YEAR");
          let make = xmlDoc.getElementsByTagName("MAKE");
          let model = xmlDoc.getElementsByTagName("MODEL");
          let color = xmlDoc.getElementsByTagName("COLOR");
          txt = "<table border='1' cellpadding='5' style='border-collapse:collapse;'>";
          txt += "<tr><th>YEAR</th><th>MAKE</th><th>MODEL</th><th>COLOR</th></tr>";
          for(let i = 0;i < year.length;i++){
            txt += "<tr>";
            txt += "<td>" + year[i].childNodes[0].nodeValue + "</td>";
            txt += "<td>" + make[i].childNodes[0].nodeValue + "</td>";
            txt += "<td>" + model[i].childNodes[0].nodeValue + "</td>";
            txt += "<td>" + color[i].childNodes[0].nodeValue + "</td>";
            txt += "</tr>";
          }
          txt += "</table>";
          document.getElementById("table-container").innerHTML = txt;
        }
      };
      xhttp.open("GET","planes.xml",true);
      xhttp.send();
    }
  </script>
</body>
</html>
```

YEAR	MAKE	MODEL	COLOR
2019	Boeing	737 MAX	White
2018	Airbus	A320neo	Blue
2021	Embraer	E175-E2	Red
2017	Boeing	787 Dreamliner	Silver
2020	Airbus	A350-1000	Black
2016	Bombardier	CRJ900	Yellow
2015	Embraer	E190-E2	Green
2022	Boeing	777X	Orange
2014	Airbus	A380	Purple
2013	Bombardier	CS300	Brown

Load Data

```
<?xml version="1.0" encoding="UTF-8"?>
<PLANES>
  <PLANE>
    <YEAR>2019</YEAR>
    <MAKE>Boeing</MAKE>
    <MODEL>737 MAX</MODEL>
    <COLOR>White</COLOR>
  </PLANE>
  <PLANE>
    <YEAR>2018</YEAR>
    <MAKE>Airbus</MAKE>
    <MODEL>A320neo</MODEL>
    <COLOR>Blue</COLOR>
  </PLANE>
  <PLANE>
    <YEAR>2021</YEAR>
    <MAKE>Embraer</MAKE>
    <MODEL>E175-E2</MODEL>
    <COLOR>Red</COLOR>
  </PLANE>
</PLANES>
```

2. Question

Angular.min.js library is given to you. Write an angular application functional to take three numerical inputs and display its' calculated value as an output according to the following expression.

Output = (input1 + input2) * input3

[10 marks]

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Angular</title>
  <script type="text/javascript" src="angular.min.js"></script>
</head>
<body>
<div ng-app="myApp" ng-controller="myCtrl">
  Input 1 : <input type="number" ng-model="input1"><br>
  Input 2 : <input type="number" ng-model="input2"><br>
  Input 3 : <input type="number" ng-model="input3"><br><br>
  <h6>Sum : {{(input1+input2)*input3}}</h6>
</div>
<script type="text/javascript">
let app = angular.module('myApp', []);
app.controller('myCtrl', function($scope) {
  $scope.input1 = null;
  $scope.input2 = null;
  $scope.input3 = null;
});
</script>
</body>
</html>
```

Input 1 :	<input type="text" value="1"/>
Input 2 :	<input type="text" value="1"/>
Input 3 :	<input type="text" value="2"/>

Output : 4

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Angular</title>
  <script type="text/javascript" src="angular.min.js"></script>
</head>
<body>
  <div ng-app="myApp" ng-controller="myController">
    Input 1 <input type="text" ng-model="input1"/><br/>
    Input 2 <input type="text" ng-model="input2"/><br/>
    Input 3 <input type="text" ng-model="input3"/><br/><br/>
    <button ng-click="getOutput()">Get Output</button>
    <br/><br/>
    <h5>Output : {{output}}</h5>
  </div>
  <script type="text/javascript">
    let app = angular.module("myApp",[]);
    app.controller("myController",function($scope){
      $scope.getOutput = function(){
        let input1 = parseInt($scope.input1);
        let input2 = parseInt($scope.input2);
        let input3 = parseInt($scope.input3);

        let output = (input1+input2)*input3;

        $scope.output = output;
      }
    });
  </script>
</body>
</html>

```

Input 1	12
Input 2	3
Input 3	2

Get Output

Output : 30

3. Question

Create a JSON data file to store your personal details including Name (first and last names), Address (House_Number, Street, City, District), Phone_Number, E_mail, Age and Gender in a text file named as personal.txt.

Host the above txt file in a web server and retrieve the JSON data from an asynchronous web connection when click on a button and display the personal data on a web page.

Hint: JSON to JavaScript object conversion is required. Structure the JSON data in the txt file according to the meaning of the data.

[15 marks]

Name

Himal Sarathchadra

Address

3662 Main Street Baddegama Galle

Phone Number

0779209137

Email

himalhp100@gmail.com

Age

27

Gender

Male

Load Data

```
{
  "name": {
    "firstName": "Himal",
    "lastName": "Sarathchadra"
  },
  "address": {
    "houseNumber": "3662",
    "street": "Main Street",
    "City": "Baddegama",
    "District": "Galle"
  },
  "phoneNumber": "0779209137",
  "email": "himalhp100@gmail.com",
  "age": "27",
  "gender": "Male"
}
```

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Json</title>
</head>
<body>
<div id="output-container"></div>
<br/><br/>
<button onclick="loadDoc()">Load Data</button>
<script type="text/javascript">
  function loadDoc(){
    let xhttp,textDoc,stuObj,txt;
    xhttp = new XMLHttpRequest();
    xhttp.onreadystatechange = function(){
      if(this.readyState === 4 && this.status === 200){
        textDoc = xhttp.responseText;
        stuObj = JSON.parse(textDoc);
        console.log(stuObj);
        txt = "<dl>";
        txt += "<dt><b>Name</b></dt>";
        txt += "<dd>";
        txt += stuObj.name.firstName + " ";
        txt += stuObj.name.lastName;
        txt += "</dd>";
        txt += "<dt><b>Address</b></dt>";
        txt += "<dd>";
        txt += stuObj.address.houseNumber + " ";
        txt += stuObj.address.street + " ";
        txt += stuObj.address.City + " ";
        txt += stuObj.address.District;
        txt += "</dd>";
        txt += "<dt><b>Phone Number</b></dt>";
        txt += "<dd>";
        txt += stuObj.phoneNumber;
        txt += "</dd>";
        txt += "<dt><b>Email</b></dt>";
        txt += "<dd>";
        txt += stuObj.email;
        txt += "</dd>";
        txt += "<dt><b>Age</b></dt>";
        txt += "<dd>";
        txt += stuObj.age;
        txt += "</dd>";
        txt += "<dt><b>Gender</b></dt>";
        txt += "<dd>";
        txt += stuObj.gender;
        txt += "</dd>";
        txt += "</dl>";
        document.getElementById("output-container").innerHTML = txt;
      }
    };
    xhttp.open("GET","personal.txt",true)
    xhttp.send();
  }
</script>
</body>
</html>

```

4. Question

1. Write php script to create the following form and display given sample output.

Personal Information	
Name	<input type="text"/>
Gender	<input type="radio"/> Male
	<input type="radio"/> Female
Designation	--Your Designation-- ▾
Email	<input type="text"/>
Division	<input type="checkbox"/> IT
	<input type="checkbox"/> Finance
	<input type="checkbox"/> Administration
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

(Hint: Designations: Computer Operator, Clerk, Management Assistant)

Sample Output

Name : Nimal De Silva

Gender: Male

Designation : Clerk

Email: nimal@yahoo.com

Division : IT, Finance

[20 marks]

Personal Information	
Name	<input type="text"/>
Gender	<input type="radio"/> Male
	<input type="radio"/> Female
Designation	--Your Designation-- ▾
Email	<input type="text"/>
Devison	<input type="checkbox"/> IT
	<input type="checkbox"/> Finance
	<input type="checkbox"/> Administration
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

Name : Marlee Bayer

Gender : Female

Designation : Management Assistant

Email : your.email+fakedata78636@gmail.com

Devison : Finance,

```

<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>PHP form</title>
</head>
<body>
    <form method="POST" action="">
    <table border="1" cellpadding="1" cellspacing="2" width="650px">
        <thead>
            <tr>
                <th colspan="2" align="left" style="background-color: #6bffc1;"><h1 style="margin-top:0;">Personal Information</h1></th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>Name</td>
                <td><input type="text" name="name"/></td>
            </tr>
            <tr>
                <td>Gender</td>
                <td><input type="radio" name="gender" value="Male"/>Male</td>
            </tr>
            <tr>
                <td></td>
                <td><input type="radio" name="gender" value="Female"/>Female</td>
            </tr>
            <tr>
                <td>Designation</td>
                <td>
                    <select name="designation">
                        <option selected hidden value="">--Your Designation--</option>
                        <option>Computer Operator</option>
                        <option>Clerk</option>
                        <option>Management Assistant</option>
                    </select>
                </td>
            </tr>
            <tr>
                <td>Email</td>
                <td><input type="email" name="email"/></td>
            </tr>
            <tr>
                <td>Devisiion</td>
                <td><input type="checkbox" name="devision[0]" value="IT"/>IT</td>
            </tr>
            <tr>
                <td></td>
                <td><input type="checkbox" name="devision[1]" value="Finance"/>Finance</td>
            </tr>
            <tr>
                <td></td>
                <td><input type="checkbox" name="devision[2]" value="Administration"/>Administration</td>
            </tr>
            <tr>
                <td></td>
                <td>
                    <input type="submit" value="Submit"/>
                    <input type="reset" value="Reset"/>
                </td>
            </tr>
        </tbody>
    </table>
</form>
<br><br>
<?php
    //echo "<pre>";
    //var_dump($_POST);
    //echo "</pre>";
    if(!empty($_POST["name"])){
        echo "Name : ".$_POST["name"]."<br>";
    }
    if(!empty($_POST["gender"])){
        echo "Gender : ".$_POST["gender"]."<br>";
    }
    if(!empty($_POST["designation"])){
        echo "Designation : ".$_POST["designation"]."<br>";
    }
    if(!empty($_POST["email"])){
        echo "Email : ".$_POST["email"]."<br>";
    }
    if(isset($_POST["devision"])){
        echo "Devisiion : ";
        echo (isset($_POST["devision"][0]) ? $_POST["devision"][0].",";"");
        echo (isset($_POST["devision"][1]) ? $_POST["devision"][1].",";"");
        echo (isset($_POST["devision"][2]) ? $_POST["devision"][2].":";"");
    }
    ?>
</body>
</html>

```


5. Question

Write a php program to compute the sum of the digits of a number using functions.

[10 marks]

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>php Sum Digits</title>
</head>
<body>
  <?php
    echo sumDigits("1234569");
    function sumDigits($number){
      $sum = 0;
      for($i = 0;$i < strlen($number);$i++){
        $sum += $number[$i];
      }
      return "Sum is : ".$sum;
    }
  ?>
</body>
</html>
```

Sum is : 30

6. Question

Write a php program to print the numbers 1-10 if numbers are less than 5 print 1 is less than 5 ..etc, if numbers are greater than 5 print 6 is greater then 5.. etc.

[10 marks]

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>php Sum Digits</title>
</head>
<body>
    <?php
        for($i = 1;$i <= 10;$i++){
            if($i<5){
                echo $i." is less than 5<br>";
            }else if($i>5){
                echo $i." is greater than 5<br>";
            }else{
                echo $i." is equal to 5<br>";
            }
        }
    ?>
</body>
</html>
```

1 is less than 5
2 is less than 5
3 is less than 5
4 is less than 5
5 is equal to 5
6 is greater than 5
7 is greater than 5
8 is greater than 5
9 is greater than 5
10 is greater than 5

7. Question

Display following pattern using php scripts

```
1
12
123
1234
12345
```

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>php Pattern</title>
</head>
<body>
  <?php
    for($i = 1;$i <= 5;$i++){
      for($x = 1;$x <= $i;$x++){
        echo $x;
      }
      echo "<br>";
    }
  ?>
</body>
</html>
```

```
1
12
123
1234
12345
```

