**SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE**

**Department Of Information Technology**

****

**Subject Code:** IT38504

**Subject Name:** Web Engineering

**LAB ASSIGNMENTS**

**Name: Instructor:**

Akshat Tiwari Mr. Lalit Purohit Sir

Mr. Upendra Singh Sir

**Enrolment No.:**

0801IT201008

Lab Assignment – 1

Q) The HTML web page should include  
- Personal Information (Photograph, Name, Address, DoB, Mobile No., Email, Hobbies, etc.)  
- Academic Information (Table containing your Academic record of 10th, 12th, BTech till date etc.), Member of some academic body, Other academic achievements etc.

Code :

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

<body style="background-color: bisque;" >

<div style="display: flex ;flex-direction: column; align-items: center;" >

<div style="font-size: 4rem; font-weight: bold;font-style: italic;margin-bottom: 1rem; ">Akshat Tiwari</div>

<div style="border-top: 2px solid black; display: flex; flex-direction: row; width: 80%; height: 50vh ;align-items: center; " >

<div style="width: 20%;padding: 1rem ; border-right: 1px solid black;display: flex;justify-content: center;">

<img src="image.jpg" alt="Loading..." style=" width: 12rem; height: 12rem;" >

</div>

<div style="display: flex;flex-direction: column; width:80%;align-items: center;" >

<div style="font-size:5rem ;font-family: 'Times New Roman', Times, serif;" >ABOUT</div>

<ul style="font-size: 1.5rem;">

<li>Name : Akshat Tiwari</li>

<li>Address : E-104,Shekhar Enclave,Sanchar Nagar,Indore</li>

<li>Date Of Birth : 14/04/2002</li>

<li>Mobile No. : 9589281960</li>

<li>Gmail : akshatmtiwari@gmail.com</li>

</ul>

</div>

</div>

<div style="border: 1px solid black;padding: 1rem; display: flex;flex-direction: column; align-self: center; width: 80%;" >

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >Degree/Certificate</div>

<div style="width: 30%; font-size: 1.5rem; " >Institute/School</div>

<div style="width: 30%; font-size: 1.5rem; " >Percentage/CGPA</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >10th</div>

<div style="width: 30%; font-size: 1.5rem; " >DPS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >90.8%</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >10th</div>

<div style="width: 30%; font-size: 1.5rem; " >DPS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >92.4%</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >Sem 1 </div>

<div style="width: 30%; font-size: 1.5rem; " >SGSITS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >8.08</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >Sem 2</div>

<div style="width: 30%; font-size: 1.5rem; " >SGSITS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >8.24</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >Sem 3</div>

<div style="width: 30%; font-size: 1.5rem; " >SGSITS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >8.30</div>

</div>

<div style="display: flex;flex-direction: row;" >

<div style="width: 40%; font-size: 2rem; font-weight: bold;" >Sem 4</div>

<div style="width: 30%; font-size: 1.5rem; " >SGSITS Indore</div>

<div style="width: 30%; font-size: 1.5rem; " >7.73</div>

</div>

</div>

</div>

</body>

</html>

# 

Lab Assignment – 2

Q) Create the layouts using CSS

1. Exam System

Code :

<!DOCTYPE html>

<html lang="en">

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<style>

\* {

margin: 0px;

padding: 0px;

}

.container {

background-color: #FFE6CD;

width: 100%;

height: 100vh;

}

.cont {

border: 2px solid #E9BE5F;

}

.f-heading {

text-align: center;

font-weight: normal;

margin: 0px 0px 30px 0px;

padding-top: 30px;

}

.s-heading {

text-align: center;

font-weight: bold;

margin-bottom: 55px;

}

.navbar {

width: 100%;

height: 15vh;

border: 2px solid #88B76F;

background-color: #D2E7D4;

}

.nav {

display: flex;

flex-direction: row;

justify-content: center;

align-items: center;

}

.items {

list-style: none;

margin: 12px 60px;

padding: 16px 13px;

border: 2px solid #A1BBCC;

text-align: center;

width: 100px;

height: 31px;

background-color: #D9E8FB;

}

.items a {

text-decoration: none;

color: black;

}

.boxes {

display: flex;

align-items: center;

justify-content: center;

margin-top: 30vh;

}

.box {

border: 2px solid #D90073;

background-color: #D90073;

margin: 0px 20px 0px 20px;

width: 25vh;

height: 25vh;

color: white;

display: flex;

align-items: center;

justify-content: center;

}

.box p {

font-size: 25px;

text-align: center;

}

</style>

</head>

<body>

<div class="container">

<div class="cont">

<h2 class="f-heading">SHRI G S INSTITUTE OF TECHNOLOGY &amp; SCIENCE, INDORE</h2>

<h2 class="s-heading">ONLINE EXAMINATION PORTAL</h2>

</div>

<nav class="navbar">

<ul class="nav">

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Home</a></li>

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Ordinance</a></li>

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Courses</a></li>

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Exam Time Table</a></li>

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Result</a></li>

<li class="items"><a href="http://127.0.0.1:5500/Exam\_System.html#">Login</a></li>

</ul>

</nav>

<div class="boxes">

<div class="box">

<p>Past Result</p>

</div>

<div class="box">

<p>Latest Information</p>

</div>

<div class="box">

<p>Examination Procedure</p>

</div>

</div>

</div>

</body>

</html

2. Chess Board

Code :

<html>

<head>

<link rel="stylesheet" href="chess.css">

<title>Title of the document</title>

<style>

        .chessboard {

            width: 640px;

            height: 640px;

            margin: 40px 400px;

            border: 8px solid #000;

            border-radius: 4px;

        }

        .black {

            float: left;

            width: 80px;

            height: 80px;

            background-color: black;

        }

        .white {

            float: left;

            width: 80px;

            height: 80px;

            background-color: white;

        }

    </style>

</head>

<body>

<div class="chessboard">

<div class="row">

<div class="white" ></div>

<div class="black" ></div>

<div class="white" ></div>

<div class="black" ></div>

<div class="white" ></div>

<div class="black" ></div>

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<div class="black" ></div>

<div class="white" ></div>

<div class="black" ></div>

<div class="white" ></div>

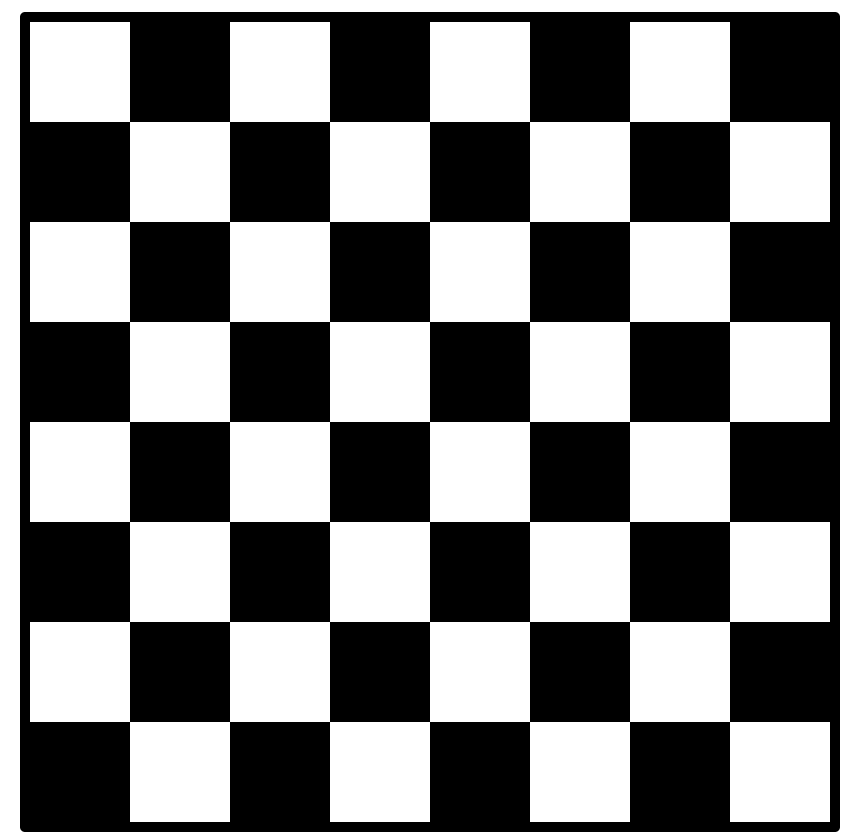
</div>

</div>

</body>

</html>

Chess.css :



Lab Assignment - 3

Q1) Write a simple CGI program to welcome you by writing your name. The initial request should be a form asking for your name. After submitting your name, the CGI program should send a welcome message to you.

Code :

python

#!/usr/bin/env python

import cgi

import os

# Create instance of FieldStorage

form = cgi.FieldStorage()

# Get filename here.

file\_item = form['upload\_file']

# Test if the file was uploaded

if file\_item.filename:

# strip leading path from file name to avoid directory traversal

attacks

filename = os.path.basename(file\_item.filename.replace("\\", "/"))

# write file to uploads directory

open('uploads/' + filename, 'wb').write(file\_item.file.read())

message = 'File uploaded successfully.'

else:

message = 'No file was uploaded.'

# Print message back to client

print('Content-Type: text/html\n')

print('<html>')

print('

<head>')

    print('<title>File Upload</title>')

    print('</head>')

print('

<body>')

    print('<h2>{}</h2>'.format(message))

    print('</body>')

print('

</html>')

Q2) Write a CGI program which asks for a secrete word from user. If secrete word typed by the user is entered correctly then a congratulation message should be printed on the screen.

Code :

python

#!/usr/bin/env python

import cgi

print("Content-type: text/html\n")  # required header for CGI

# HTML form to input secret word

print('''<html>   <head>  <title> Secret Word </title>  </head>

<body>  <form *method*="post">

<label>Enter the secret word:</label>

<input *type*="text" *name*="secret\_word" *required*>

<input *type*="submit" *value*="Submit">

</form>  </body>  </html>''')

# Check if the secret word matches the predefined value

form = cgi.FieldStorage()

secret\_word = form.getvalue("secret\_word")

if secret\_word == "open sesame":

    print("<h2>Congratulations, you have entered the correct secret word!</h2>")

Q3) Write a CGI program to upload a file / image on web server.

Code :

#!/usr/bin/env python3

import cgi

print("Content-Type: text/html\n\n")

form = cgi.FieldStorage()

if "name" not in form:

print("""

<html>

<body>

    <h1>Welcome</h1>

    <form *method*="post">

        <label>Please enter your name:</label><br>

        <input *type*="text" *name*="name"><br>

        <input *type*="submit" *value*="Submit">

    </form>

</body>

</html>

""")

else:

name = form.getvalue("name")

print(f"""

<html>

<body>

    <h1>Welcome, {name}!</h1>

</body>

</html>

""")

Lab Assignment – 5

Study on the Front End of our Project “GSRooms”.

# Overview

Students coming from cities outside Indore find it tough to find a spot near SGSITS Indore for spending their college years. GSROOMS is made from the intention of helping these students to find a PG near SGSITS Indore, and get them a place to settle in for the 4 college years.

# User Interface and Design

* The User Interface contains a navbar section, body and then footer.
* The Navbar contains the icon which acts as a route to the home page, also contains login and sign up page. Along with with with this it contains functionalites of post rooms and check rooms.
* This functionalities provide users to interact with the the web application.As in if they are someone who are looking to post a room or someone who is in search of a room.

# Technologies Used

* Front End :

1. React JS
2. Bootstrap
3. CSS (external css along with bootstrap)

* Backend :

1. Node JS
2. Express

* Database :

1. MYSQL

## Functionality

* This application caters to both,those students have a vacant room and those who want to post a room.So both of these functionalites are provided in the navigation bar section of the page.
* To perform both of these operations the user first needs to sign up.If the user already has signed,then he/she can simply login.
* In the MYSQL database to tables are present,one is user table and another is property data table.User table stores the the userernam,email,password. Id is made the primary key for this table.On the other hand propertyData table stores information related to the rooms such as locality,rent etc.
* In the search bar at the home page the user can type the locality and find the rooms available at those places.Remember the localities for which rooms will be fetched should be near SGSITS.
* The Post Room functionality allows user to post a room they know which is available near SGSITS.
* The Footer section contains the gmail id’s and contact number of the the creators.

# Development Process

* First we started with creating a react app using the npm create react-app.
* Then we created the UI for the front end with the help of bootsrap,css.In this process we also break down the whole app into smaller components and then use them.
* After this we set up the backend,create tables in MYSQL and then link them to the app using express and axios.
* Now we add some sample data in the table for the purpose of testing and validation.That is we basically register ourselves and then test its working for us.
* After that we adjust our app accordingly and it future try to make it more practical.

# Code

Home->

import React from "react";

import Axios from "axios";

import { useState } from "react";

import "./Home.css";

import himg from "./homeimg.jpeg";

import Footer from "../Components/Footer";

import { Link } from "react-router-dom";

export default function Home() {

  const [PropertyList, setPropertyList] = useState([]);

  const [loc, setLoc] = useState("");

  const getPropertyList = async (event) => {

    event.preventDefault();

    try {

      const res = await Axios.get("http://localhost:3001/server/posts");

      setPropertyList(res.data);

    } catch (err) {

      console.log(err);

    }

  };

  const handleInputChange = (event) => {

    setLoc(event.target.value);

    console.log(loc);

  };

  return (

    <>

      <div>

        <div className="search">

          <div className="searchBar">

            <center>

              <h1>find pg rooms nearby</h1>

            </center>

            <form className="d-flex" role="search" onSubmit={getPropertyList}>

              <input

                className="form-control me-2"

                type="search"

                placeholder="Search"

                aria-label="Search"

                value={loc}

                onChange={handleInputChange}

              />

              <datalist id="localities">

                <option value="vallabh nagar"></option>

                <option value="malwa mill"></option>

                <option value="vijay nagar"></option>

              </datalist>

              <button className="btn" type="submit">

                <Link className="list-group-item" to="/Search">

                  Search

                </Link>

              </button>

            </form>

          </div>

        </div>

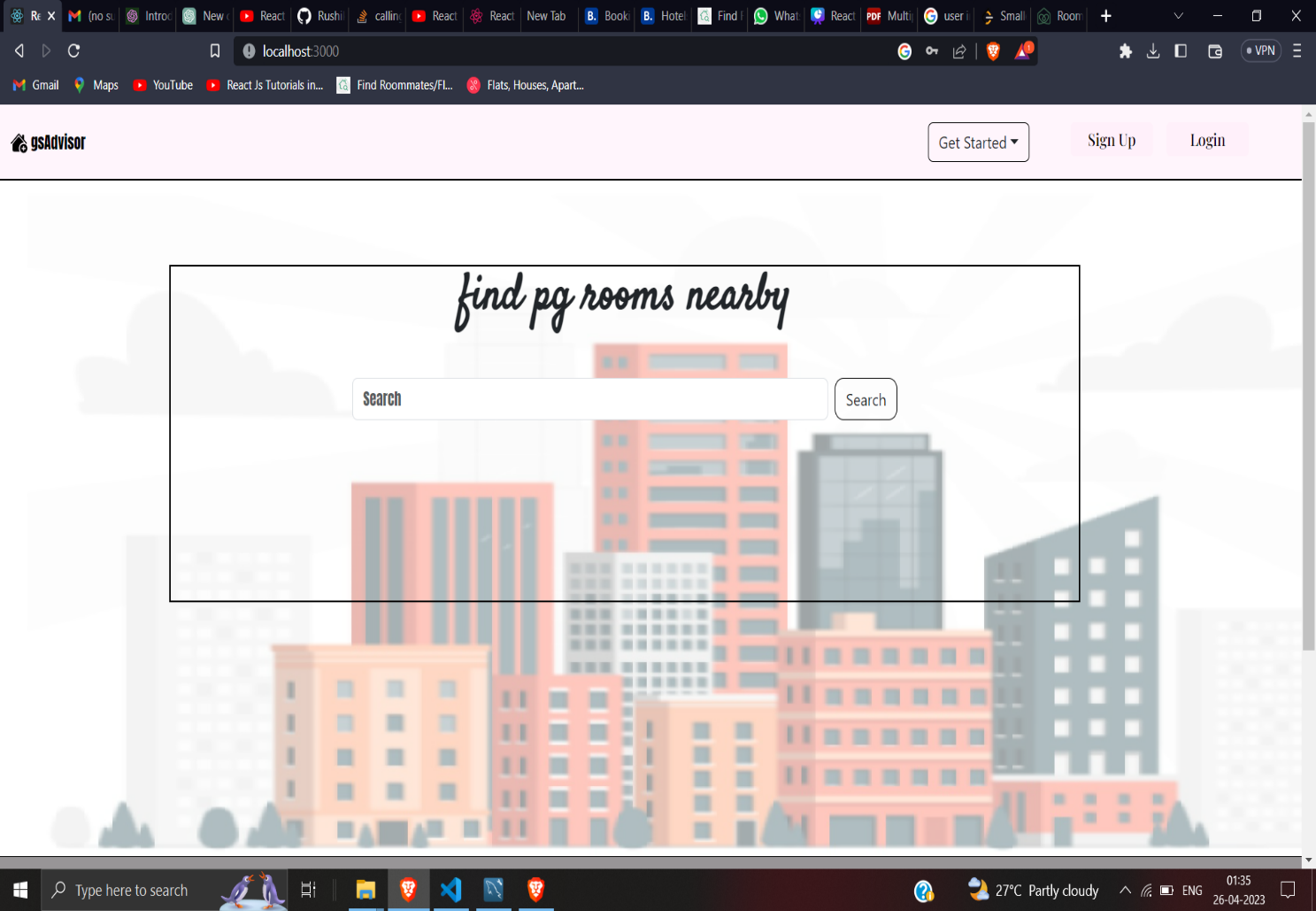
        <Footer />

      </div>

    </>

  );

}



Post->

import React from "react";

import { useState } from "react";

import Axios from "axios";

import "./Post.css";

export default function Post() {

  const [gmail, setGmail] = useState("");

  const [propertyName, setPropertyName] = useState("");

  const [address, setAddress] = useState("");

  const [phoneNumber, setPhoneNumber] = useState("");

  const [rent, setRent] = useState(0);

  const [locality, setLocality] = useState("");

  const [propertyType, setPropertyType] = useState("");

  const [ownerName, setOwnerName] = useState("");

  const [date, setDate] = useState();

  const [image, setImage] = useState("");

  const register = () => {

    Axios.post("http://localhost:3001/server/posts", {

      gmail: gmail,

      propertyName: propertyName,

      address: address,

      phoneNumber: phoneNumber,

      rent: rent,

      locality: locality,

      propertyType: propertyType,

      ownerName: ownerName,

      date: date,

      image: image,

    }).then(() => {

      alert("You have successfully registered");

    });

  };

  return (

    <div className="post">

      <h1>SECTION 1 : Personal Details</h1>

      <div className="personalDetails">

        <label>Gmail</label>

        <input

          type="text"

          onChange={(event) => {

            setGmail(event.target.value);

          }}

        />

        <label>Phone Number</label>

        <input

          type="number"

          onChange={(event) => {

            setPhoneNumber(event.target.value);

          }}

        />

        <label>Owner Name</label>

        <input

          type="text"

          onChange={(event) => {

            setOwnerName(event.target.value);

          }}

        />

      </div>

      <h1>SECTION 2 : Property Details</h1>

      <div className="propertyDetails">

        <div className="col1">

          <label>Property Name</label>

          <input

            type="text"

            onChange={(event) => {

              setPropertyName(event.target.value);

            }}

          />

          <label>Locality</label>

          <input

            type="text"

            onChange={(event) => {

              setLocality(event.target.value);

            }}

          />

          <label>Address</label>

          <input

            type="text"

            onChange={(event) => {

              setAddress(event.target.value);

            }}

          />

        </div>

        <div className="col2">

          <label>Rent</label>

          <input

            type="number"

            onChange={(event) => {

              setRent(event.target.value);

            }}

          />

          <label>Property Type</label>

          <input

            type="text"

            onChange={(event) => {

              setPropertyType(event.target.value);

            }}

          />

          <label>Upload Image</label>

          <input

            className="inputImage"

            type="file"

            accept="image/png,image/gif,image/jpeg"

            onChange={(event) => {

              setImage(event.target.value);

            }}

          />

        </div>

      </div>

      <div className="date">

        <label>Date of registration</label>

        <input

          type="date"

          onChange={(event) => {

            setDate(event.target.value);

          }}

        />

      </div>

      <div className="register">

        <button className="btn btn-dark" type="submit" onClick={register}>

          Register

        </button>

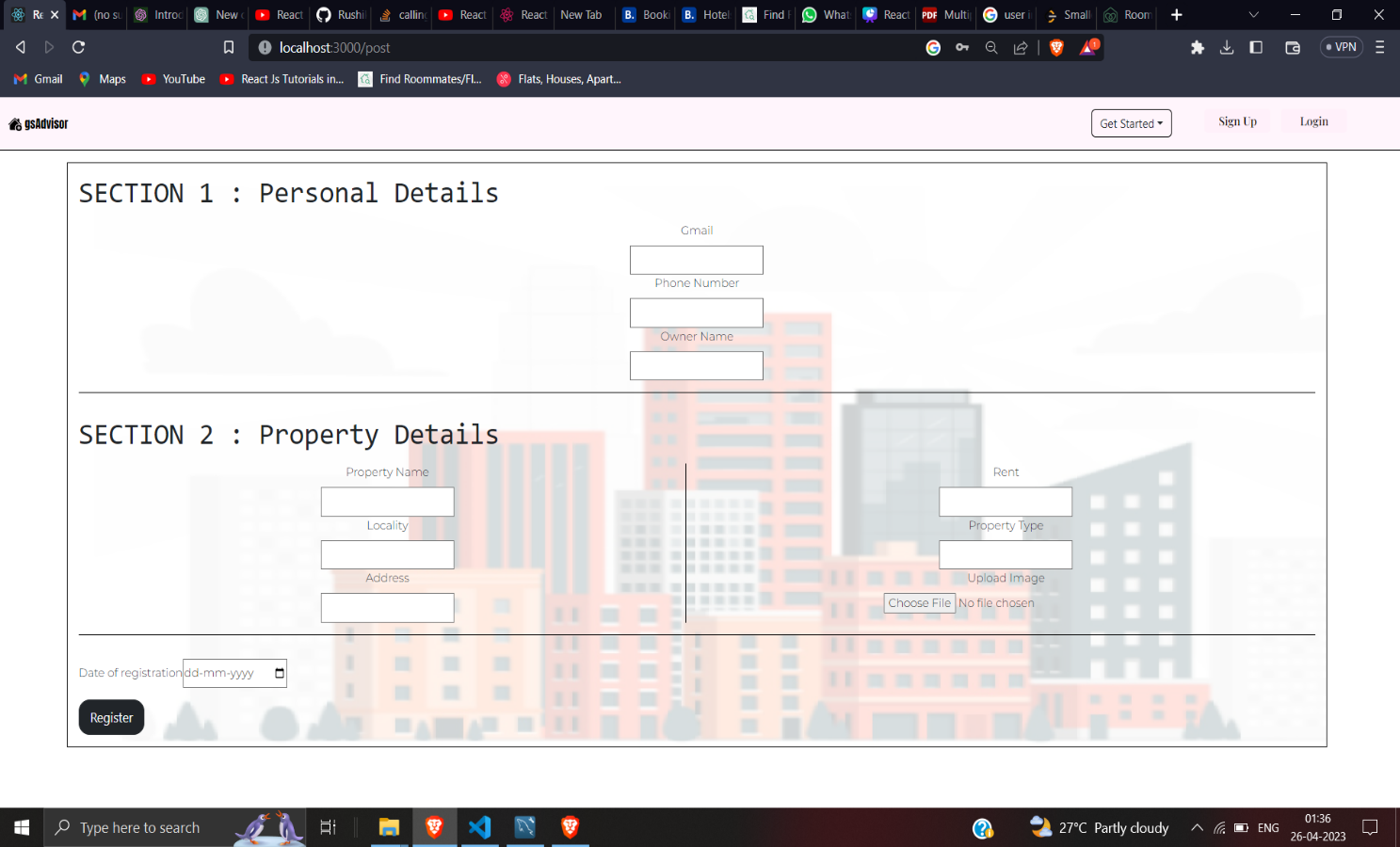
      </div>

      <div />

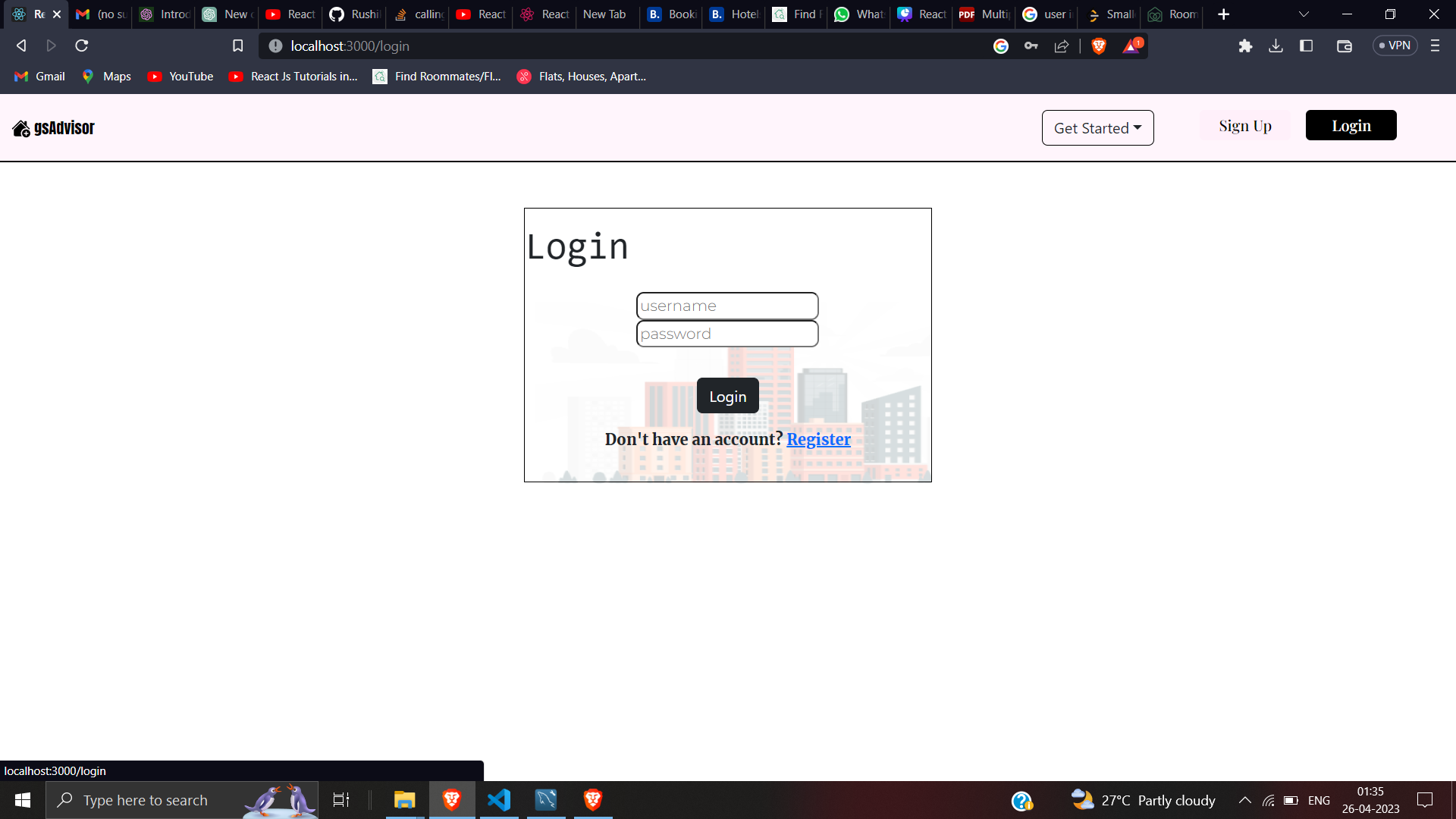
    </div>

  );

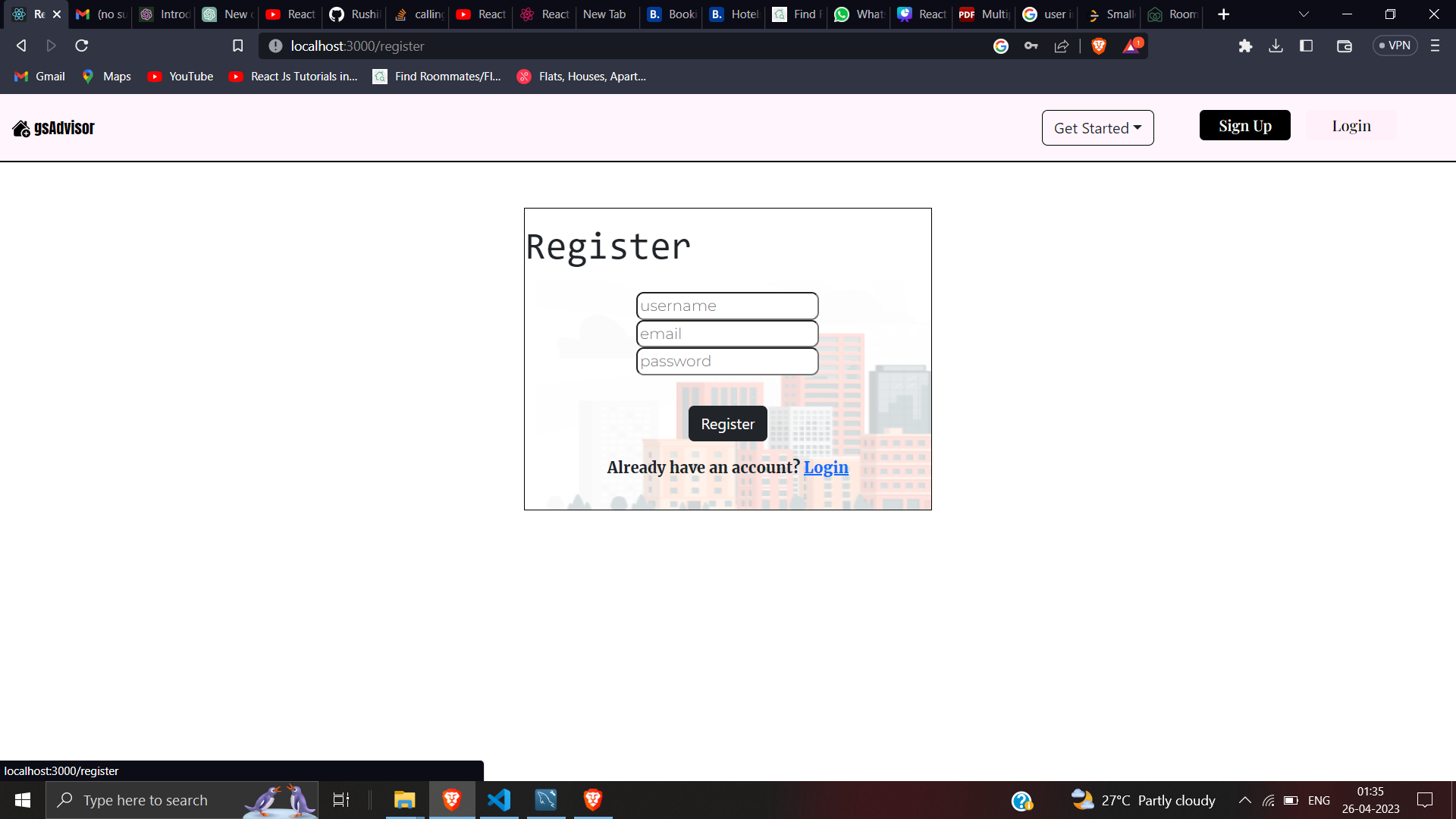
}



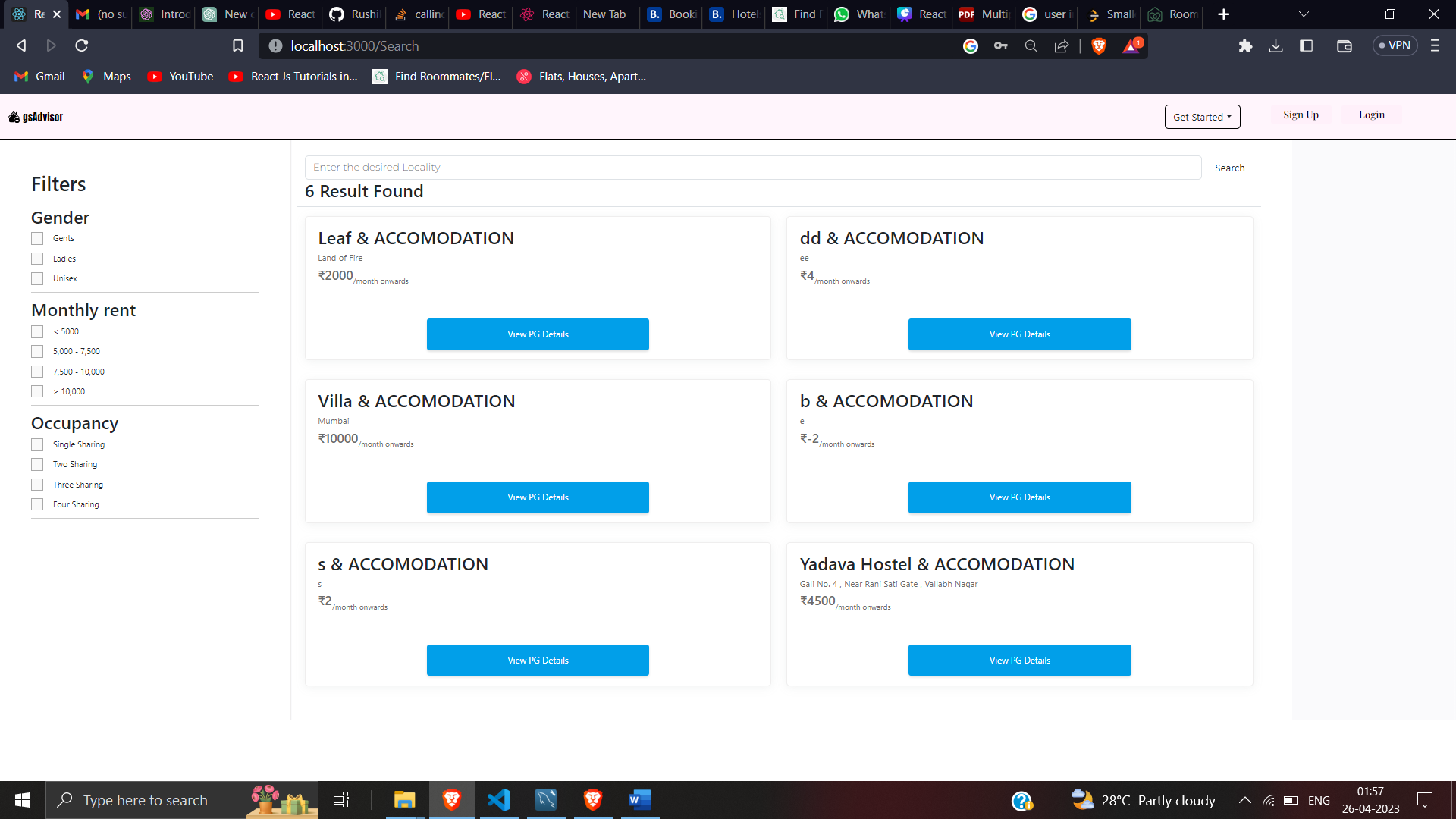
Login ->



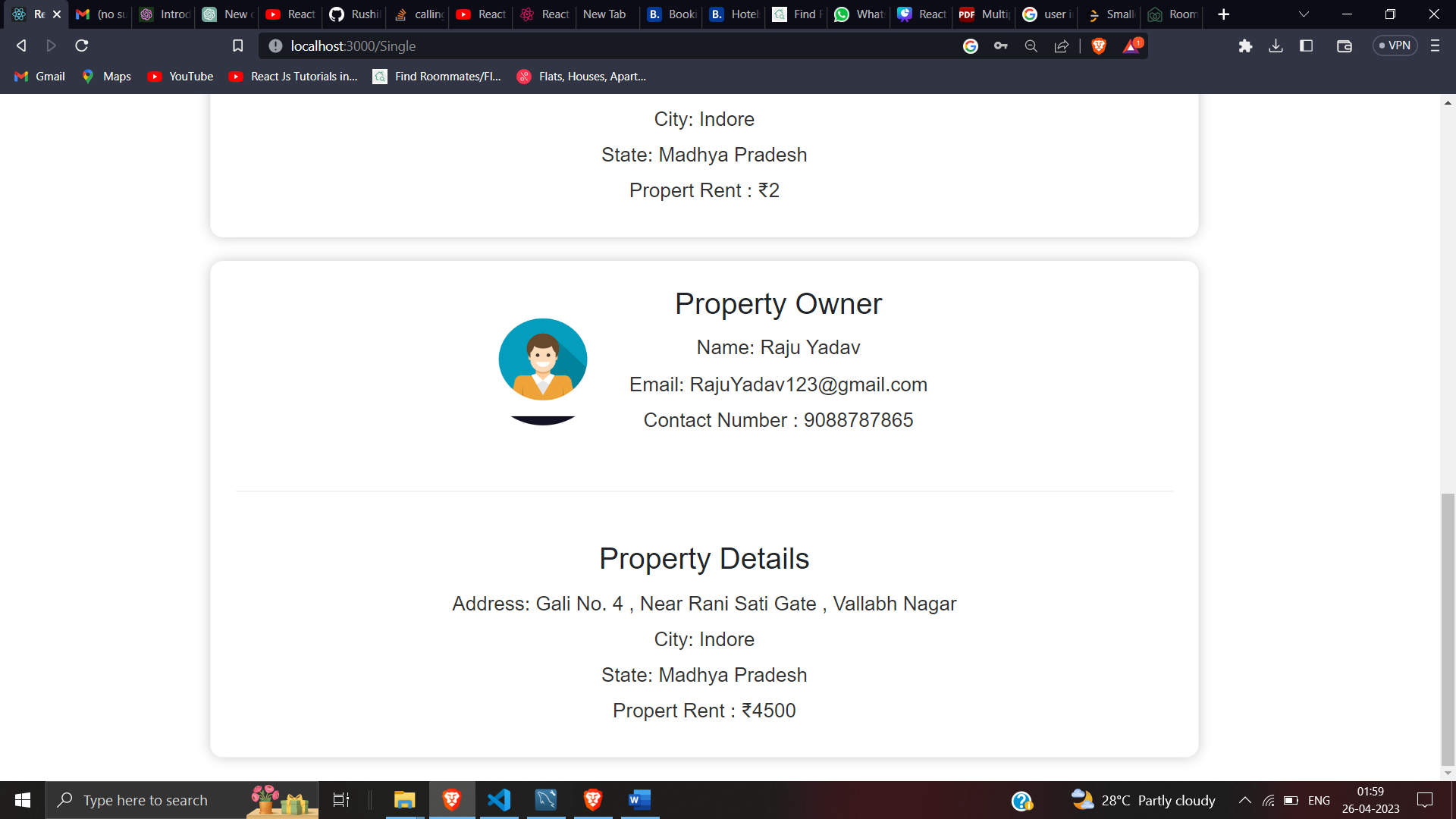
Signup ->



Check Rooms ->



Room details ->



Lab Assignment – 6

Servlet:

// Servlet Program with Data Base connectivity (MYSql)

import java.io.\* ;

import javax.servlet.\* ;

import javax.servlet.http.\* ;

import java.sql.\* ;

public class DBServlet extends HttpServlet

{

public void doGet(HttpServletRequest req, HttpServletResponse res) throws IOException, ServletException

{

try{ res.setContentType("text/html");

PrintWriter out = res.getWriter();

HttpSession s1 = req.getSession(true);

String logname = req.getParameter("name");

String passwd = req.getParameter("passwd");

String dbname,dbpasswd;

int found = 0;

/\* FOR ORACLE DRIVER TO BE LOADED \*/

/\* Class.forName("sun.jdbc.odbc.JdbcOdbcDriver"); //Load the driver

Connection con = DriverManager.getConnection("jdbc:odbc:t","scott","tiger"); //Establish

the connection \*/

/\* FOR MYSQL ..... Name of Database is “t” in this program \*/

Class.forName("com.mysql.jdbc.Driver"); //Load the driver

Connection con =

DriverManager.getConnection("jdbc:mysql://10.88.3.5/web1?user=it&password=123456");

Statement stmt = con.createStatement();

// Statement object is created to execute the QUERY immidiately

ResultSet rs = stmt.executeQuery("SELECT \* FROM auth WHERE loginname=\'"+logname

+"\' AND passwd = \'"+passwd+"\'");

while(rs.next())

{

dbname = (String)rs.getString("loginname");

dbpasswd = (String) rs.getString("passwd");

found=1;

}

if (found==1)

{

out.println("<HTML>

<BODY> Hello, " + logname +" Welcome to yr home

</BODY>

</HTML>");

}

else

{

out.println("<HTML>

<BODY> Login name or password is incorrect!! Please try

    again later </BODY>

</HTML>");

}

}catch(Exception e)

{ System.out.println("Exception caught "+e);

}

}

}