

Lab Assignment - 2 (NodeJS)

19CSE445 – Cloud Computing

HTML with CSS:

1.

ADD NEW EMPLOYEE

Employee Id

Employee Name

Qualification

Designation

SalesBoy ▾

Salary

AddRecord

Exit

Loading HTML through NodeJS: (Client Side)

```
Windows PowerShell x Windows PowerShell x + v
PS C:\Users\Administrator\Desktop\19453-NodeJS\client> node .\client.js
Server running at 8080
```

ADD NEW EMPLOYEE

Employee Id	<input type="text"/>
Employee Name	<input type="text"/>
Qualification	<input type="text"/>
Designation	<input type="text" value="SalesBoy"/>
Salary	<input type="text"/>
<input type="button" value="AddRecord"/>	
<input type="button" value="Exit"/>	

Validation JS file (Server side):

```
PS C:\Users\Administrator\Desktop\19453-NodeJS\server> node .\serv.js
Server running at 8081
true
true
true
true
true
true
true
true
```

If form is empty, validation page shows:

Hi,Welcome

Errors:

ID is incorrect must contain numbers only and not null

Name is incorrect must contain characters only

Qualification must be in characters only

Salary must contain numbers only and not null

Case(i): Qualification not entered

ADD NEW EMPLOYEE

Employee Id	<input type="text" value="453"/>
Employee Name	<input type="text" value="Abhinav"/>
Qualification	<input type="text"/>
Designation	<input type="text" value="SalesBoy"/>
Salary	<input type="text" value="0"/>
<input type="button" value="AddRecord"/>	
<input type="button" value="Exit"/>	

Errors:

Qualification must be in characters only

Case(ii): Id and Name not entered

ADD NEW EMPLOYEE

Employee Id	<input type="text"/>
Employee Name	<input type="text"/>
Qualification	<input type="text" value="School"/>
Designation	<input type="text" value="SalesBoy"/>
Salary	<input type="text" value="1000"/>
<input type="button" value="AddRecord"/>	
<input type="button" value="Exit"/>	

Errors:

ID is incorrect must contain numbers only and not null

Name is incorrect must contain characters only

HTML:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Abhinav</title>
    <link href="style.css" rel="stylesheet">
  </head>
  <body>
    <div class="container" align="center"><br>
      <form action="http://localhost:8081" method="GET">
        <h1>ADD NEW EMPLOYEE</h1>
        <table>
          <tr>
            <td class="tdLabel"><label for="number"
class="label">Employee Id</label></td>
            <td class="d1"><input type="number" name="id"
value="" id="id"/></td>
          </tr>
          <tr>
            <td class="tdLabel"><label for="text"
class="label">Employee Name</label></td>
            <td><input type="text" name="name" id="name"/></td>
          </tr>
          <tr>
            <td class="tdLabel"><label for="register_email"
class="label">Qualification</label></td>
            <td class="d1"><input type="text" name="qual"
value="" id="qual"/></td>
          </tr>
          <tr>
            <td class="tdLabel"><label for="register_country"
class="label">Designation</label></td>
            <td><select name="country" id="des">
              <option value="i">SalesBoy</option>
              <option value="p">Marketing</option>
              <option value="a">Accountant</option>
              <option value="c">Audit</option>
              <option value="other">other</option>
            </select>
            </td>
          </tr>
          <tr>
            <td class="tdLabel"><label for="register_name"
class="label">Salary</label></td>
            <td><input type="number" name="number" value=""
id="sal"/></td>
          </tr>
          <tr>
            <td colspan="2"><div align="center"><input
type="submit" id="submit" value="AddRecord"
class="btn btn-success" autocomplete="off" onClick="create_account()"/>
            </div></td>
            <td colspan="2"><div align="left"><input
type="reset" id="reset" value="Exit"/>
            </div></td>
          </tr>
        </table>
      </form>
    </div>
  </body>
</html>
```

```
        <br><br>
    </div>
</body>
</html>
```

CSS:

```
body {
    font-family: "Open Sans", sans-serif;
    color: #272829;
}

a {
    color: #149ddd;
    text-decoration: none;
}

a:hover {
    color: #37b3ed;
    text-decoration: none;
}

h1,
h2,
h3,
h4,
h5,
h6 {
    font-family: "Lucida Handwriting", sans-serif;
    font-size: 35px;
    color: blue;
}

.container {
    border-radius: 5px;

    background-color: peachpuff;
    width: 400px;
    height: 330px;
    border: 2px solid black;
    padding: 50px;
    position: absolute;
    left: 27%;
}

.td {
    width: 160px;
    padding: 50px;
}

.tdLabel {
    font-size: 18px;
    color: rgba(255, 0, 0, 0.671);
}

.d1 {
    font-weight: italic;
}
```

Client.js (Accessing html file thorough server):

```
var http = require("http");
var path = require("path");
var fs = require('fs');

http.createServer(function (req, res) {
  fs.readFile(__dirname + '/index.html', function (err,data) {
    if (err) {
      res.writeHead(404);
      res.end(JSON.stringify(err));
      return;
    }
    res.writeHead(200);
    res.end(data);
  });
}).listen(8080);

// Console will print the message
console.log('Server running at 8080');
```

Server.js (Validation of added record):

```
var http = require("http");
var gow = require("url");

http
  .createServer(function (request, response) {
    response.writeHead(200, { "Content-Type": "text/html" });
    var q = gow.parse(request.url, true).query;
    console.log("true");
    let id = q.id;
    let empName = q.name;
    let qualification = q.qual;
    var numbers = /^[0-9]*$/;
    var letters = /^[a-zA-Z]*$/;
    var email_val = /^[a-zA-Z0-9_\.\\-]+\@(([a-zA-Z0-9\\-]+\.)+([a-zA-Z0-9]{2,4})+)$/;
    var txt = "Welcome " + q.name;
    var dummy = "Errors: ";
    response.write('<h1 style="color:darkblue" align="center">Hi,' +
txt+'</h1>');
    response.write('<h1 style="color:red"> \t' + dummy+'</h1>');
    if (!(id !== "" && id !== undefined && id.match(numbers))) {
      response.write(
        "<p>ID is incorrect must contain numbers only and not
null</p>"
      );
    }
    if (
      !(empName !== "" && empName !== undefined &&
empName.match(letters))
    ) {
      response.write("<p>Name is incorrect must contain characters
only</p>");
    }
    if (
```

```
        !(qualification !== "" && qualification !== undefined &&
qualification.match(letters))
    ) {
        response.write("<p>Qualification must be in characters
only</p>");
    }
    if (!(id !== "" && id !== undefined && id.match(numbers))) {
        response.write(
            "<p>Salary must contain numbers only and not null</p>"
        );
    }
    response.end();
})
.listen(8081);
// Console will print the message
console.log('Server running at 8081');
```