SRI KRISHNA COLLEGE OF TECHNOLOGY

[An Autonomous Institution | Affiliated to Anna University and

Approved by AICTE | Accredited by NAAC with ‘A’ Grade]

KOVAIPUDUR, COIMBATORE – 641 042.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

21ITE07 – Web Technologies

Lab Manual

SRI KRISHNA COLLEGE OF TECHNOLOGY

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Course Outcomes:

CO1	Outline the internet standards and recent web technologies like conferencing, newsgroup etc.	[U]
CO2	Develop static and dynamic web pages using basic web concepts.	[AP]
CO3	Apply the knowledge of HTML and CSS code to create personal and/or business websites following current professional and/or industry standards.	[AP]
CO4	Develop a web-based information systems using HTML, XML.	[AP]
CO5	Apply dynamic web page design techniques to construct an interactive web page using client-side technologies.	[U]
CO6	Construct server-side scripts using JSP and Servlets for web applications.	[AP]

Sl.No	List of Experiments	CO Mapping
1.	Create a web page with the following using HTML. • To embed an image map in a web page. • To fix the hot spots. • Show all the related information when the hot spots are clicked.	CO2
2.	Create a web page with all types of Cascading style sheets	CO3
3.	Client Side Scripts for Validating Web FormControls using DHTML	CO5
4.	Write programs in Java using Servlets: ● To invoke servlets from HTML forms. ● Session Tracking.	CO6
5.	Write programs in Java to create three-tierapplications using JSP and Databases ● For conducting on-line examination. ● For displaying student mark list. Assumethat student information is available in adatabase which has been stored in adatabase server	CO6
6.	Programs using XML – Schema – XSLT/XSL	CO4
7.	Programs using NoSQL	CO4

Ex:1 Creating A Webpage Using Image Map

AIM: To Create a web page with the following using HTML

i) To embed an image map in a web page

ii) To fix the hot spots

iii) Show all the related information when the hot spots are clicked.

Algorithm

Step1: Open a notepad.

Step 2: Write the code for imagemap.html.

Step 3: Enter a program that includes tags for <MAP> and other tags.

Step 4: Insert Hyperlink using <A href>.

Step 5: Save the file with .html extension.

Step 6: Run the program in a web browser

Step 7: Display Results.

CODE:

CODE:

```
<html>
<head>
<title>ImageMap</title>
</head>
<body>
<center>
<style>
body {
background-image: linear-gradient(rgba(0,0,0,0.2),rgba(0,0,0,0.2)),url(indiaflag.jpg);
}
</style>
```

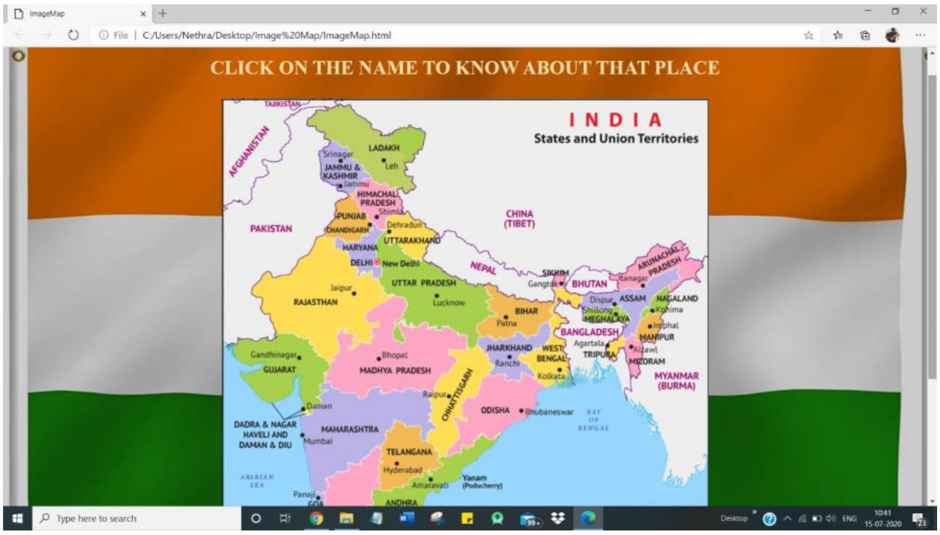
```
<br>

<h1><p style="color: NAVAJOWHITE">CLICK ON THE NAME TO KNOW ABOUT THAT PLACE</h1>

<img src="india.gif" usemap="#indiamap" >

<map name="indiamap">
```

CODE:

```
<html>

<head>

<title>ImageMap</title>

</head>

<body>

<center>

<style>

body {

background-image: linear-gradient(rgba(0,0,0,0.2),rgba(0,0,0,0.2)),url(indiaflag.jpg);

}

</style>

<br>

<h1><p style="color: NAVAJOWHITE">CLICK ON THE NAME TO KNOW ABOUT THAT PLACE</h1>

<img src="india.gif" usemap="#indiamap" >

<map name="indiamap">

<area shape="rect" coords="206,47,339,100" href="https://en.wikipedia.org/wiki/Ladakh" title="Ladakh">

<area shape="rect" coords="212,392,350,472" href="https://en.wikipedia.org/wiki/Madhya_Pradesh" title="Madhya Pradesh">

<area shape="rect" coords="94,282,237,360" href="https://en.wikipedia.org/wiki/Rajasthan" title="Rajasthan">

<area shape="rect" coords="267,275,409,348" href="https://en.wikipedia.org/wiki/Uttar_Pradesh" title="Uttar Pradesh">
```

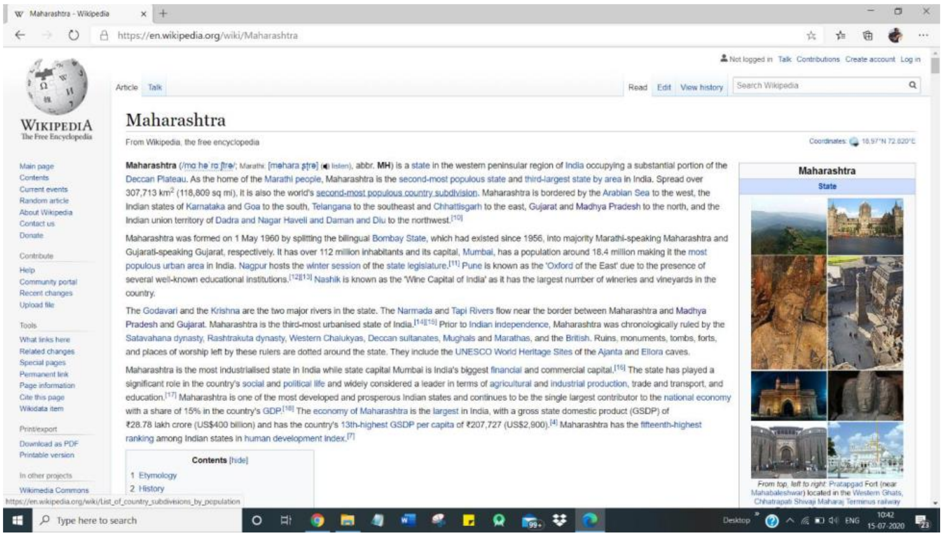
```
<area shape="rect" coords="36,403,139,470" href="https://en.wikipedia.org/wiki/Gujarat"
title="Gujarat">

<area shape="rect" coords="147,495,269,580"
href="https://en.wikipedia.org/wiki/Maharashtra" title="Maharashtra">

</center>

</body>

</html>
```

OUTPUT:



C:/Users/Nethra/Desktop/Image%20Map/ImageMap.html

CLICK ON THE NAME TO KNOW ABOUT THAT PLACE



Maharashtra - Wikipedia

https://en.wikipedia.org/wiki/Maharashtra

Maharashtra

From Wikipedia, the free encyclopedia

Coordinates: 18.97°N 72.820°E

Maharashtra (/mɑːhəˈrɑːʃtrə/; Marathi: [məharaːʂʈrə] listen), abbr. **MH**) is a state in the western peninsular region of India occupying a substantial portion of the Deccan Plateau. As the home of the Marathi people, Maharashtra is the second-most populous state and third-largest state by area in India. Spread over 307,713 km^2 (118,809 sq mi), it is also the world's second-most populous country subdivision. Maharashtra is bordered by the Arabian Sea to the west, the Indian states of Karnataka and Goa to the south, Telangana to the southeast and Chhattisgarh to the east, Gujarat and Madhya Pradesh to the north, and the Indian union territory of Dadra and Nagar Haveli and Daman and Diu to the northwest.[10]

Maharashtra was formed on 1 May 1960 by splitting the bilingual Bombay State, which had existed since 1956, into majority Marathi-speaking Maharashtra and Gujarati-speaking Gujarat, respectively. It has over 112 million inhabitants and its capital, Mumbai, has a population around 18.4 million making it the most populous urban area in India. Nagpur hosts the winter session of the state legislature.[11] Pune is known as the 'Oxford of the East' due to the presence of several well-known educational institutions.[12][13] Nashik is known as the 'Wine Capital of India' as it has the largest number of wineries and vineyards in the country.

The Godavari and the Krishna are the two major rivers in the state. The Narmada and Tapi Rivers flow near the border between Maharashtra and Madhya Pradesh and Gujarat. Maharashtra is the third-most urbanised state of India.[14][15] Prior to Indian independence, Maharashtra was chronologically ruled by the Satavahana dynasty, Rashtrakuta dynasty, Western Chalukyas, Deccan sultanates, Mughals and Marathas, and the British. Ruins, monuments, tombs, forts, and places of worship left by these rulers are dotted around the state. They include the UNESCO World Heritage Sites of the Ajanta and Ellora caves.

Maharashtra is the most industrialised state in India while state capital Mumbai is India's biggest financial and commercial capital.[16] The state has played a significant role in the country's social and political life and widely considered a leader in terms of agricultural and industrial production, trade and transport, and education.[17] Maharashtra is one of the most developed and prosperous Indian states and continues to be the single largest contributor to the national economy with a share of 15% in the country's GDP.[18] The economy of Maharashtra is the largest in India, with a gross state domestic product (GSDP) of ₹28.78 lakh crore (US$400 billion) and has the country's 13th-highest GSDP per capita of ₹207,727 (US$2,900).[4] Maharashtra has the fifteenth-highest ranking among Indian states in human development index.[7]

Contents [hide]

1 Etymology

2 History

Maharashtra

State

From top, left to right: Pratapgad Fort (near Mahabaleshwar) located in the Western Ghats, Chhatrapati Shivaji Maharaj Terminus railway

https://en.wikipedia.org/wiki/List_of_country_subdivisions_by_population

Result:

Thus the image map is created for India map.

Ex 2: Create dropdown menu using External Style Sheet

Aim:

To create a HTML page using types of Cascading Style Sheet.

ALGORITHM

Internal CSS:

Step 1: Create a HTML program with <style> tag.

Step 2: Inside the <style> tag, specify the format required for that web page.

Step 3 : Run the program with a web browser.

External CSS:

Step 4: Open a notepad, type the needed CSS in it and save it with .css extension.

Step 5: Refer this .css file in the HTML using the tag <link>.

Step 6: Run the program with a web browser.

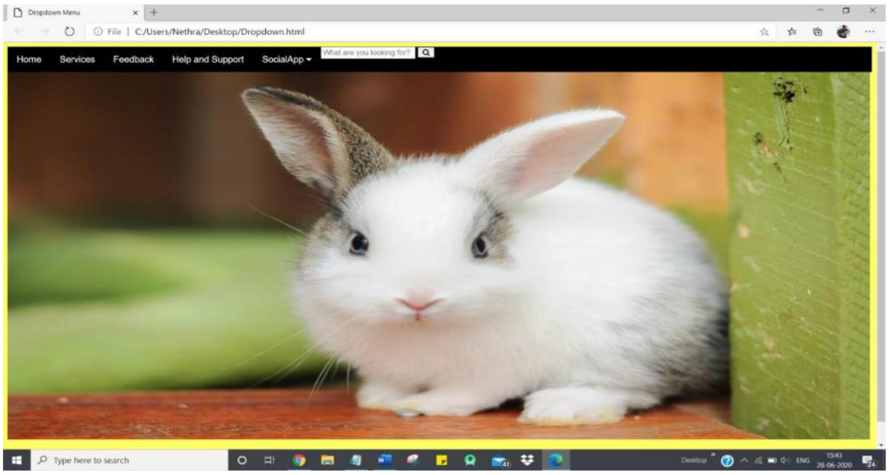
CODE

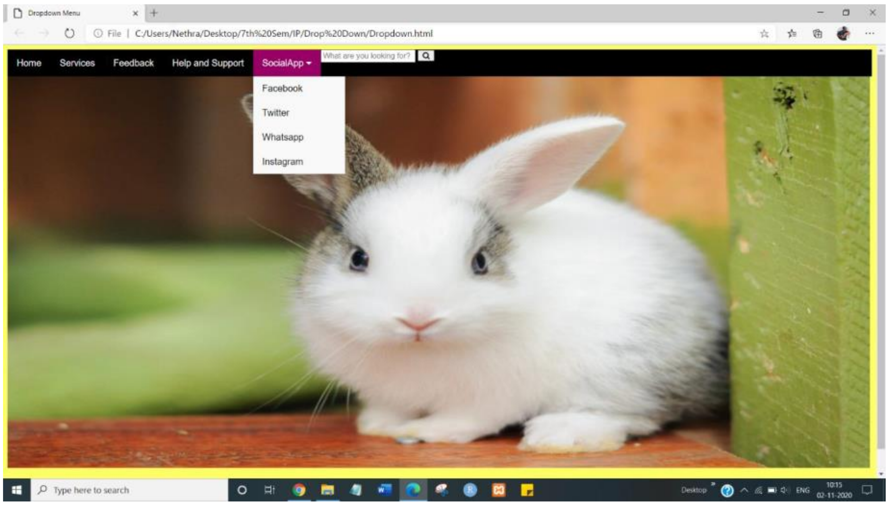
```
<html>

<head>

<title> Dropdown Menu </title>

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

<style>

body {

font-family: Comic Sans, Helvetica, sans-serif;

background-image: url("C:\Users\Nethra\Desktop\IP\Audio Video\Bunny.jpg");

background-color: #FFFF66;

}
```

```css
.navbar {
overflow: hidden;
background-color: #000000;
}
.navbar a {
float: left;
font-size: 16px;
color: white;
text-align: center;
padding: 14px 16px;
text-decoration: none;
}
.dropdown {
float: left;
overflow: hidden;
}
.dropdown .dropbtn {
font-size: 16px;
border: none;
outline: none;
color: white;
padding: 14px 16px;
background-color: inherit;
font-family: inherit;
margin: 0;
}
.navbar a:hover, .dropdown:hover .dropbtn {
background-color: #990066;
}
.dropdown-content {
display: none;
position: absolute;
background-color: #f9f9f9;
min-width: 160px;
box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
z-index: 1;
}
.dropdown-content a {
float: none;
color: black;
padding: 12px 16px;
text-decoration: none;
display: block;
text-align: left;
}
.dropdown-content a:hover {
background-color: #ddd;
}
.dropdown:hover .dropdown-content {
display: block;
}
</style>
</head>
<body>
<div class="navbar">
<a href="#home">Home</a>
```

```html
<a href="#news">Services</a>
<a href="#news">Feedback</a>
<a href="#news">Help and Support</a>
<div class="dropdown">
<button class="dropbtn">SocialApp
<i class="fa fa-caret-down"></i>
</button>
<div class="dropdown-content">
<a href="#">Facebook</a>
<a href="#">Twitter</a>
<a href="#">Whatsapp</a>
<a href="#">Instagram</a>
</div>
</div>
<div class="wrap">
<div class="search">
<input type="text" class="searchTerm" placeholder="What are you looking for?">
<button type="submit" class="searchButton">
<i class="fa fa-search"></i>
</button>
</div>
</div>
</div>
<img src="C:\Users\Nethra\Desktop\IP\Audio Video\Bunny.jpg" width="1500" height="680" alt="Bunny" />
<h3>Dropdown Menu</h3> </body> </html>
```

OUTPUT SCREENSHOTS:





Result:

Thus the drop down menu created using stylesheets.

Ex 3: Validate the user registration login and credit card details

AIM: Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.

ALGORITHM:

Step1: Open a notepad.

Step 2: Write the code for validation.html.

Step 3: Create javascript functions to validate user deatils

Step 4: Save the file with .html extension.

Step 5: Run the program in a web browser

Step 6: Display Results.

```
<html>
<head>
<title>Form Validation using JAVASCRIPT</title>
<link rel="stylesheet" href="style.css">
<script type="text/javascript">
function validate_form ( )
{
valid = true;
if ( document.contact_form.contact_name.value == "" )
{
alert ( "Please fill in the 'Name' box." );
valid = false;
}
if ( ( document.contact_form.gender[0].checked == false ) && (
document.contact_form.gender[1].checked == false ) )
{
alert ( "Please choose Gender: Male or Female" );
valid = false;
}
if ( document.contact_form.age.selectedIndex == 0 )
{
alert ( "Please select Age." );
valid = false;
}
if ( document.contact_form.terms.checked == false )
{
alert ( "Please check the Terms & Conditions box." );
valid = false;
}

var x=document.contact_form.email.value;
var atposition=x.indexOf("@");
var dotposition=x.lastIndexOf(".");
if (atposition<1 || dotposition<atposition+2 || dotposition+2>=x.length)
{
alert("Please enter a valid e-mail address \n atpostion:"+atposition+"\n
dotposition:"+dotposition);
return false;
}
if(!document.contact_form.phoneno.value.match(/^\d+/))
{
alert("Please only enter numeric characters only for your Age!");
valid = false;
}
return valid;
}
//-->
</script>
</head>
<body bgcolor="#FFFFFF">
<form name="contact_form" method="post" action="" onSubmit="return validate_form ( );">
<h1> REGISTRATION FORM DETAILS</h1>
<p>Name: <input type="text" name="contact_name"></p>
<p>Gender: <input type="radio" name="gender" value="Male"> Male
<input type="radio" name="gender" value="Female"> Female</p>
<p>Age:
<select name="age">
<option value="">Please Select an Option:</option>
<option value="0-18 years">0-18 years</option>
<option value="18-30 years">18-30 years</option>
<option value="30-45 years">30-45 years</option>
<option value="45-60 years">45-60 years</option>
<option value="60+ years">60+ years</option>
</select>
<p>
Email: <input type="text" name="email"></p>

<p>
Number: <input type="text" name="phoneno"></p>
<p>Please tick the Terms and Conditions
<input type="checkbox" name="terms" value="Yes"> Yes
<p><input type="submit" name="send" value="Submit"></p>
</form>
```

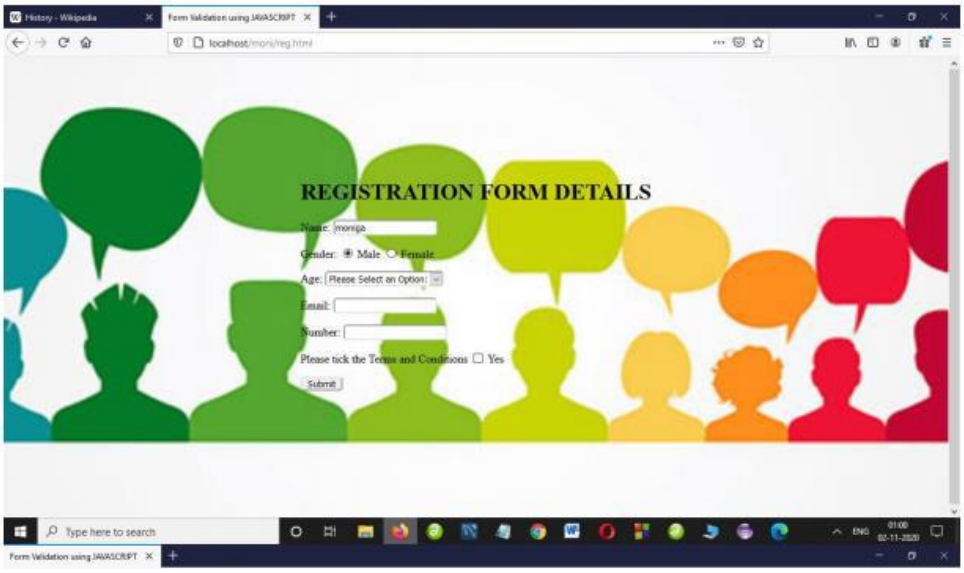
```
</body>
</html>
```

CSS Code:

style.css

```
@import url('https://fonts.googleapis.com/css?family=Muli&display=swap');
@import url('https://fonts.googleapis.com/css?family=Open+Sans:400,500&display=swap');
* {
box-sizing: border-box;
position: relative;
border-radius: 5px;
}
body
{
background-image: url(image/feedback.jpg);
background-position:center;
background-repeat: no-repeat;
background-size:cover;
display: flex;
align-items: center;
justify-content: center;
min-height: 100vh;
margin: 1;
}
```

OUTPUT:



REGISTRATION FORM DETAILS

Name: monga

Gender: ● Male ○ Female

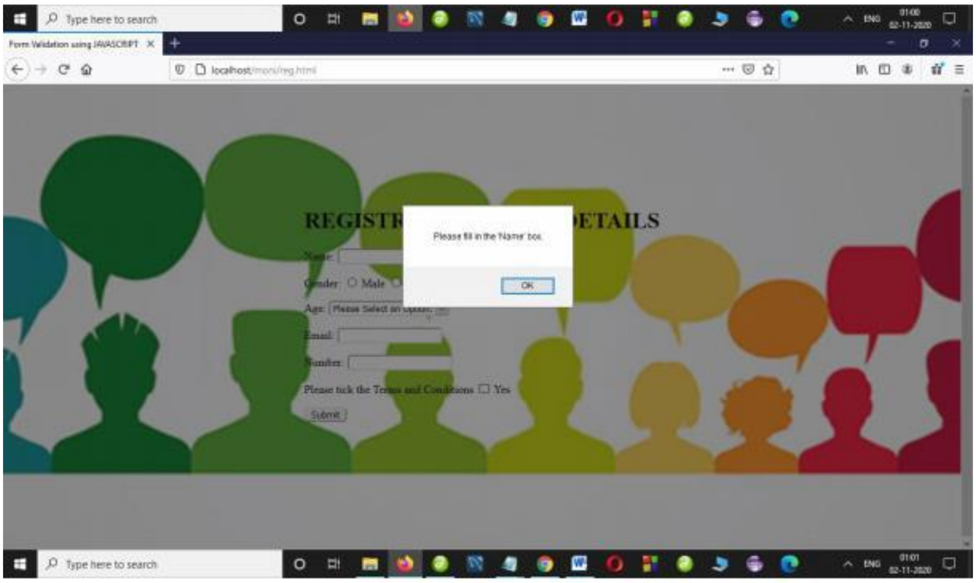
Age: Please Select an Option:

Email:

Number:

Please tick the Terms and Conditions □ Yes

Submit



REGISTR ETAILS

Please fill in the 'Name' box.

OK

Name:

Gender: ○ Male ○

Age: Please Select an Option:

Email:

Number:

Please tick the Terms and Conditions □ Yes

Submit

Result:

Thus the registration form created and validated using Java Script.

Ex: 4 Write programs in Java using Servlets

Aim: To write programs in Java using Servlets

- **i. To invoke servlet from HTML**
- **ii. Session tracking using hidden form fields.**

CODE:

index.html

```
<html>
<head>
<title>TODO supply a title</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>
<form action="servlet1">
Name:<input type="text" name="userName"/><br/>
<input type="submit" value="go"/>
</form>
</body>
</html>
```

FirstServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class FirstServlet extends HttpServlet {
public void doGet(HttpServletRequest request, HttpServletResponse response){
try{
response.setContentType("text/html");
PrintWriter out = response.getWriter();
String n=request.getParameter("userName");
out.print("Welcome "+n);
//creating form that have invisible textfield
out.print("<form action='servlet2'>");
out.print("<input type='hidden' name='uname' value='"+n+"'>");
                out.print("<input type='submit' value='go'>");

out.print("</form>");
out.close();
}catch(Exception e){System.out.println(e);}
}
}
```

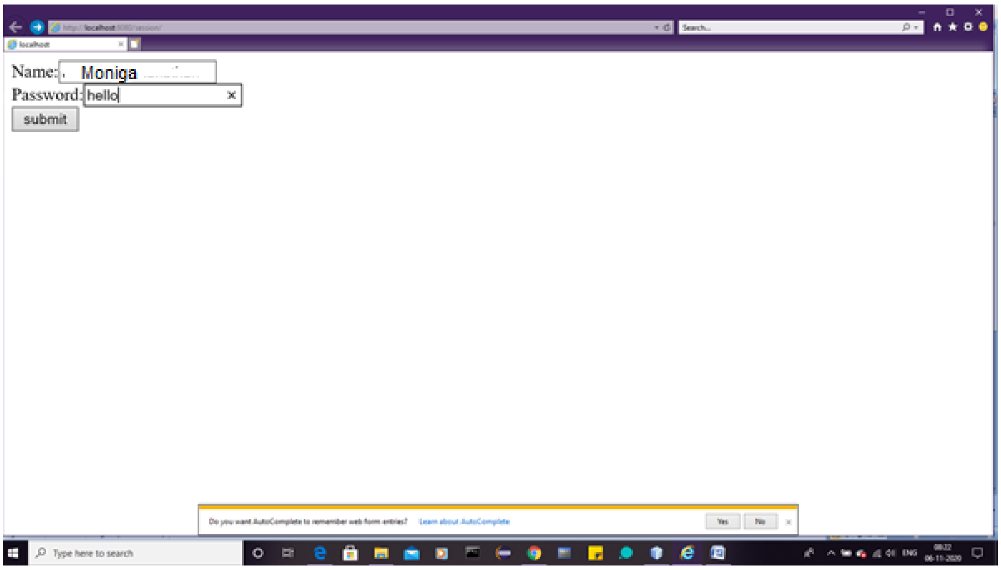
SecondServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class SecondServlet extends HttpServlet {
public void doGet(HttpServletRequest request, HttpServletResponse response) {
try{
response.setContentType("text/html");
PrintWriter out = response.getWriter();
//Getting the value from the hidden field
String n=request.getParameter("uname");
out.print("Hello "+n);
out.close();
}catch(Exception e){System.out.println(e);}
}
}
```

Web.xml

```
<web-app>
<servlet>
<servlet-name>s1</servlet-name>
<servlet-class>FirstServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>s1</servlet-name>
<url-pattern>/servlet1</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>s2</servlet-name>
<servlet-class>SecondServlet</servlet-class>
</servlet>
<servlet-mapping>
        <servlet-name>s2</servlet-name>

<url-pattern>/servlet2</url-pattern>
</servlet-mapping>
</web-app>
```

Output:



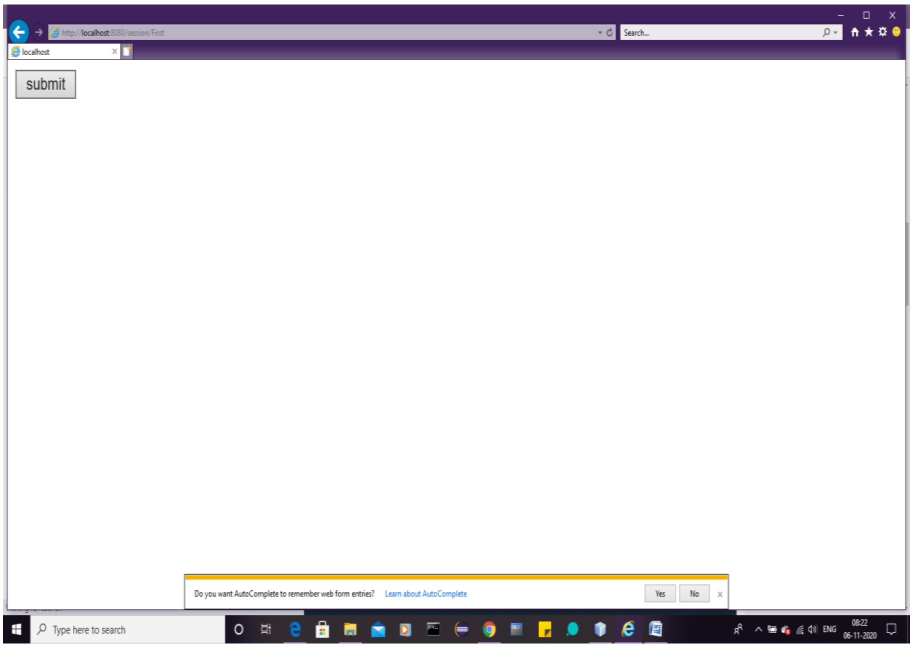
http://localhost:8080/session/

Name: Moniga

Password: hello

submit

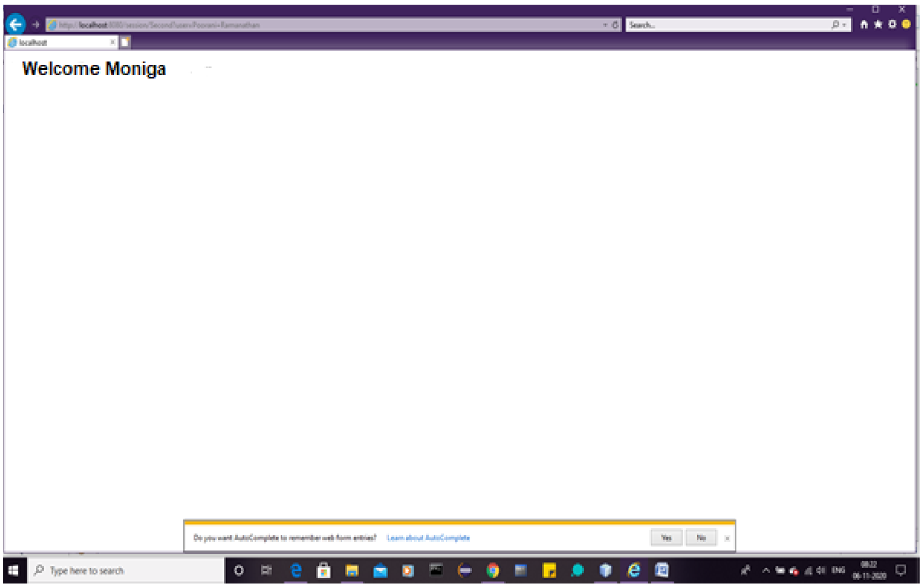
Do you want AutoComplete to remember web form entries? Learn about AutoComplete



http://localhost:8080/session/First

submit

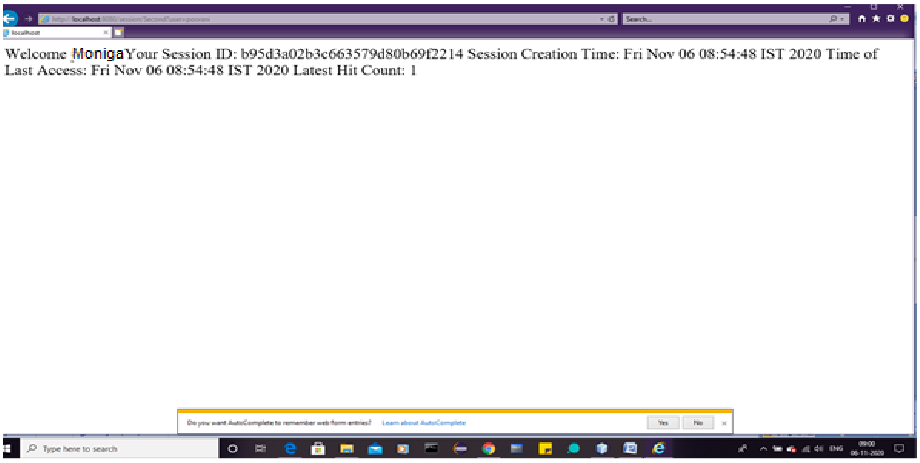
Do you want AutoComplete to remember web form entries? Learn about AutoComplete



http://localhost:8080/session/Second?uname=Poorani+Ramanathan

Welcome Moniga

Do you want AutoComplete to remember web form entries? Learn about AutoComplete



Welcome MonigaYour Session ID: b95d3a02b3c663579d80b69f2214 Session Creation Time: Fri Nov 06 08:54:48 IST 2020 Time of Last Access: Fri Nov 06 08:54:48 IST 2020 Latest Hit Count: 1

Result:

Thus the servlet program invoked from HTML form for session tracking.

Ex :5 Write programs in java to create three tier applications using servlets for conducting online examination for displaying student marklist

Aim:

To create three tier applications using servlets for conducting online examination for displaying student marklist

ALGORITHM:

1. Design the HTML page (ExamClient.html) with the following

   a) Create a form to get the input from the user.

   b) Use radio buttons to make various options for the questions.

   c) Set the URL of the server (ExamServer.jsp) as the value of the action attribute.

   d) Use submit button to invoke the server and send the form data to the server.

2. Create the JSP file with the following

   a) Read the input from the client.

   b) Retrieve the answers from the database.

   c) Match the answers from the user with the correct answers from the database table.

   d) For each correct answer increment the mark by 5.

   e) Server displays the mark and result to the client as a response.

ExamServer.jsp:

```
<%@page contentType="text/html" language="java" import="java.sql.*"%>

<html>

<head>

<title>Online Exam Server</title>

<style type="text/css">

  body{background-color:black;font-family:courier;color:blue}
```

```
</style>
</head>
<body>
<h2 style="text-align:center">ONLINE EXAMINATION</h2>
<p>
<a href="ExamClient.html">Back To Main Page</a>
</p>
<hr/>
<%
String str1=request.getParameter("ans1");
String str2=request.getParameter("ans2");
String str3=request.getParameter("ans3");
int mark=0;
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:examDS");
Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("SELECT * FROM examTab");
int i=1;
while(rs.next())
{
 if(i==1)
 {
  String dbans1=rs.getString(1);
  if(str1.equals(dbans1))
  {
   mark=mark+5;
  }
 }
 if(i==2)
 {
  String dbans2=rs.getString(1);
  if(str2.equals(dbans2))
  {
   mark=mark+5;
  }
 }
 if(i==3)
 {
  String dbans3=rs.getString(1);
  if(str3.equals(dbans3))
  {
   mark=mark+5;
  }
 }
 i++;
}
if(mark>=10)
{
 out.println("<h4>Your Mark Is : "+mark+"</h4>");
 out.println("<h3>Congratulations....! You Are Eligible For The Next Round...</h3>");
}
else
{
 out.println("<h4>Your Mark is : "+mark+"</h4>");
 out.println("<h3>Sorry....!! You Are Not Eligible For  The Next Round...</h3>");
}
```

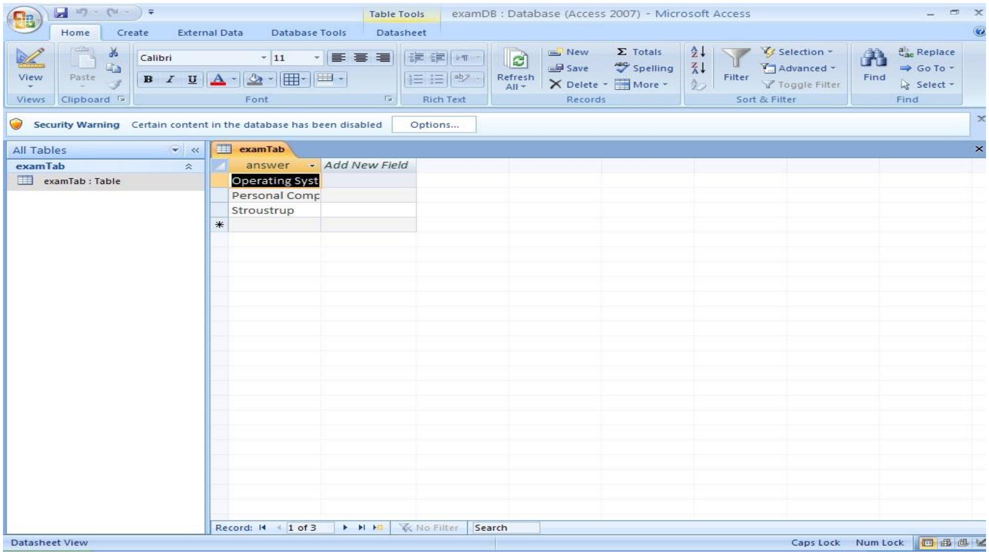
```
%>
</form>
</body>
</html>
```

ExamClient.html

```
<html>
<head>
<title>Online Exam Client</title>
<style type="text/css">
  body{background-color:black;font-family:courier;color:blue}
</style>
</head>
<body>
<h2 style="text-align:center">ONLINE EXAMINATION</h2>
<h3>Answer the following questions (5 marks for each correct answer)</h3>
<hr/>
<form name="examForm" method="post" action="ExamServer.jsp">
1. All computers must have <br/>
<input type="radio" name="ans1" value="Operating System">Operating System
<input type="radio" name="ans1" value="Application Software">Application Software
<input type="radio" name="ans1" value="CD Drive">CD Drive
<input type="radio" name="ans1" value="Microsoft word">Microsoft word
<br/><br/>
2. The term PC means <br/>
<input type="radio" name="ans2" value="Private Computer">Private Computer
<input type="radio" name="ans2" value="Professional Computer">Professional Computer
```

```
<input type="radio" name="ans2" value="Personal Computer">Personal Computer

<input type="radio" name="ans2" value="Personal Calculator">Personal Calculator

<br/><br/>

3.C was developed by?<br/>

<input type="radio" name="ans3" value="Dennis Ritchie">Dennis Ritchie

<input type="radio" name="ans3" value="Stroustrup">Stroustrup

<input type="radio" name="ans3" value="David Ritchie">David Ritchie

<input type="radio" name="ans3" value="Charles Babbage">Charles Babbage

<br/><br/>

<input type="submit" value="Check Your Result"/>

</form>

</body>

</html>
```

DATABASE



examDB : Database (Access 2007) - Microsoft Access

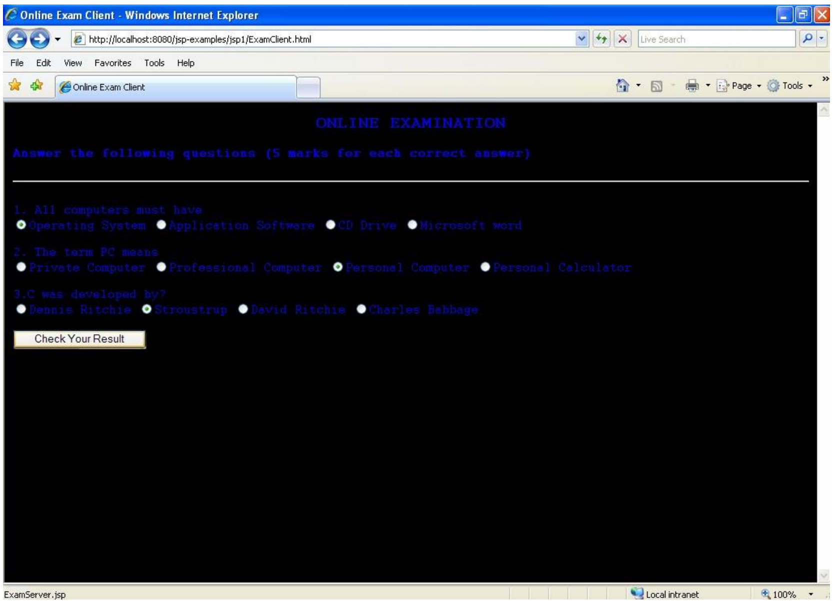
Security Warning Certain content in the database has been disabled

examTab : Table

answer	Add New Field
Operating Syst	
Personal Comp	
Stroustrup	

Record: 1 of 3

OUTPUT



Online Exam Client - Windows Internet Explorer
http://localhost:8080/jsp-examples/jsp1/ExamClient.html
File Edit View Favorites Tools Help
Online Exam Client
ExamServer.jsp
Local intranet
100%

ONLINE EXAMINATION

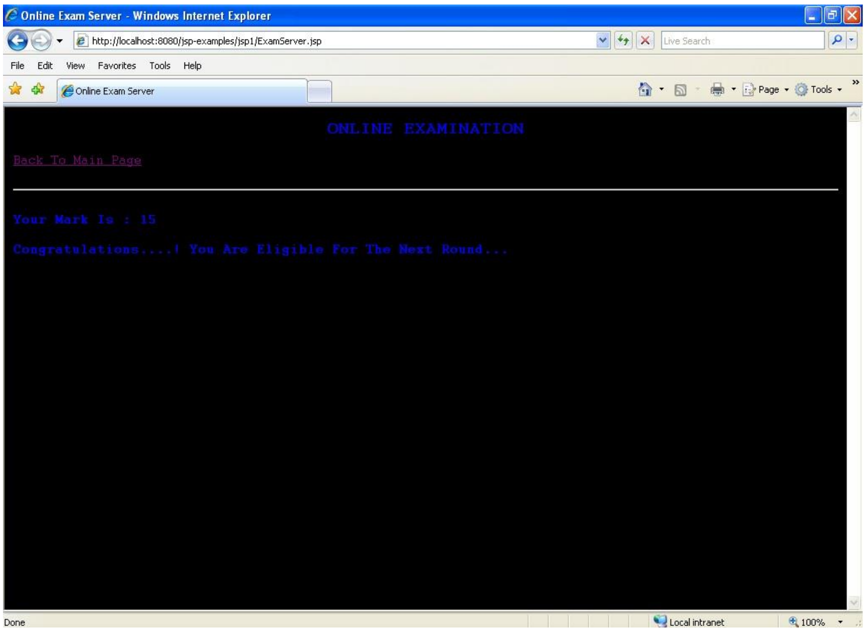
Answer the following questions (5 marks for each correct answer)

1. All computers must have
◉ Operating System ○ Application Software ○ CD Drive ○ Microsoft word

2. The term PC means
○ Private Computer ○ Professional Computer ◉ Personal Computer ○ Personal Calculator

3.C was developed by?
○ Dennis Ritchie ◉ Stroustrup ○ David Ritchie ○ Charles Babbage

Check Your Result



Online Exam Server - Windows Internet Explorer
http://localhost:8080/jsp-examples/jsp1/ExamServer.jsp
File Edit View Favorites Tools Help
Online Exam Server
Done
Local intranet
100%

ONLINE EXAMINATION

Back To Main Page

Your Mark Is : 15

Congratulations....! You Are Eligible For The Next Round...

Result:

Thus the three tier application created for online quiz.

EX.NO : 6 Programs using XML – Schema – XSLT/XSL

AIM:

To write a program for implementing student information using XML & XSL.

ALGORITHM:

Step1:The XML document reference to the XSL document.

Step2: The create the student information in the student tag and insert the same information about the student.

Step3:Close all opened tags.

Step4:In XSL document create a html file include the student information in table format.

Step5:Close the necessary tags.

PROGRAM:

```
//student.xml
<?xml version="1.0"?>
<?xml-stylesheet type="text/css" href="student.css"?>
<!DOCTYPE student SYSTEM "student.dtd">
<students>
<student>
<sno>801041</sno>
<sname>S.Soundarapandian</sname>
<dob>05/081991</dob>
<address>Neyveli</address>
<m1>80</m1>
<m2>90</m2>
<m3>95</m3>
</student>
<student>
```

```
<sno>801049</sno>

<sname>R.Vadivelan</sname>

<dob>22/07/1990</dob>

<address>Pondicherry</address>

<m1>90</m1>

<m2>95</m2>

<m3>80</m3>

</student>

<student>

<sno>801037</sno>

<sname>R.Satheesh</sname>

<dob>21/01/1991</dob>

<address>Kanyakumari</address>

<m1>80</m1>

<m2>90</m2>

<m3>95</m3>

</student>

</students>
```

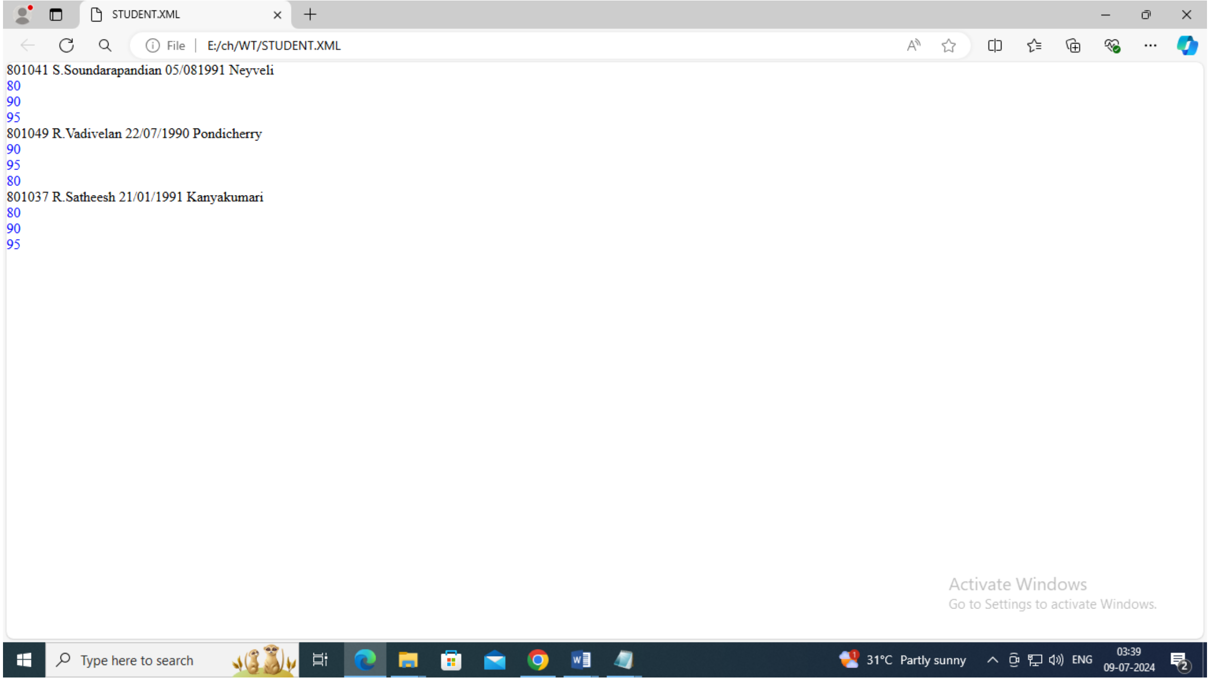
//student.css

```
Student { background.color:#aabbcc;width:100%;} Sno {

display:block; color:GREEN; font.size:25pt; } Sname {

display:block; color:BLACK; font.size:20pt; }Dob {

display:block; color:BLUE; font.size:15pt; } Address {

display:block; color:BLUE; font.size:15pt; }m1 {

display:block; color:BLUE; font.size:15pt; }

m2 { display:block; color:BLUE; font.size:15pt; }m3 {

display:block; color:BLUE; font.size:15pt;}
```

//student.dtd`

```
<?xml version="1.0"?>

<!ELEMENT students (student+)>

<!ELEMENT student (sno,sname,dob,address,m1,m2,m3)>

<!ELEMENT sno (#PCDATA)>

<!ELEMENT sname (#PCDATA)>

<!ELEMENT dob (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT m1 (#PCDATA)>

<!ELEMENT m2 (#PCDATA)>

<!ELEMENT m3 (#PCDATA)>
```

OUTPUT:



```
801041 S.Soundarapandian 05/081991 Neyveli
80
90
95
801049 R.Vadivelan 22/07/1990 Pondicherry
90
95
80
801037 R.Satheesh 21/01/1991 Kanyakumari
80
90
95
```

RESULT:

Thus the creation of XSL document using Xml has been verified successfully

Ex 7 Programs using NoSQL

Aim:

To develop programs using NoSQL –MonoDB – Create a restaurant database and display using find query.

Algorithm:

1. Go to the MongoDB Atlas website (https://www.mongodb.com/cloud/atlas) and click on the "Sign up" button in the top-right corner.

2. Enter your email address and create a password. You can also sign up with your Google or Github account.

3. Select the type of organization you're signing up for: "Personal" or "Team". If you're signing up for a team, you'll need to provide additional information about your organization.

4. Fill in your personal information, including your name and country.

5. Review the Terms of Service and Privacy Policy, and click on the "Create Account" button.

6. You'll be taken to the MongoDB Atlas dashboard, where you can create your first project. Click on the "Create a New Project" button to get started.

7. Give your project a name, select your preferred cloud provider and region, and click on the "Create Project" button.

8. Once your project is created, you can start creating clusters and adding data to your database.

Program

Structure of 'restaurants' collection :

```
{
  "address": {
     "building": "1007",
    "coord": [ -73.856077, 40.848447 ],
    "street": "Morris Park Ave",
    "zipcode": "10462"
  },
  "borough": "Bronx",
  "cuisine": "Bakery",
  "grades": [
    { "date": { "$date": 1393804800000 }, "grade": "A", "score": 2 },
    { "date": { "$date": 1378857600000 }, "grade": "A", "score": 6 },
    { "date": { "$date": 1358985600000 }, "grade": "A", "score": 10 },
    { "date": { "$date": 1322006400000 }, "grade": "A", "score": 9 },
    { "date": { "$date": 1299715200000 }, "grade": "B", "score": 14 }
  ],
  "name": "Morris Park Bake Shop",
  "restaurant_id": "30075445"
}
```

Query:

```
db.restaurants.find({},{"restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1});
```

Output:

```
{ "_id" : ObjectId("564c2d939eb21ad392f175c9"), "borough" : "Manhattan", "cuisine" : "Irish",
"name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }

{ "_id" : ObjectId("564c2d939eb21ad392f175ca"), "borough" : "Bronx", "cuisine" : "Bakery",
"name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }

{ "_id" : ObjectId("564c2d939eb21ad392f175cb"), "borough" : "Brooklyn", "cuisine" :
"American ", "name" : "Riviera Caterer", "restaurant_id" : "40356018" }

{ "_id" : ObjectId("564c2d939eb21ad392f175cc"), "borough" : "Brooklyn", "cuisine" :
"Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
```

```
{ "_id" : ObjectId("564c2d939eb21ad392f175cd"), "borough" : "Queens", "cuisine" :
"Jewish/Kosher", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356068" }

{ "_id" : ObjectId("564c2d939eb21ad392f175ce"), "borough" : "Queens", "cuisine" :
"American ", "name" : "Brunos On The Boulevard", "restaurant_id" : "40356151" }

{ "_id" : ObjectId("564c2d939eb21ad392f175cf"), "borough" : "Brooklyn", "cuisine" :
"American ", "name" : "Regina Caterers", "restaurant_id" : "40356649" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d0"), "borough" : "Brooklyn", "cuisine" :
"Delicatessen", "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d1"), "borough" : "Bronx", "cuisine" : "American
", "name" : "Wild Asia", "restaurant_id" : "40357217" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d2"), "borough" : "Brooklyn", "cuisine" : "Ice
Cream, Gelato, Yogurt, Ices", "name" : "Taste The Tropics Ice Cream", "restaurant_id" :
"40356731" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d3"), "borough" : "Brooklyn", "cuisine" :
"American ", "name" : "C & C Catering Service", "restaurant_id" : "40357437" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d4"), "borough" : "Brooklyn", "cuisine" :
"Chinese", "name" : "May May Kitchen", "restaurant_id" : "40358429" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d5"), "borough" : "Manhattan", "cuisine" :
"American ", "name" : "1 East 66Th Street Kitchen", "restaurant_id" : "40359480" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d6"), "borough" : "Brooklyn", "cuisine" :
"Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40360045" }

{ "_id" : ObjectId("564c2d949eb21ad392f1c593"), "borough" : "Queens", "cuisine" : "Other",
"name" : "Laquana King", "restaurant_id" : "50003441" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d7"), "borough" : "Brooklyn", "cuisine" : "Ice
Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360076" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d8"), "borough" : "Queens", "cuisine" : "Ice
Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }

{ "_id" : ObjectId("564c2d939eb21ad392f175d9"), "borough" : "Brooklyn", "cuisine" :
"Delicatessen", "name" : "Nordic Delicacies", "restaurant_id" : "40361390" }

{ "_id" : ObjectId("564c2d939eb21ad392f175da"), "borough" : "Brooklyn", "cuisine" :
"American ", "name" : "The Movable Feast", "restaurant_id" : "40361606" }

{ "_id" : ObjectId("564c2d939eb21ad392f175db"), "borough" : "Manhattan", "cuisine" :
"American ", "name" : "Glorious Food", "restaurant_id" : "40361521" }
```

Result:

Thus the table creation using NoSQL Database MongoDB is completed.