Web Technologies

Assignment - 5

-: Submitted By :-

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20MCMB15

MTECH-IT

-: Submitted to :-

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1)Develop an application using HTML, CSS and Java Script such that access to JSON data from URL parameters will display the data based on the search keywords mentioned in the textbox. (Assume appropriate members and data for the design and development of the required application).

index.html

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

<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <!-- Bootstrap CSS -->
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap.min.css" rel="stylesheet"

integrity="sha384-BmbxuPwQa2lc/FVzBcNJ7UAyJxM6wuqIj61tLrc4wSX0szH/Ev+nYRRuWlolflfl" crossorigin="anonymous">
    <title>MyEngine.com | 20MCMB15</title>

    <!-- Style -->
    <style>
        h1 {
            text-align: center;
            background-color: black;
            color: blanchedalmond;
        }

        #logostyle {
            font-size: 90px;
            margin-top: 95px;
            margin-bottom: 50px;
            padding: 10px;
        }
```

```html
        #search_bar {
            padding-top: 10px;
            padding-bottom: 10px;
            padding-right: 20px;
            padding-left: 25px;
            font-size: 25px;
            border-radius: 27px;
            box-shadow: 1px 1px 1px #a1a1a1;
        }


        #btn_set {
            margin-top: 30px;
            margin-bottom: 100px;


        }

    </style>
</head>

<body>
    <script type="text/javascript" src="main.js"></script>

    <div class="container">

        <h5 class="card-title" id="title"></h5>
        <br>
        <!-- content -->
        <p class="card-text" id="content"></p>

        <!-- Logo: Search engine -->
        <div class="row justify-content-center">
            <div class="col-md-5">
                <h1 id="logostyle"><strong> MyEngine </strong></h1>
            </div>
        </div>

        <!-- Input : Search bar -->
        <div class="row justify-content-center">
            <div class="col-md-8">
```

```html
                <input class="form-control" type="text" placeholder="Write
the keywords here..." id="search_bar">
            </div>
        </div>


        <!-- Search button -->
        <div class="row">
            <div class="d-flex justify-content-center" id="btn_set">
                    <button type="button" class="btn btn-light btn-lg
btn-outline-dark" onclick="search()">Search</button>
                    <button type="button" class="btn btn-light btn-lg
btn-outline-dark" style="margin-left: 5px;">I'm feeling lucky</button>
                </div>
            </div>
        </div>
    </div>
    <center>
    <div>India <br>
        About     Advertisement   Privacy   
Terms    Setting </span></p>
    </div>
    </center>
    <!-- JavaScript -->
    <script>

    </script>
</body>

</html>
```

main.js

```javascript
// Function to validate and redirect to output page.
function search() {
    // extracting keyword.
    var searchKey =
document.getElementById('search_bar').value.trim().toLowerCase();
    // If not empty then redirect to the result page.
    if ('' != searchKey){
        window.location.href = 'output.html?search=' + searchKey;
    }else{
```

```
        alert("Please Enter any keyword !");
    }
}
```

output.html

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

<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.cs
s"

integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/
dAiS6JXm" crossorigin="anonymous">

    <title>Searched Output</title>
</head>

<style>
    h1{
        font-size: 5em;
    }
</style>

<body>
    <script type="text/javascript" src="search.js"></script>
    <div class="container" style="margin-top: 100px;">

        <!-- Search Result -->
        <div class="d-flex justify-content-center">
            <div class="card w-75">
                <div class="card-body">
                    <!-- heading -->
```

```html
                <h5 class="card-title" id="title"></h5>
                <br>
                <!-- content -->
                <p class="card-text" id="content"></p>
            </div>
        </div>
    </div>
    <!-- Button to go back to search page -->
    <br><br>
    <div class="d-flex justify-content-center">
        <a href="index.html" class="btn btn-outline-dark btn-lg">Back
to Search</a>
    </div>
  </div>
</body>

</html>
```

search.js

```javascript
// retrieve searched keyword from URL.
let params = new URLSearchParams(window.location.search);
const searchKey = params.get('search');

// JSON data file url
const URL = "data.json";

//let title = document.getElementById('title');
//let content = document.getElementById('content');

var searchFlag = true;
    fetch(URL).then(response => response.json()).then(jsonResponse => {
        var searchFlag = true;

        // Iteratation over data
        for (let i = 0; i < jsonResponse.data.length; i++) {
          // Compare
            if (searchKey == jsonResponse.data[i].keyword) {
                searchFlag = false;

                console.log(jsonResponse.data[i].description);
```

```
            //Show the details.
            document.getElementById('title').innerHTML = '<h1>' +
searchKey +'</h1>';
            document.getElementById('content').innerHTML = '<h3>' +
jsonResponse.data[i].description + '</h3>';
        }
    }

    // If the keyword is not found in the JSON file.
    if (searchFlag) {
        content.innerHTML = '<h1>Ooops!</h1> NOT FOUND';
    }
})
```

data.json

```
{
"data":
[
  {
    "keyword": "firebase",
    "description": "Firebase is a platform developed by Google for
creating mobile and web applications. It was originally an independent
company founded in 2011. In 2014, Google acquired the platform and it is
now their flagship offering for app development. Wikipedia"
  },
  {
    "keyword": "xml",
    "description": "Extensible Markupa Language is a markup language that
defines a set of rules for encoding documents in a format that is both
human-readable and machine-readable."
  },
  {
    "keyword": "android",
    "description": "Android is a mobile operating system based on a
modified version of the Linux kernel and other open source software,
designed primarily for touchscreen mobile devices such as smartphones and
tablets."
```

```json
    },
    {
        "keyword": "javascript",
        "description": "JavaScript, often abbreviated as JS, is a programming
language that conforms to the ECMAScript specification."
    },
    {
        "keyword": "html",
        "description": "The HyperText Markup Language, or HTML is the
standard markup language for documents designed to be displayed in a web
browser."
    }
]
}
```
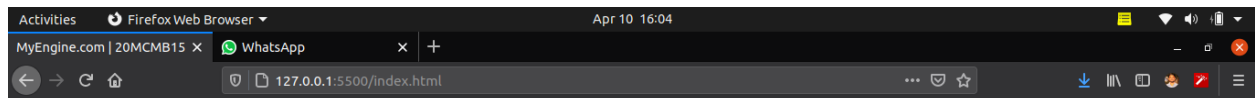
MyEngine

html
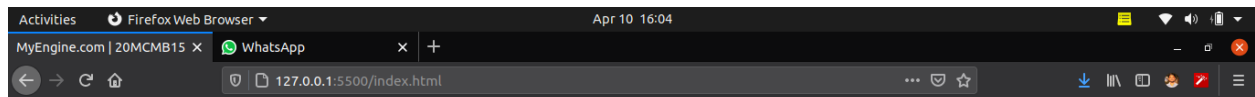
Search   I'm feeling lucky

India
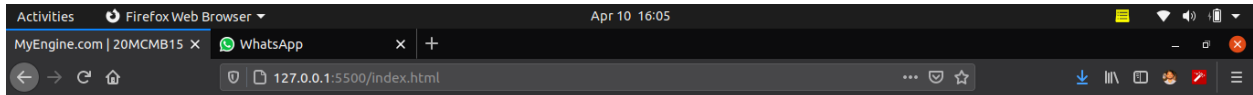
About   Advertisement   Privacy   Terms   Setting
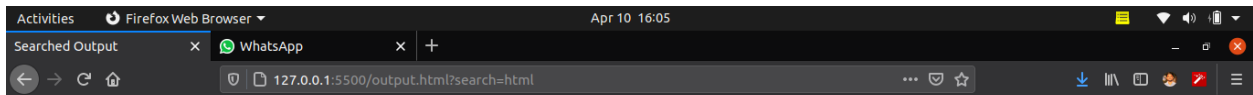
html

The HyperText Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser.

Back to Search

2)Write JS code that reads XML file or JSON file and print the details as tabular data. (Assume appropriate members and data for the design and development of the required application).

index.html

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

<head>
    <title>Question 1 | 20MCMB15-IT</title>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.cs
s">
  </head>
<body>
<script type="text/javascript" src="read.js"></script>

 <div id='content'>
      <table class="table table-hover"  id='student_record'
cellpadding='10px' style="text-align:left;">
          <thead class="indigo white-text">
              <tr class="bg-success" align="center">
                  <th>First Name</th>
                  <th>Last Name</th>
                  <th>RollNo</th>
                  <th>Contact No.</th>
                  <th>Email</th>
                  <th>Address</th>
                  <th>Department</th>
              </tr>
          </thead>
          <tbody class="table-striped">
```

```
        </tbody>
      </table>
   </div>
</body>
</html>
```

read.js

```javascript
      // URL of the json file.
      const URL = "data.json";
      // Fetch the json Object.
      fetch(URL).then(response => response.json()).then(jsonResponse => {
          // Loop through all the book details.
          for (let i = 0; i < jsonResponse.student.length; i++) {

              // retrieved data as table row.
              let row = `<tr>
                  <td>${jsonResponse.student[i].firstName}</td>
                  <td>${jsonResponse.student[i].lastName}</td>
                  <td>${jsonResponse.student[i].rollNo}</td>
                  <td>${jsonResponse.student[i].contactNo}</td>
                  <td>${jsonResponse.student[i].email}</td>
                  <td>${jsonResponse.student[i].address.City}
${jsonResponse.student[i].address.State}
${jsonResponse.student[i].address.Zip}</td>
                  <td>${jsonResponse.student[i].department}</td>
              </tr>`;

              // Append new row in table.
              document.getElementById('student_record').innerHTML += row;
          }
      })
```
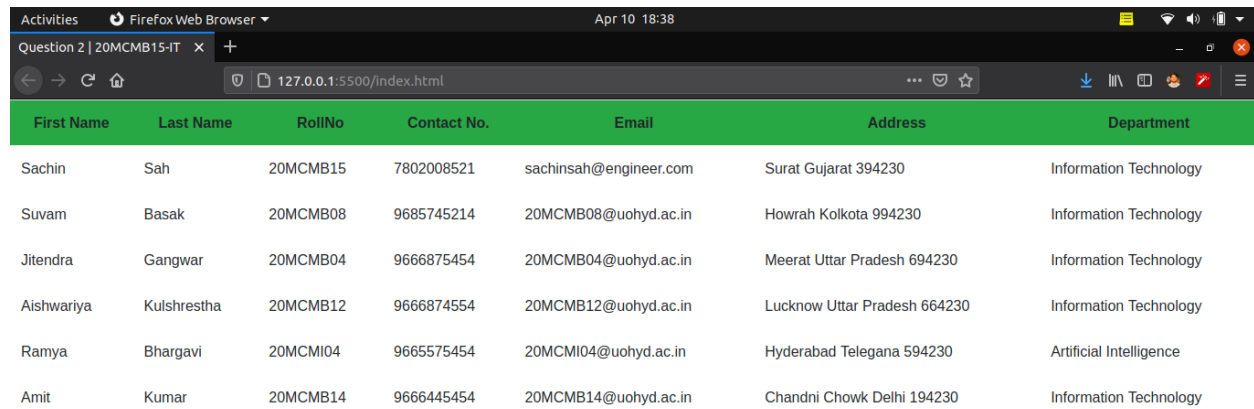
data.json

```json
{

"student" : [
  {
      "firstName": "Sachin",
      "lastName": "Sah",
      "rollNo": "20MCMB15",
      "contactNo": "7802008521",
      "email": "sachinsah@engineer.com",
      "address": {
         "City": "Surat",
         "State": "Gujarat",
         "Zip": "394230"
      },
      "department": "Information Technology"
  },
  {
      "firstName": "Suvam",
      "lastName": "Basak",
      "rollNo": "20MCMB08",
      "contactNo": "9685745214",
      "email": "20MCMB08@uohyd.ac.in",
      "address": {
         "City": "Howrah",
         "State": "Kolkota",
         "Zip": "994230"
      },
      "department": "Information Technology"
  },
  {
      "firstName": "Jitendra",
      "lastName": "Gangwar",
      "rollNo": "20MCMB04",
      "contactNo": "9666875454",
      "email": "20MCMB04@uohyd.ac.in",
      "address": {
         "City": "Meerat",
         "State": "Uttar Pradesh",
         "Zip": "694230"
      },
```

```json
            "department": "Information Technology"
    },
    {
        "firstName": "Aishwariya",
        "lastName": "Kulshrestha",
        "rollNo": "20MCMB12",
        "contactNo": "9666874554",
        "email": "20MCMB12@uohyd.ac.in",
        "address": {
            "City": "Lucknow",
            "State": "Uttar Pradesh",
            "Zip": "664230"
        },
        "department": "Information Technology"
    },
    {
        "firstName": "Ramya",
        "lastName": "Bhargavi",
        "rollNo": "20MCMI04",
        "contactNo": "9665575454",
        "email": "20MCMI04@uohyd.ac.in",
        "address": {
            "City": "Hyderabad",
            "State": "Telegana",
            "Zip": "594230"
        },
        "department": "Artificial Intelligence"
    },
    {
        "firstName": "Amit",
        "lastName": "Kumar",
        "rollNo": "20MCMB14",
        "contactNo": "9666445454",
        "email": "20MCMB14@uohyd.ac.in",
        "address": {
            "City": "Chandni Chowk",
            "State": "Delhi",
            "Zip": "194230"
        },
        "department": "Information Technology"
```

```
    }

]


}
```

OUTPUT :

First Name	Last Name	RollNo	Contact No.	Email	Address	Department
Sachin	Sah	20MCMB15	7802008521	sachinsah@engineer.com	Surat Gujarat 394230	Information Technology
Suvam	Basak	20MCMB08	9685745214	20MCMB08@uohyd.ac.in	Howrah Kolkota 994230	Information Technology
Jitendra	Gangwar	20MCMB04	9666875454	20MCMB04@uohyd.ac.in	Meerat Uttar Pradesh 694230	Information Technology
Aishwariya	Kulshrestha	20MCMB12	9666874554	20MCMB12@uohyd.ac.in	Lucknow Uttar Pradesh 664230	Information Technology
Ramya	Bhargavi	20MCMI04	9665575454	20MCMI04@uohyd.ac.in	Hyderabad Telegana 594230	Artificial Intelligence
Amit	Kumar	20MCMB14	9666445454	20MCMB14@uohyd.ac.in	Chandni Chowk Delhi 194230	Information Technology