

Assignment 1

- a). Create a responsive web page which shows the ecommerce/college/exam admin dashboard with sidebar and statistics in cards using HTML, CSS and Bootstrap.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>eCommerce Admin Dashboard</title>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" />
<style>
body {
    font-family: 'Segoe UI', sans-serif;
    background-color: #f8f9fa;
}
.sidebar {
    height: 100vh;
    background-color: #72899f;
    color: white;
}
.sidebar a {
    color: white;
    text-decoration: none;
    display: block;
    padding: 10px 20px;
}
.sidebar a:hover {
    background-color: #343a40;
}
```

```
.card-icon {  
    font-size: 1.5rem;  
}  
  
.banner-img {  
    width: 100%;  
    height: 200px;  
    object-fit: cover;  
    border-radius: 10px;  
    margin-bottom: 20px;  
}  
  
.product-img {  
    height: 150px;  
    object-fit: cover;  
    border-radius: 10px;  
}  
  
</style>  
</head>  
<body>  
<div class="container-fluid">  
    <div class="row">  
        <nav class="col-md-2 d-none d-md-block sidebar">  
            <div class="p-3">  
                <h4 class="text-white">eCommerce</h4>  
                <hr>  
                <a href="#">Dashboard</a>  
                <a href="#">Products</a>  
                <a href="#">Orders</a>  
                <a href="#">Customers</a>  
                <a href="#">Reports</a>  
                <a href="#">Settings</a>  
            </div>  
        </nav>
```

```
<main class="col-md-10 ms-sm-auto col-lg-10 px-md-4">
  <div class="pt-3 pb-2 mb-3 border-bottom">
    <h2>Admin Dashboard</h2>
  </div>
  
  <div class="row">
    <div class="col-md-3 mb-4">
      <div class="card text-white bg-primary">
        <div class="card-body d-flex justify-content-between">
          <div>
            <h5 class="card-title">Total Sales</h5>
            <p class="card-text fs-4">₹45,320</p>
          </div>
          <div class="card-icon"> ₹ </div>
        </div>
      </div>
    </div>
    <div class="col-md-3 mb-4">
      <div class="card text-white bg-success">
        <div class="card-body d-flex justify-content-between">
          <div>
            <h5 class="card-title">Orders</h5>
            <p class="card-text fs-4">1,280</p>
          </div>
          <div class="card-icon"> 📦 </div>
        </div>
      </div>
    </div>
    <div class="col-md-3 mb-4">
      <div class="card text-white bg-warning">
        <div class="card-body d-flex justify-content-between">
          <div>
```

```
<h5 class="card-title">Customers</h5>
<p class="card-text fs-4">860</p>
</div>
<div class="card-icon">👤 </div>
</div>
</div>
</div>

<div class="col-md-3 mb-4">
<div class="card text-white bg-danger">
<div class="card-body d-flex justify-content-between">
<div>
<h5 class="card-title">Revenue</h5>
<p class="card-text fs-4">₹1.2L</p>
</div>
<div class="card-icon">📈 </div>
</div>
</div>
</div>
</div>

<div class="card mb-4">
<div class="card-body">
<h5 class="card-title mb-3">Top Products</h5>
<div class="row g-3">
<div class="col-md-3">
<div class="card h-100">

<div class="card-body">
<h6 class="card-title">Smartwatch</h6>
<p class="card-text">₹5,999</p>
</div>
</div>
</div>
```

```
<div class="col-md-3">
  <div class="card h-100">
    
    <div class="card-body">
      <h6 class="card-title">Headphones</h6>
      <p class="card-text">₹3,499</p>
    </div>
  </div>
</div>

<div class="col-md-3">
  <div class="card h-100">
    
    <div class="card-body">
      <h6 class="card-title">Sneakers</h6>
      <p class="card-text">₹4,299</p>
    </div>
  </div>
</div>

<div class="col-md-3">
  <div class="card h-100">
    
    <div class="card-body">
      <h6 class="card-title">Backpack</h6>
      <p class="card-text">₹2,199</p>
    </div> </div> </div> </div> </div> </div>
  </main>
</div>
</div>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

Assignment 1

b. Write a JavaScript Program to get the user registration data and push to array/local storage with AJAX POST method and data list in new page.

```
<!DOCTYPE html>

<html>
  <head>
    <title>Register</title>
    <style>
      body {
        font-family: 'Segoe UI', sans-serif;
        background: #f4f7f8;
        display: flex;
        justify-content: center;
        align-items: center;
        height: 100vh;
      }
      .container {
        background: white;
        padding: 40px;
        border-radius: 10px;
        box-shadow: 0 4px 8px rgba(0,0,0,0.1);
        width: 300px;
      }
      h2 {
        text-align: center;
        margin-bottom: 20px;
        color: #333;
      }
      input[type="text"],
      input[type="email"],
```

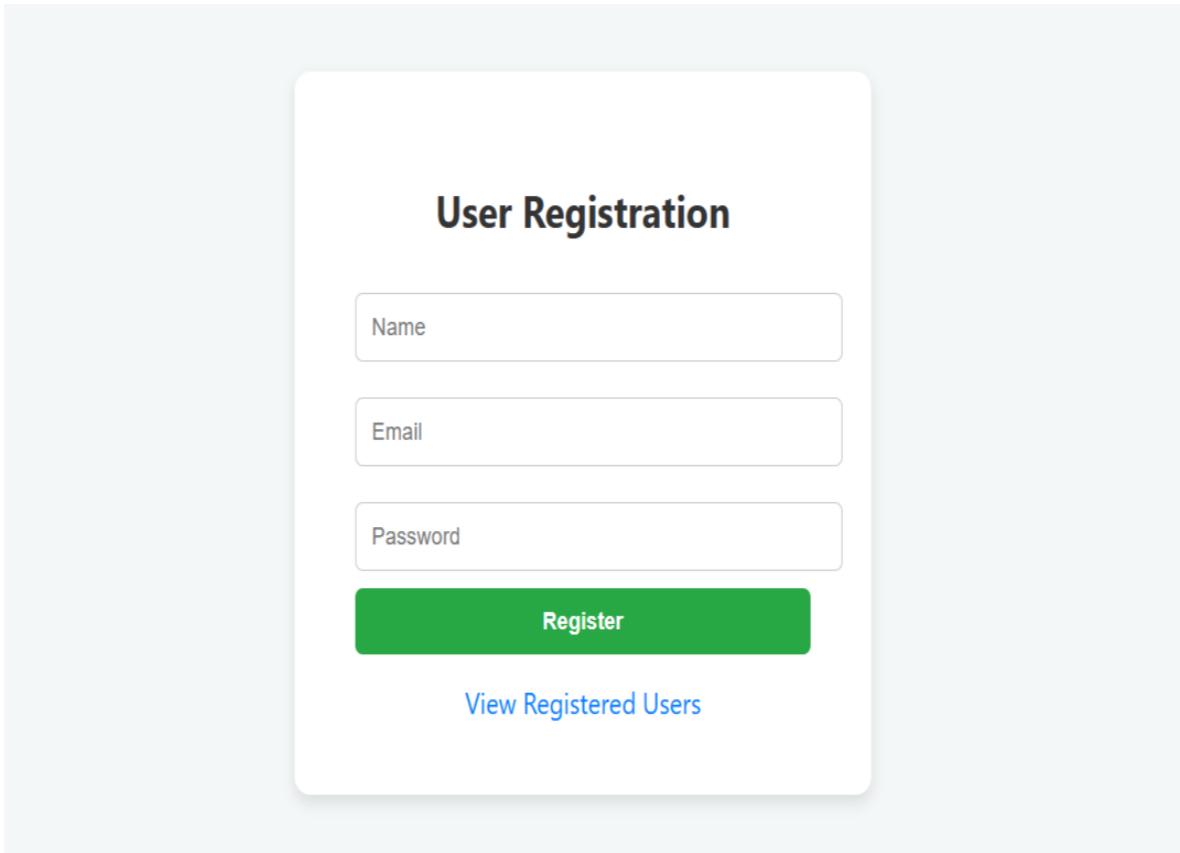
```
input[type="password"] {  
    width: 100%;  
    padding: 10px;  
    margin: 10px 0;  
    border: 1px solid #ccc;  
    border-radius: 5px;  
}  
  
button {  
    width: 100%;  
    background-color: #28a745;  
    color: white;  
    padding: 10px;  
    border: none;  
    border-radius: 5px;  
    cursor: pointer;  
    font-weight: bold;  
}  
  
button:hover {  
    background-color: #218838;  
}  
  
a {  
    display: block;  
    text-align: center;  
    margin-top: 15px;  
    text-decoration: none;  
    color: #007bff;  
}  
  
a:hover {  
    text-decoration: underline;  
}  
</style>
```

```
</head>
<body>
<div class="container">
<h2>User Registration</h2>
<form id="registrationForm">
<input type="text" id="name" placeholder="Name" required>
<input type="email" id="email" placeholder="Email" required>
<input type="password" id="password" placeholder="Password" required>
<button type="submit">Register</button>
</form>
<a href="users.html">View Registered Users</a>
</div>

<script>
const form = document.getElementById("registrationForm");
form.addEventListener("submit", function (e) {
  e.preventDefault();
  const user = {
    name: document.getElementById("name").value,
    email: document.getElementById("email").value,
    password: document.getElementById("password").value
  };
  let users = JSON.parse(localStorage.getItem("users")) || [];
  users.push(user);
  localStorage.setItem("users", JSON.stringify(users));

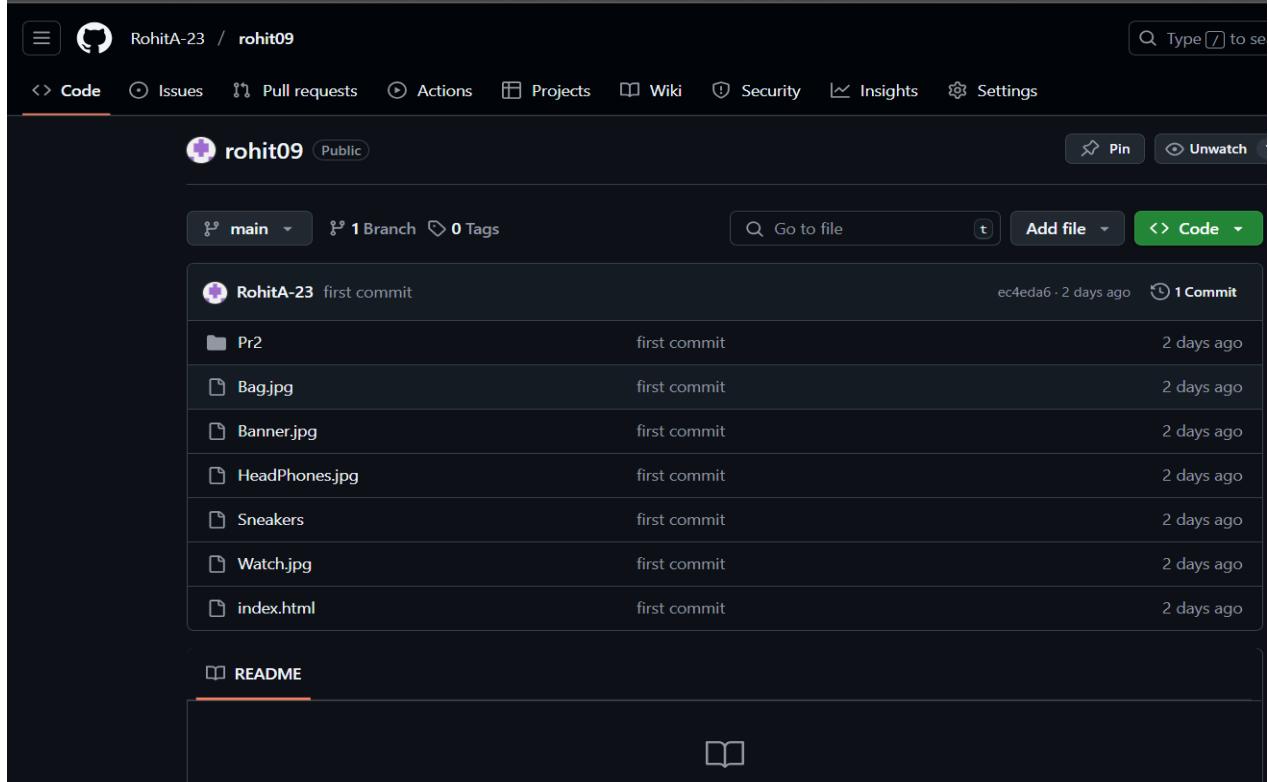
  fetch("https://jsonplaceholder.typicode.com/posts", {
    method: "POST",
    headers: {
      "Content-type": "application/json"
    },
    body: JSON.stringify(user)
  });
})</script>
```

```
})
    .then(response => response.json())
    .then(data => {
        alert("User registered successfully!");
        form.reset();
    })
    .catch(error => {
        console.error("Error:", error);
    });
});
</script>
</body>
</html>
```



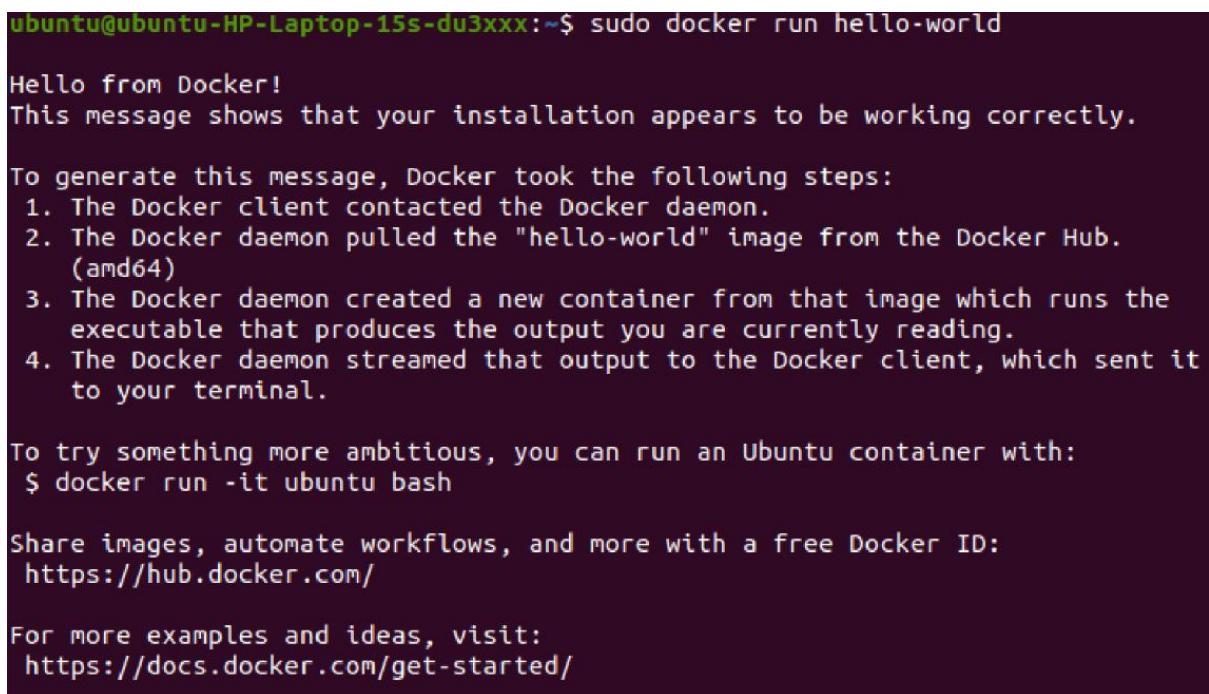
Assignment 2

- a). Create version control account on GitHub and using Git commands to create repository and push your code to GitHub.



The screenshot shows a GitHub repository page for 'rohit09'. At the top, it displays 'RohitA-23 / rohit09'. Below the header are navigation links: Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The 'Code' tab is selected. The repository name 'rohit09' is shown as public. Below the repository name are buttons for Pin and Unwatch. Underneath, there's a search bar with 'Go to file' and a 'Add file' button. A 'Code' dropdown menu is open. The main content area shows a commit from 'RohitA-23' titled 'first commit' made 2 days ago with commit hash 'ec4eda6'. The commit details show files: Pr2, Bag.jpg, Banner.jpg, HeadPhones.jpg, Sneakers, Watch.jpg, and index.html, all with 'first commit' status and 2 days ago timestamp. Below the commit, there's a 'README' file link.

- b. Create Docker Container Environment (NVIDEIA Docker or any other).



```
ubuntu@ubuntu-HP-Laptop-15s-du3xxx:~$ sudo docker run hello-world
Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/
```

Assignment 2

c). Create an Angular application which will do following actions: Register User, Login User, Show User Data on Profile Component.

➤ **Index.html**

```
<!doctype html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>MyNewApp</title>
<base href="/">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p" crossorigin="anonymous"></script>
<link rel="icon" type="image/x-icon" href="favicon.ico">
</head>
<body>
<app-root></app-root>
</body>
</html>
```

➤ **Main.ts**

```
import { enableProdMode } from '@angular/core';
import { platformBrowserDynamic } from '@angular/platform-browser-dynamic';
import { AppModule } from './app/app.module';
import { environment } from './environments/environment';
```

```
if (environment.production) {  
  enableProdMode();  
}  
  
platformBrowserDynamic().bootstrapModule(AppModule)  
.catch(err => console.error(err));
```

➤ **Style.css**

```
position: fixed;  
top: 20%;  
left: 40%;  
transform: translate(-50%, -50%);  
margin: 10%;  
padding: 5%;  
background-color: antiquewhite;  
font-size: 39px;  
width: max-content;  
border-radius: 2%;  
}  
button {  
padding: 2%;  
background-color: skyblue;  
border: none;  
margin-right: 10%;  
}  
.block {  
width: 50%;  
height: 100%;  
}  
input {  
display: inline;  
border: none;  
margin-bottom: 5%;  
padding: 1%;  
width: 200% !important;  
border-radius: 5%; }
```

➤ test.ts

```
import 'zone.js/testing';

import { getTestBed } from '@angular/core/testing';
import {

  BrowserDynamicTestingModule,
  platformBrowserDynamicTesting
} from '@angular/platform-browser-dynamic/testing';

declare const require: {

  context(path: string, deep?: boolean, filter?: RegExp): {
    <T>(id: string): T;
    keys(): string[];
  };
};

getTestBed().initTestEnvironment(
  BrowserDynamicTestingModule,
  platformBrowserDynamicTesting(),
);

const context = require.context('./', true, /\.spec\.ts$/);
context.keys().map(context);
```



Login

Enter Name

Enter Email

Login Register

Assignment 3

a). Create a Node.JS Application which serves a static website.

➤ Index.js.

```
const express=require('express');
const app=express();

app.use(express.static('public'))

app.listen(4000, ()=>{
    console.log("Server is Started");
})
```

➤ Package.json

```
{
  "name": "pr3a",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Rohit",
  "license": "ISC",
  "description": "",
  "dependencies": {
    "express": "^5.1.0"
  }
}
```

Index.html:

Refer Assignment 1 A (Create a responsive web page which shows the ecommerce/college/exam admin dashboard with sidebar and statistics in cards using HTML, CSS and Bootstrap.)

Assignment 3

b). Create four API using Node.JS, ExpressJS and MongoDB for CURD Operations on assignment 2.C.

➤ Index.js

```
const dbConnect=require('./mongodb')
const express=require('express');
const {response}= require('express');
const app=express();
app.use(express.json())
app.get('/getData/', async (req,res)=>{
    let result=await dbConnect();
    result=await result.find().toArray();
    res.json(result)
})
app.post('/insertData/',async(req,res)=> {
    let result=await dbConnect();
    result=await result.insertOne(req.body);
    res.send("Data Inserted Successfully")
})
app.put('/updateData/:name',async(req,res)=> {
    let result=await dbConnect();
    result=await result.updateOneOne({name:req.params.name},{$set:req.body});
    res.send("Data Updated Successfully")
})
app.delete('/deleteData/:name',async(req,res)=> {
    let result=await dbConnect();
    result=await result.deleteOne({name:req.params.name});
    res.send("Data Deleted Successfully")
})
app.listen(3000, ()=>{
    console.log('Server runing on http://localhost:3000'); });
```

➤ Mongodb.js

```
const {MongoClient}=require('mongodb');

const url="mongodb://localhost:27017"

const database='student';

const client=new MongoClient(url);

const dbConnect=async()=>{

    const result=await client.connect();

    const db=await result.db(database);

    return db.collection('profile');

}

module.exports= dbConnect;
```

The screenshot shows the MongoDB Compass interface connected to 'localhost:27017'. The 'student.profile' collection is selected. There are 0 documents and 1 index. The 'Documents' tab is active, showing two documents:

- Document 1:**

```
_id: ObjectId('6464854ca12ea5946f90f9c0')
name: "Rohit"
email: "rohit@gmail.com"
city: "Nashik"
```
- Document 2:**

```
_id: ObjectId('64648ba300dab17d2a198955')
name: "Arnav"
email: "arnav@gmail.com"
city: "Mumbai"
```

Below the documents, there is a text input field with 'Mumbai' typed into it.

Activate Windows

Assignment 4

a). Create a simple Mobile Website using jQuery Mobile.

```

<th>Department</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorem, ipsum.</td>
<td>Computer Science</td>
<td><a href="https://pict.edu/">
    data-rel="external">
        https://pict.edu/
    </a>
</td>
</tr>
</tbody>
</table>
</div>
</div>
<input type="button" id="Button"
       value="Value of the classes option">
<div id="log"></div>
</div>
</center>
<script>
$(document).ready(function () {
    $("#GFG").table({
        classes: {
            "classes.Name": "GeeksforGeeks"
        }
    });
    $("#GFG").table("option", "classes.Name", "GeeksforGeeks");
    $("#Button").on('click', function () {

```

```

var a = $("#GFG").table("option", "classes.Name");
$("#log").html(a);
});
});

</script>
</body>
</html>

```

Company Website

Company Information Table

Company	Lorem, ipsum.
Department	Information technology
Domain	https://PGMCOE.in/

Value of the classes option

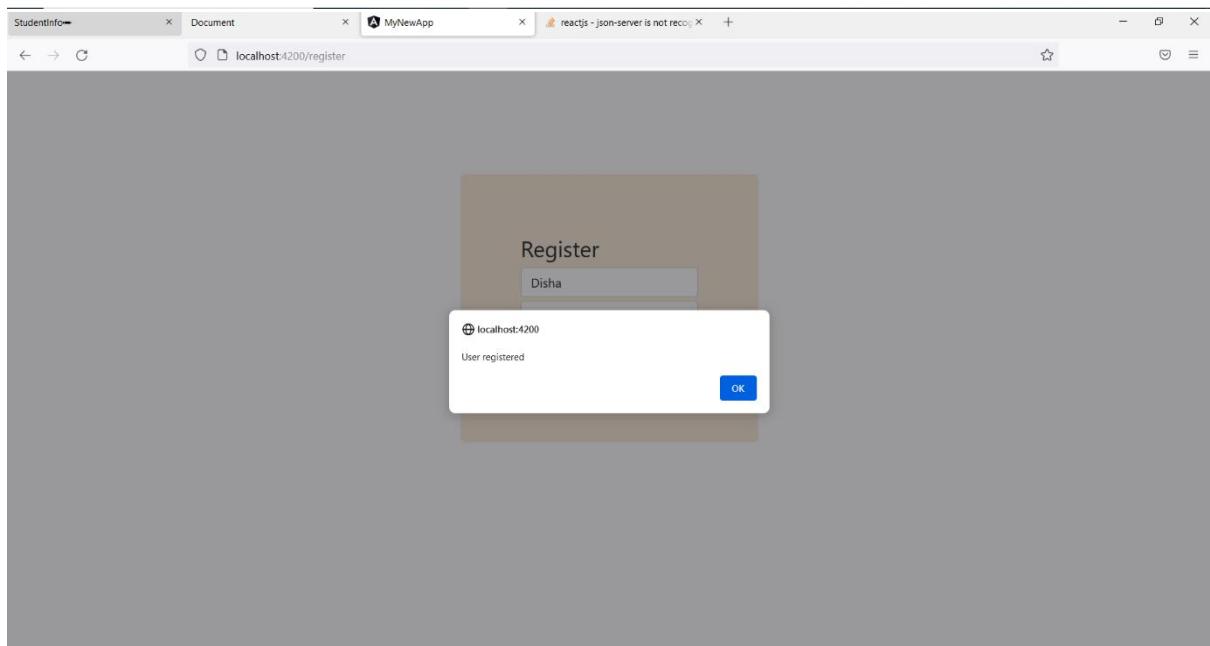
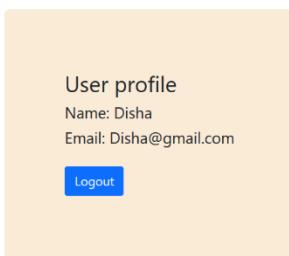
Company Website

Company Information Table

Company	Lorem, ipsum.
Department	Information technology
Domain	https://PGMCOE.in/

Value of the classes option

Apna College



eCommerce

Admin Dashboard

E-COMMERCE

E-COMMERCE SOLUTIONS FOR YOUR ON-LINE BUSINESS.
Turn visitors into purchasers



Total Sales ₹45,320 Orders 1,280 Customers 860 Revenue ₹1.2L

Top Products



Smartwatch



Headphones



Sneakers



Backpack

34°C Sunny

Search

12:43 10-04-2025

List of Registered Users

ROHIT TRIMBAKRAO AHER (rohitaher2328@gmail.com)

Aniket Shinde (aniketshinde2305@gmail.com)

Abhishek (abhi23@gmail.com)

[← Back to Registration](#)

eCommerce

Admin Dashboard

E-COMMERCE

E-COMMERCE SOLUTIONS FOR YOUR ON-LINE BUSINESS.
Turn visitors into purchasers

Total Sales ₹45,320

Orders 1,280

Customers 860

Revenue ₹1.2L

Top Products

Product	Image	Description	Price
Smartwatch		Smartwatch	₹5,999
Headphones		Headphones	₹3,499
Sneakers		Sneakers	₹4,299
Backpack		Backpack	₹2,199

Working locally in Scratch Pad. Switch to a Workspace

Scratch Pad

New Import GET localhost:3000/ + ***

localhost:3000/

GET localhost:3000/

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	*** Bulk Edit
Key	Value	Description	

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

Status: 200 OK Time: 142 ms Size: 328 B Save Response

```
1
2
3
4
5
6
7
8
{
  "_id": "4b64854cs12ea5946f90f9c0",
  "name": "Rohit",
  "email": "rohit@gmail.com",
  "city": "Nasik"
}
```

Activate Windows
Go to Settings to activate Windows

Find and Replace Console

Home Workspaces Explore Search Postman Sign In Create Account

Working locally in Scratch Pad. Switch to a Workspace

Scratch Pad

New Import POST localhost:3000/ + ***

localhost:3000/

POST localhost:3000/

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize HTML

Status: 200 OK Time: 94 ms Size: 254 B Save Response

```
1
2
3
4
5
{
  "name": "Arnav",
  "email": "arnav@gmail.com",
  "city": "Pune"
}
```

1 Data Inserted Successfully

Activate Windows
Go to Settings to activate Windows

Find and Replace Console

Runner Trash

☰ Home Workspaces Explore

Search Postman

Sign In Create Account

Working locally in Scratch Pad. Switch to a Workspace

localhost:3000/Rohit

DELETE localhost:3000/Rohit

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description	...	

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize HTML

Status: 200 OK Time: 62 ms Size: 253 B Save Response

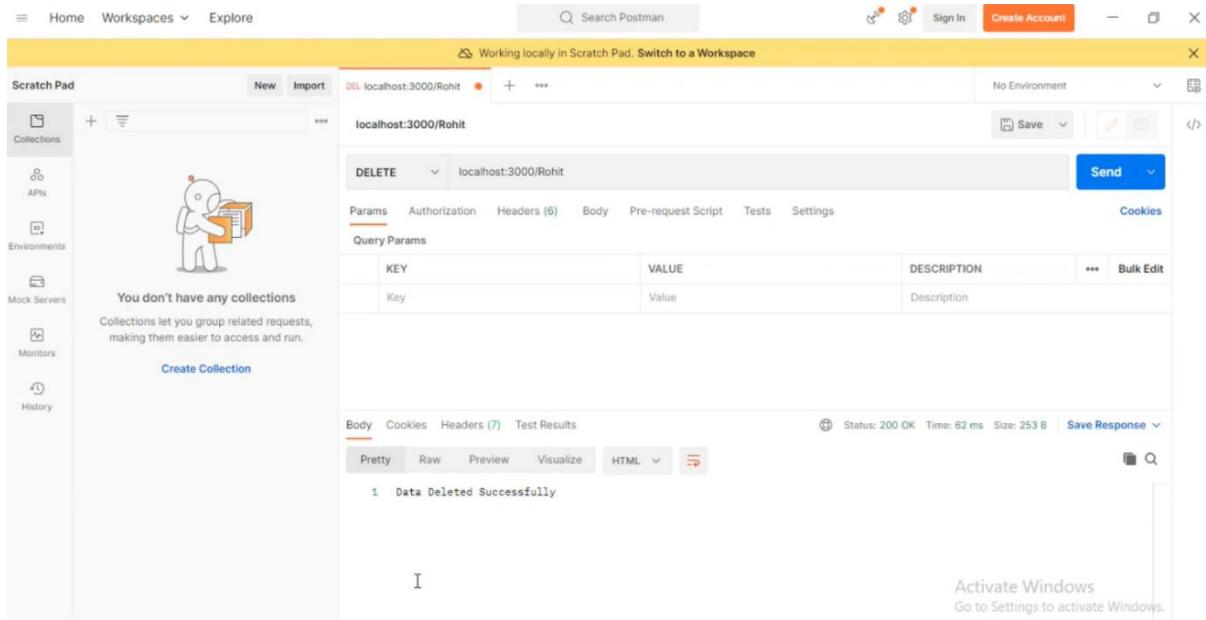
1 Data Deleted Successfully

You don't have any collections

Collections let you group related requests, making them easier to access and run.

Create Collection

Activate Windows
Go to Settings to activate Windows.



☰ Home Workspaces Explore

Search Postman

Sign In Create Account

Working locally in Scratch Pad. Switch to a Workspace

PUT localhost:3000/update

localhost:3000/updateData/Rohit

PUT localhost:3000/updateData/Rohit

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Body

none form-data x-www-form-urlencoded raw binary GraphQL JSON

Beautify

```
1
2 ...
3 ... "name": "Rohit",
4 ... "email": "r@gmail.com",
5 ... "city": "Delhi"
```

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize HTML

Status: 200 OK Time: 54 ms Size: 253 B Save Response

1 Data Updated Successfully

You don't have any collections

Collections let you group related requests, making them easier to access and run.

Create Collection

