



**Fall Semester 2024-25**

**CodeIgniter: An Online Web Based IDE**  
**(For Web Development)**

**Submitted to**

**Dr Sandhya P**

Full Stack Web Development (PMCA601L)

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## Aim

**"To provide an intuitive, lightweight, and efficient web-based Integrated Development Environment (IDE) for developers to seamlessly code, test, and debug HTML, CSS, and JavaScript projects, fostering creativity and productivity in web development."**

## Tech Used: (MERN Stack)

### MERN Stack Overview:

- **MERN Definition:** MERN stands for MongoDB, Express.js, React.js, and Node.js, forming a full-stack JavaScript framework.
- **Database (MongoDB):** A NoSQL database for storing data as JSON-like documents, ensuring scalability and flexibility.
- **Backend Framework (Express.js):** Simplifies building robust APIs and server-side functionality.
- **Frontend Library (React.js):** Used for creating dynamic, user-friendly interfaces with reusable components.
- **Server Runtime (Node.js):** Executes JavaScript code on the server, enabling fast and efficient backend operations.
- **End-to-End JS:** Allows developers to use JavaScript for both frontend and backend, streamlining development.
- **Scalable:** Perfect for building scalable applications with modular architecture.
- **Popularity:** Widely adopted due to ease of learning, extensive community support, and open-source resources.
- **Flexibility:** Supports both small and large-scale application development.
- **Tool Ecosystem:** Compatible with modern tools like Vite, enhancing productivity.

### Important Installation:

#### Frontend (React with Vite)

#### Libraries Used:

1. **React:** Core library for building UI.
  - Installation: `npm install react react-dom`
2. **React Router:** For managing routes.
  - Installation: `npm install react-router-dom`

3. **Axios:** For making HTTP requests to the backend.
  - Installation: npm install axios
4. **Tailwind CSS:** For styling (optional, can replace with another CSS framework).
  - Installation: npm install -D tailwindcss postcss autoprefixer

```
npx tailwindcss init
```
5. **Vite:** Development tool for building React apps (already included with Vite setup).

### **Vite Project Setup:**

```
npm create vite@latest my-project --template react
cd my-project
npm install
```

### **Backend (Node.js with Express)**

#### **Libraries Used:**

1. **Express.js:** Backend framework.
  - Installation: npm install express
2. **Cors:** To handle cross-origin resource sharing.
  - Installation: npm install cors
3. **Body-Parser:** For parsing JSON and URL-encoded data.
  - Installation: npm install body-parser
4. **Dotenv:** For environment variable management.
  - Installation: npm install dotenv
5. **Mongoose:** For MongoDB interaction.
  - Installation: npm install mongoose
6. **Nodemon:** For automatic server restarting during development.
  - Installation (Development Dependency): npm install -D nodemon

### **Database (MongoDB)**

#### **Libraries Used:**

1. **Mongoose:** Object Data Modeling (ODM) library for MongoDB.

- Installation: npm install mongoose
2. **MongoDB Driver** (optional, if not using Mongoose): Official MongoDB client.
- Installation: npm install mongodb

## Implementation:

### Frontend (React file)

#### App.js

```
import React, {useState} from 'react'
import { BrowserRouter, Routes, Route, Navigate } from "react-router-dom";
import "./App.css"
import Home from './pages/Home';
import NoPage from './pages/NoPage';
import SignUp from './pages/SignUp';
import Login from './pages/Login';
import Editior from './pages/Editior';

const App = () => {
  let isLoggedIn = localStorage.getItem("isLoggedIn");
  return (
    <>
    <BrowserRouter>
      <Routes>
        <Route path='/' element={isLoggedIn ? <Home /> : <Navigate to="/login"/>} />
        <Route path='/signUp' element={<SignUp />} />
        <Route path='/login' element={<Login />} />
        <Route path='/editior/:projectId' element={isLoggedIn ? <Editior /> : <Navigate to="/login"/>} />
        <Route path="*" element={isLoggedIn ? <NoPage /> : <Navigate to="/login"/>} />
      </Routes>
    </BrowserRouter>
    </>
  )
}

export default App
```

#### App.css

```
*{
  margin: 0;
  padding: 0;
```

```
}

body{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    background-color: #0D0C0C;
    color: #fff;
    overflow-x: hidden;
}

html{
    overflow-x: hidden;
}

.inputBox{
    width: 100%;
    background-color: #141414;
    border-radius: 5px;
    display: flex;
    align-items: center;
    margin-bottom: 15px;
}

.inputBox input{
    flex: 1;
    padding: 10px;
    border: none;
    outline: none;
    background-color: transparent;
    color: #fff;
    font-size: 16px;
}

.btnBlue{
    background-color: #00AEEF;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    text-align: center;
    cursor: pointer;
    font-size: 16px;
}

.btnBlue:hover{
    background-color: #0086b3;
}

.grid{
```

```

display: flex !important;
flex-wrap: wrap !important;
gap: 10px;
}

.lightMode{
background-color: #fff !important;
color: #000 !important;
};

.lightMode .navbar{
background-color: #fff;
}

.lightMode .tabs{
background-color: #f7f7f7;
}
.lightMode .tabs .tab{
background-color: #c2c1c1;
color: #000;
}

.lightMode .btn{
background-color: #C2C1C1;
color: #000;
}

```

Src/compoents/NavbarEditor.jsx

```

import React from 'react'
import logo from "../images/logo.png"
import { FiDownload } from "react-icons/fi";
import { FaRegFileCode } from "react-icons/fa";
import { FaFileCode } from "react-icons/fa";
import { Link } from 'react-router-dom';
import ListCard from './ListCard';

const EditiorNavbar = () => {
  return (
    <>
    <div className="EditorNavbar flex items-center justify-between px-[100px] h-[80px] bg-[#141414]">
      {/* Logo Section */}
      <div className="logo">

```

```

<Link to="/">
  <img className="w-[60px] cursor-pointer" src={logo} alt="Logo" />
</Link>
</div>
<p>File / <span className='text-[gray]'>Project</span></p>
<i className='p-[8px] btn bg-black rounded-[5px] cursor-pointer text-[20px]'><FaFileCode /></i>
</div>
</>
)
}

export default EditorNavbar

```

src/components/Navbar.jsx

```

import React, { useEffect, useState } from 'react'
import logo from "../images/logo.png"
import { Link, useNavigate } from 'react-router-dom'
import Avatar from 'react-avatar';
import { MdLightMode } from "react-icons/md";
import { BsGridFill } from "react-icons/bs";
import { api_base_url, toggleClass } from '../helper';

const Navbar = ({ isGridLayout, setIsGridLayout }) => {

  const navigate = useNavigate();

  const [data, setData] = useState(null);
  const [error, setError] = useState("");

  useEffect(() => {
    fetch(api_base_url + "/getUserDetails", {
      mode: "cors",
      method: "POST",
      headers: {
        "Content-Type": "application/json",
      },
      body: JSON.stringify({
        userId: localStorage.getItem("userId")
      })
    }).then(res => res.json()).then(data => {
      if (data.success) {
        setData(data.user);
      }
    })
  })
}

```

```

        else {
          setError(data.message);
        }
      })
    }, [])
}

const logout = () => {
  localStorage.removeItem("userId");
  localStorage.removeItem("token");
  localStorage.removeItem("isLoggedIn");
  window.location.reload();
}

return (
  <>
  <div className="navbar flex items-center justify-between px-[100px] h-[80px] bg-[#141414]">
    <div className="logo">
      <img className='w-[70px] cursor-pointer' src={logo} alt="" />
    </div>
    <div className="links flex items-center gap-2">
      {/* <Link>Home</Link>
      <Link>About</Link>
      <Link>Contact</Link>
      <Link>Services</Link> */}
      <button onClick={logout} className="btnBlue !bg-red-500 min-w-[120px] ml-2 hover:!bg-red-600">Logout</button>
      <Avatar onClick={() => { toggleClass(".dropDownNavbar", "hidden") }} name={data ? data.name : ""} size="40" round="50%" className='cursor-pointer ml-2' />
    </div>

    <div className='dropDownNavbar hidden absolute right-[60px] top-[80px] shadow-lg shadow-black/50 p-[10px] rounded-lg bg-[#1A1919] w-[150px] h-[160px]'>
      <div className='py-[10px] border-b-[1px] border-b-[#ffff]'>
        <h3 className='text-[17px]' style={{ lineHeight: 1 }}>{data ? data.name : ""}</h3>
      </div>
      <i className='flex items-center gap-2 mt-3 mb-2 cursor-pointer' style={{ fontStyle: "normal" }}><MdLightMode className='text-[20px]' /> Light mode</i>
      <i onClick={() => setIsGridLayout(!isGridLayout)} className='flex items-center gap-2 mt-3 mb-2 cursor-pointer' style={{ fontStyle: "normal" }}><BsGridFill className='text-[20px]' /> {isGridLayout ? "List" : "Grid"} layout</i>
    </div>
  </div>
</>
)
}

```

```
export default Navbar
```

src/components/ListCard.jsx

```
import React, { useState } from 'react'
import img from "../images/code.png"
import deleteImg from "../images/delete.png"
import { api_base_url } from '../helper';
import { useNavigate } from 'react-router-dom';

const ListCard = ({item}) => {
  const navigate = useNavigate();
  const [isDeleteModelShow, setIsDeleteModelShow] = useState(false);

  const deleteProj = (id) => {
    fetch(api_base_url + "/deleteProject",{
      mode: "cors",
      method: "POST",
      headers: {
        "Content-Type": "application/json",
      },
      body: JSON.stringify({
        progId: id,
        userId: localStorage.getItem("userId")
      })
    }).then(res=>res.json()).then(data=>{
      if(data.success){
        setIsDeleteModelShow(false)
        window.location.reload()
      }else{
        alert(data.message)
        setIsDeleteModelShow(false)
      }
    })
  }

  return (
    <>
    <div className="listCard mb-2 w-[full] flex items-center justify-between p-[10px] bg-[#141414] cursor-pointer rounded-lg hover:bg-[#202020]">
      <div onClick={()=>{navigate('/editior/${item._id}')}} className='flex items-center gap-2'>
        <img className='w-[80px]' src={img} alt="" />
        <div>
          <h3 className='text-[20px]'{>{item.title}</h3>
```

```

    <p className='text-[gray] text-[14px]'>Created in { new Date(item.date).toLocaleString() }</p>
    </div>
</div>
<div>
    <img onClick={()=>{setIsDeleteModelShow(true)}} className='w-[30px] cursor-pointer mr-4'
src={deleteImg} alt="" />
    </div>
</div>

{
  isDeleteModelShow ? <div className="model fixed top-0 left-0 w-screen h-screen bg-[rgba(0,0,0,0.1)] flex justify-center items-center flex-col">
    <div className="mainModel w-[25vw] h-[25vh] bg-[#1A1919] rounded-lg p-[20px]">
      <h3 className='text-3xl'>Do you want to delete <br />
        this project</h3>
      <div className='flex w-full mt-5 items-center gap-[10px]">
        <button onClick={()=>{deleteProj(item._id)}} className='p-[10px] rounded-lg bg-[#FF4343] text-white cursor-pointer min-w-[49%]">Delete</button>
        <button onClick={()=>{setIsDeleteModelShow(false)}} className='p-[10px] rounded-lg bg-[#1A1919] text-white cursor-pointer min-w-[49%]">Cancel</button>
      </div>
    </div>
  </div> : ""
}
</>
)
}

export default ListCard

```

src/components/GridList.jsx

```

import React, { useState } from 'react'
import deleteImg from "../images/delete.png"
import codeImg from "../images/code.png"
import { useNavigate } from 'react-router-dom';

const GridCard = ({item}) => {
  const [isDeleteModelShow, setIsDeleteModelShow] = useState(false);
  const navigate = useNavigate();

  return (
    <>

```

```

<div className="gridCard bg-[#141414] w-[270px] p-[10px] h-[180px] cursor-pointer hover:bg-[#202020] rounded-lg shadow-lg shadow-black/50">
  <div onClick={()=>{navigate(`/editior/${item._id}`)}}>
    <img className="w-[90px]" src={codeImg} alt="" />
    <h3 className='text-[20px] w-[90%] line-clamp-1'>{ item.title }</h3>
  </div>
  <div className='flex items-center justify-between'>
    <p className='text-[14px] text-[gray]'>Created in { new Date(item.date).toDateString() }</p>
    <img onClick={()=>{setIsDeleteModelShow(true)}} className='w-[30px] cursor-pointer' src={deleteImg} alt="" />
  </div>
</div>

{
  isDeleteModelShow ? <div className="model fixed top-0 left-0 w-screen h-screen bg-[rgba(0,0,0,0.1)] flex justify-center items-center flex-col">
    <div className="mainModel w-[25vw] h-[25vh] bg-[#141414] rounded-lg p-[20px]">
      <h3 className='text-3xl'>Do you want to delete <br /> this project</h3>
      <div className='flex w-full mt-5 items-center gap-[10px]'>
        <button className='p-[10px] rounded-lg bg-[#FF4343] text-white cursor-pointer min-w-[49%]'>Delete</button>
        <button onClick={()=>{setIsDeleteModelShow(false)}} className='p-[10px] rounded-lg bg-[#1A1919] text-white cursor-pointer min-w-[49%]'>Cancel</button>
      </div>
    </div>
  </div> : ""
}
</>
)
}

export default GridCard

```

src/pages/Editor.jsx

```

import React, { useEffect, useState } from 'react';
import EditiorNavbar from '../components/EditiorNavbar';
import Editor from '@monaco-editor/react';
import { MdLightMode } from 'react-icons/md';
import { AiOutlineExpandAlt } from "react-icons/ai";
import { api_base_url } from './helper';
import { useParams } from 'react-router-dom';

```

```

const Editor = () => {
  const [tab, setTab] = useState("html");
  const [isLightMode, setIsLightMode] = useState(false);
  const [isExpanded, setIsExpanded] = useState(false);
  const [htmlCode, setHtmlCode] = useState("<h1>Hello world</h1>");
  const [cssCode, setCssCode] = useState("body { background-color: #f4f4f4; }");
  const [jsCode, setJsCode] = useState("// some comment");

  // Extract projectID from URL using useParams
  const { projectID } = useParams();

  const changeTheme = () => {
    const editorNavbar = document.querySelector(".EditorNavbar");
    if (isLightMode) {
      editorNavbar.style.background = "#141414";
      document.body.classList.remove("lightMode");
      setIsLightMode(false);
    } else {
      editorNavbar.style.background = "#fff";
      document.body.classList.add("lightMode");
      setIsLightMode(true);
    }
  };

  const run = () => {
    const html = htmlCode;
    const css = `<style>${cssCode}</style>`;
    const js = `<script>${jsCode}</script>`;
    const iframe = document.getElementById("iframe");

    if (iframe) {
      iframe.srcdoc = html + css + js;
    }
  };

  useEffect(() => {
    setTimeout(() => {
      run();
    }, 200);
  }, [htmlCode, cssCode, jsCode]);
}

useEffect(() => {
  fetch(api_base_url + "/getProject", {
    mode: "cors",
    method: "POST",
  })
  .then(response => response.json())
  .then(data => {
    setTab(data.tab);
    setIsLightMode(data.isLightMode);
    setIsExpanded(data.isExpanded);
    setHtmlCode(data.htmlCode);
    setCssCode(data.cssCode);
    setJsCode(data.jsCode);
  })
  .catch(error => console.error(error));
}

```

```

headers: {
  "Content-Type": "application/json"
},
body: JSON.stringify({
  userId: localStorage.getItem("userId"),
  projId: projectID // Use projectID here
})
})
.then(res => res.json())
.then(data => {
  setHtmlCode(data.project.htmlCode);
  setCssCode(data.project.cssCode);
  setJsCode(data.project.jsCode);
});
}, [projectID]);

useEffect(() => {
  const handleKeyDown = (event) => {
    if (event.ctrlKey && event.key === 's') {
      event.preventDefault(); // Prevent the default save file dialog

      // Ensure that projectID and code states are updated and passed to the fetch request
      fetch(api_base_url + "/updateProject", {
        mode: "cors",
        method: "POST",
        headers: {
          "Content-Type": "application/json"
        },
        body: JSON.stringify({
          userId: localStorage.getItem("userId"),
          projId: projectID, // Make sure projectID is correct
          htmlCode: htmlCode, // Passing the current HTML code
          cssCode: cssCode, // Passing the current CSS code
          jsCode: jsCode // Passing the current JS code
        })
      })
    }
  }
  .then(res => res.json())
  .then(data => {
    if (data.success) {
      alert("Project saved successfully");
    } else {
      alert("Something went wrong");
    }
  })
  .catch((err) => {

```

```

        console.error("Error saving project:", err);
        alert("Failed to save project. Please try again.");
    });
}
};

window.addEventListener('keydown', handleKeyDown);

// Clean up the event listener on component unmount
return () => {
    window.removeEventListener('keydown', handleKeyDown);
};
}, [projectID, htmlCode, cssCode, jsCode]);

return (
<>
<EditiorNavbar />
<div className="flex">
<div className={`${left w-[${isExpanded ? "100%" : "50%"}]`}>
<div className="tabs flex items-center justify-between gap-2 w-full bg-[#1A1919] h-[50px] px-[40px]">
<div className="tabs flex items-center gap-2">
<div onClick={() => { setTab("html"); }} className="tab cursor-pointer p-[6px] bg-[#1E1E1E] px-[10px] text-[15px]">HTML</div>
<div onClick={() => { setTab("css"); }} className="tab cursor-pointer p-[6px] bg-[#1E1E1E] px-[10px] text-[15px]">CSS</div>
<div onClick={() => { setTab("js"); }} className="tab cursor-pointer p-[6px] bg-[#1E1E1E] px-[10px] text-[15px]">JavaScript</div>
</div>

<div className="flex items-center gap-2">
{ /* <i className="text-[20px] cursor-pointer" onClick={changeTheme}><MdLightMode /></i> */ }
<i className="text-[20px] cursor-pointer" onClick={() => { setIsExpanded(!isExpanded); }}><AiOutlineExpandAlt /></i>
</div>
</div>

{tab === "html" ? (
<Editor
onChange={(value) => {
    setHtmlCode(value || "");
    run();
}}
height="82vh"

```

```

theme={isLightMode ? "vs-light" : "vs-dark"}
language="html"
value={htmlCode}
/>
): tab === "css" ? (
<Editor
onChange={(value) => {
  setCssCode(value || "");
  run();
}}
height="82vh"
theme={isLightMode ? "vs-light" : "vs-dark"}
language="css"
value={cssCode}
/>
): (
<Editor
onChange={(value) => {
  setJsCode(value || "");
  run();
}}
height="82vh"
theme={isLightMode ? "vs-light" : "vs-dark"}
language="javascript"
value={jsCode}
/>
)
</div>

{ !isExpanded && (
<iframe
id="iframe"
className="w-[50%] min-h-[82vh] bg-[#fff] text-black"
title="output"
/>
)
}
</div>
</>
);
};

export default Editor;

```

## src/pages/Home.jsx

```

import React, { useEffect, useState } from 'react'
import Navbar from './components/Navbar'
import ListCard from './components/ListCard';
import GridCard from './components/GridCard';
import { api_base_url } from '../helper';
import { useNavigate } from 'react-router-dom';

const Home = () => {

  const [data, setData] = useState(null);
  const [error, setError] = useState("");
  const [searchQuery, setSearchQuery] = useState("") // State for search query
  const [projTitle, setProjTitle] = useState("");
  const navigate = useNavigate();
  const [isCreateModelShow, setIsCreateModelShow] = useState(false);

  // Filter data based on search query
  const filteredData = data ? data.filter(item =>
    item.title.toLowerCase().includes(searchQuery.toLowerCase()) // Case insensitive filtering
  ) : [];

  const createProj = (e) => {
    if (projTitle === "") {
      alert("Please Enter Project Title");
    } else {
      fetch(api_base_url + "/createProject", {
        mode: "cors",
        method: "POST",
        headers: {
          "Content-Type": "application/json",
        },
        body: JSON.stringify({
          title: projTitle,
          userId: localStorage.getItem("userId")
        })
      }).then(res => res.json()).then(data => {
        if (data.success) {
          setIsCreateModelShow(false);
          setProjTitle("");
          alert("Project Created Successfully");
          navigate(`/editior/${data.projectId}`);
        } else {
          alert("Something Went Wrong");
        }
      })
    }
  }
}

```

```

        }
    });
}
};

const getProj = () => {
  fetch(api_base_url + "/getProjects", {
    mode: "cors",
    method: "POST",
    headers: {
      "Content-Type": "application/json",
    },
    body: JSON.stringify({
      userId: localStorage.getItem("userId")
    })
  }).then(res => res.json()).then(data => {
    if (data.success) {
      setData(data.projects);
    } else {
      setError(data.message);
    }
  });
};

useEffect(() => {
  getProj();
}, []);
}

const [userData, setUserData] = useState(null);
const [userError, setUserError] = useState("");

useEffect(() => {
  fetch(api_base_url + "/getUserDetails", {
    mode: "cors",
    method: "POST",
    headers: {
      "Content-Type": "application/json",
    },
    body: JSON.stringify({
      userId: localStorage.getItem("userId")
    })
  }).then(res => res.json()).then(data => {
    if (data.success) {
      setUserData(data.user);
    }
  });
});

```

```
        }
    else {
        setUserError(data.message);
    }
})
}, [])
}

const [isGridLayout, setIsGridLayout] = useState(false);

return (
<>
<Navbar isGridLayout={isGridLayout} setIsGridLayout={setIsGridLayout} />
<div className='flex items-center justify-between px-[100px] my-[40px]'>
    <h2 className='text-2xl'>Hi, {userData ? userData.username : ""}</h2>
    <div className='flex items-center gap-1'>
        {/* Search Bar */}
        <div className="inputBox !w-[350px]">
            <input
                type="text"
                placeholder='Search Here... !'
                value={searchQuery} // Bind search input to searchQuery state
                onChange={(e) => setSearchQuery(e.target.value)} // Update searchQuery on input change
            />
        </div>
        <button onClick={() => { setIsCreateModelShow(true) }} className='btnBlue !bg-[#EE4323] rounded-[5px] mb-4 text-[20px] !p-[5px] !px-[10px]'+</button>
    </div>
</div>

/* Project Display */
<div className="cards">
{
    isGridLayout ?
        <div className='grid px-[100px]'>
            {
                filteredData.length > 0 ? filteredData.map((item, index) => (
                    <GridCard key={index} item={item} />
                )) : <p>No projects found</p>
            }
        </div>
    : <div className='list px-[100px]'>
        {
            filteredData.length > 0 ? filteredData.map((item, index) => (
                <ListCard key={index} item={item} />
            ))
        }
    </div>
}
```

```

        )) : <p>No projects found</p>
    }
</div>
}
</div>

/* Modal for Creating a New Project */
{isCreateModelShow &&
<div className="createModelCon fixed top-0 left-0 right-0 bottom-0 w-screen h-screen bg-[rgb(0,0,0,0.1)] flex items-center justify-center">
    <div className="createModel w-[25vw] h-[27vh] shadow-lg shadow-black/50 bg-[#141414] rounded-[10px] p-[20px]">
        <h3 className='text-2xl'>Create New Project</h3>
        <div className="inputBox !bg-[#202020] mt-4">
            <input
                onChange={(e) => { setProjTitle(e.target.value) }}
                value={projTitle}
                type="text"
                placeholder='Project Title'
            />
        </div>
        <div className='flex items-center gap-[10px] w-full mt-2'>
            <button onClick={createProj} className='btnBlue !bg-[#EE4323] rounded-[5px] w-[49%] mb-4 !p-[5px] !px-[10px] !py-[10px]''>Create</button>
            <button onClick={() => { setIsCreateModelShow(false) }} className='btnBlue !bg-[#1A1919] rounded-[5px] mb-4 w-[49%] !p-[5px] !px-[10px] !py-[10px]''>Cancel</button>
        </div>
    </div>
</div>
}
</div>
);
}

export default Home;

```

src/pages/Login.jsx

```

import React, { useState } from 'react'
import logo from "../images/logo.png"
import { Link, useNavigate } from 'react-router-dom';
import image from "../images/authP.jpg";
import { api_base_url } from '../helper';

```

```

const Login = () => {
  const [email, setEmail] = useState("");
  const [pwd, setPwd] = useState("");

  const [error, setError] = useState("");

  const navigate = useNavigate();

  const submitForm = (e) => {
    e.preventDefault();
    fetch(api_base_url + "/login", {
      mode: "cors",
      method: "POST",
      headers: {
        "Content-Type": "application/json"
      },
      body: JSON.stringify({
        email: email,
        password: pwd
      })
    }).then(res => res.json()).then(data => {
      if(data.success === true){
        localStorage.setItem("token", data.token);
        localStorage.setItem("isLoggedIn", true);
        localStorage.setItem("userId", data.userId);
        setTimeout(() => {
          window.location.href = "/"
        }, 200);
      } else {
        setError(data.message);
      }
    })
  }

  return (
    <>
    <div className="container w-screen min-h-screen flex items-center justify-between pl-[100px]">
      <div className="left w-[35%]">
        <img className='w-[200px]' src={logo} alt="" />
        <form onSubmit={submitForm} className='w-full mt-[60px]' action="">

          <div className="inputBox">
            <input required onChange={(e)=>{setEmail(e.target.value)}} value={email} type="email" placeholder='Email'/>

```

```

    </div>

    <div className="inputBox">
      <input required onChange={(e)=>{setPwd(e.target.value)}} value={pwd} type="password"
placeholder='Password' />
    </div>

    <p className='text-[gray]'>Don't have an account <Link to="/signUp" className='text-[#EE4323]'>Sign Up</Link></p>

    <p className='text-red-500 text-[14px] my-2'>{error}</p>

    <button className="btnBlue !bg-[#EE4323] w-full mt-[20px]">Login</button>
  </form>
</div>
<div className="right w-[55%]">
  <img className='h-[100vh] w-[100%] object-cover' src={image} alt="" />
</div>
</div>
</>
)

}

export default Login

```

src/pages/Signup.jsx

```

import React, { useState } from 'react'
import logo from "../images/logo.png"
import { Link, useNavigate } from 'react-router-dom';
import image from "../images/authP.jpg";
import { api_base_url } from '../helper';

const SignUp = () => {
  const [username, setUsername] = useState("");
  const [name, setName] = useState("");
  const [email, setEmail] = useState("");
  const [pwd, setPwd] = useState("");

  const [error, setError] = useState("");

  const navigate = useNavigate();

  const submitForm = (e) => {

```

```

e.preventDefault();
fetch(api_base_url + "/signUp",{
  mode: "cors",
  method: "POST",
  headers: {
    "Content-Type": "application/json"
  },
  body: JSON.stringify({
    username: username,
    name: name,
    email: email,
    password: pwd
  })
}).then((res)=>res.json()).then((data)=>{
  if(data.success === true){
    alert("Account created successfully");
    navigate("/login");
  }
  else{
    setError(data.message);
  }
})
}

return (
<>
<div className="container w-screen min-h-screen flex items-center justify-between pl-[100px]">
  <div className="left w-[35%]">
    <img className='w-[200px]' src={logo} alt="" />
    <form onSubmit={submitForm} className='w-full mt-[60px]' action="">
      <div className="inputBox">
        <input required onChange={(e)=>{setUsername(e.target.value)}} value={username} type="text" placeholder='Username' />
      </div>

      <div className="inputBox">
        <input required onChange={(e)=>{setName(e.target.value)}} value={name} type="text" placeholder='Name' />
      </div>

      <div className="inputBox">
        <input required onChange={(e)=>{setEmail(e.target.value)}} value={email} type="email" placeholder='Email' />
      </div>
    </form>
  </div>
</div>
)

```

```

<div className="inputBox">
  <input required onChange={(e)=>{setPwd(e.target.value)}} value={pwd} type="password"
placeholder='Password'/>
</div>

<p className='text-[gray]'>Already have an account <Link to="/login" className='text-[#EE4323]'>login</Link></p>

<p className='text-red-500 text-[14px] my-2'>{error}</p>

<button className="btnBlue !bg-[#EE4323] w-full mt-[20px]">Sign Up</button>
</form>
</div>
<div className="right w-[55%]">
  <img className='h-[100vh] w-[100%] object-cover' src={image} alt="" />
</div>
</div>
</>
)
}

export default SignUp

```

src/pages/Nopage.jsx

```

import React from 'react'

const NoPage = () => {
  return (
    <div>NoPage</div>
  )
}

export default NoPage

```

## BackEnd (Node.js and express)

App.js

```

var createError = require('http-errors');
var express = require('express');
var path = require('path');
var cookieParser = require('cookie-parser');
var logger = require('morgan');

```

```

var cors = require("cors");

var indexRouter = require('./routes/index');
var usersRouter = require('./routes/users');

var app = express();

// view engine setup
app.set('views', path.join(__dirname, 'views'));
app.set('view engine', 'ejs');

app.use(logger('dev'));
app.use(express.json());
app.use(express.urlencoded({ extended: false }));
app.use(cookieParser());
app.use(express.static(path.join(__dirname, 'public')));

app.use(cors());

app.use('/', indexRouter);
app.use('/users', usersRouter);

// catch 404 and forward to error handler
app.use(function(req, res, next) {
  next(createError(404));
});

// error handler
app.use(function(err, req, res, next) {
  // set locals, only providing error in development
  res.locals.message = err.message;
  res.locals.error = req.app.get('env') === 'development' ? err : {};

  // render the error page
  res.status(err.status || 500);
  res.render('error');
});

module.exports = app;

```

## projectModel.js

```
const mongoose = require("mongoose");
```

```

mongoose.connect('mongodb://127.0.0.1:27017/codeIDE');

const projectSchema = new mongoose.Schema({
  title: String,
  createdBy: String,
  date: {
    type: Date,
    default: Date.now
  },
  htmlCode: {
    type: String,
    default: `

<!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>

</body>
</html>`},
  cssCode: {
    type: String,
    default: `

body{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}`},
  jsCode: {
    type: String,
    default: 'console.log("Hello World")'
  }
});

module.exports = mongoose.model("Project", projectSchema);

```

### userModel.jsx

```

let mongoose = require('mongoose');

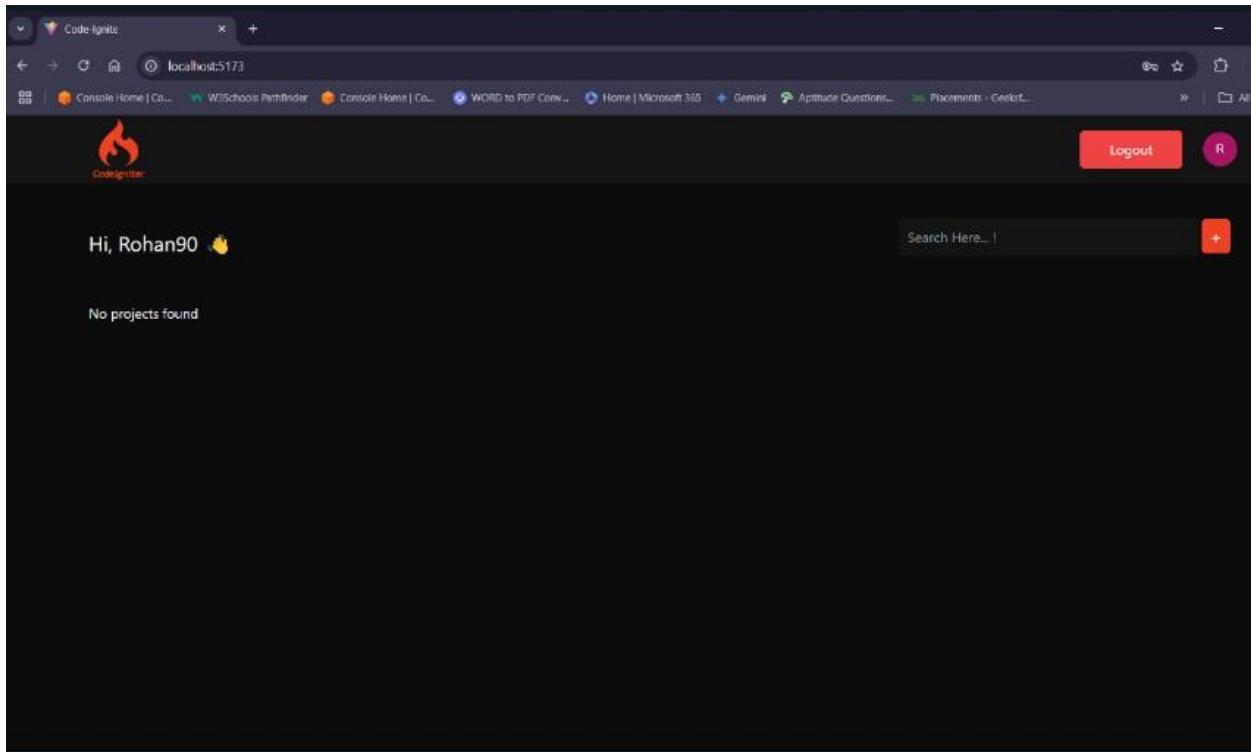
mongoose.connect('mongodb://127.0.0.1:27017/codeIDE');

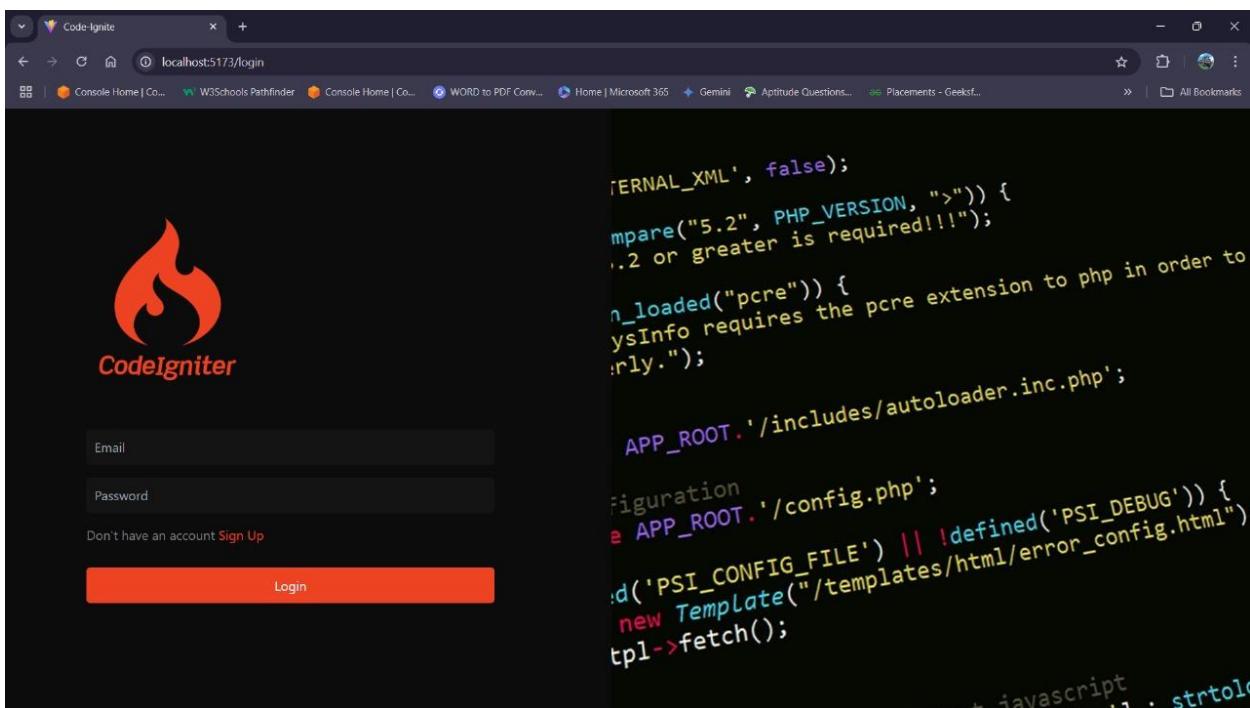
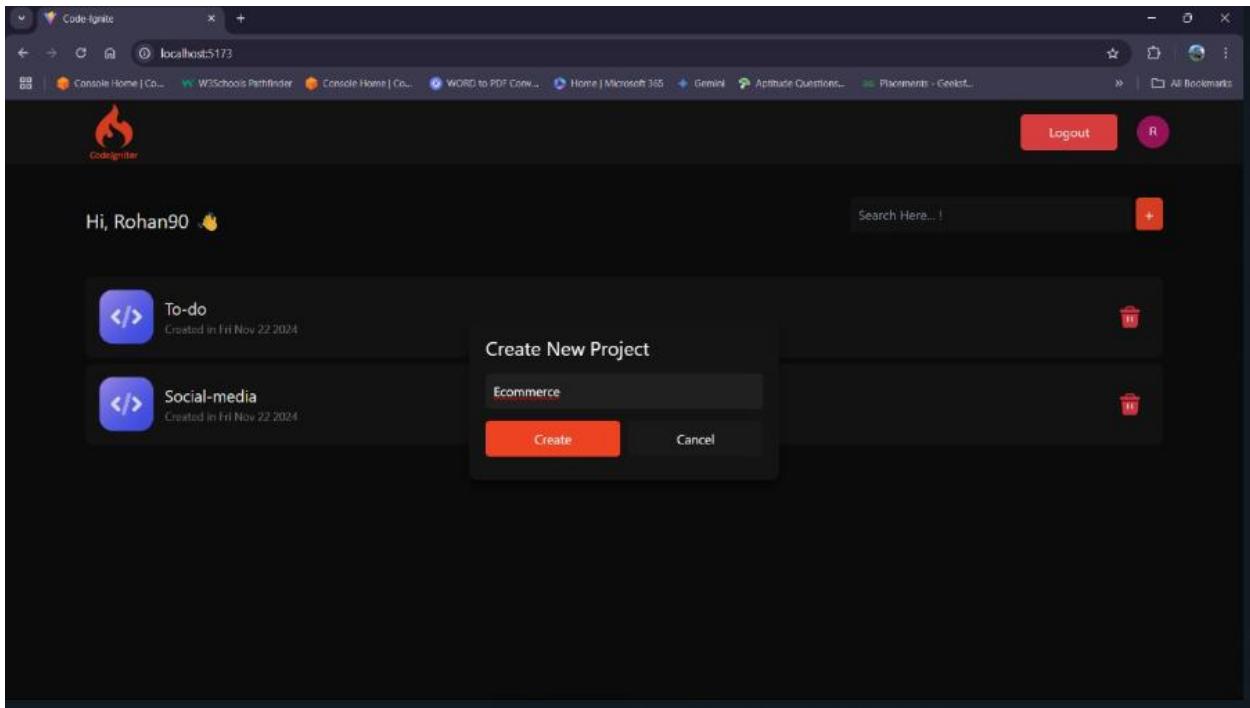
let userSchema = new mongoose.Schema({

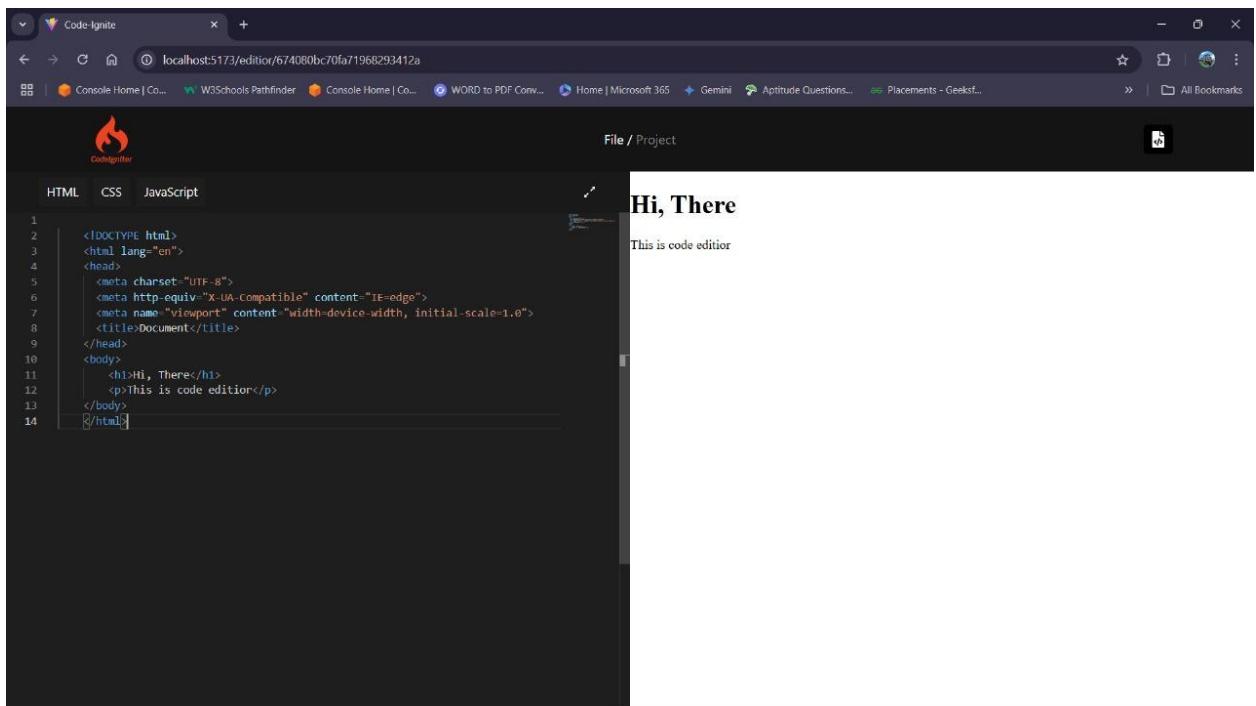
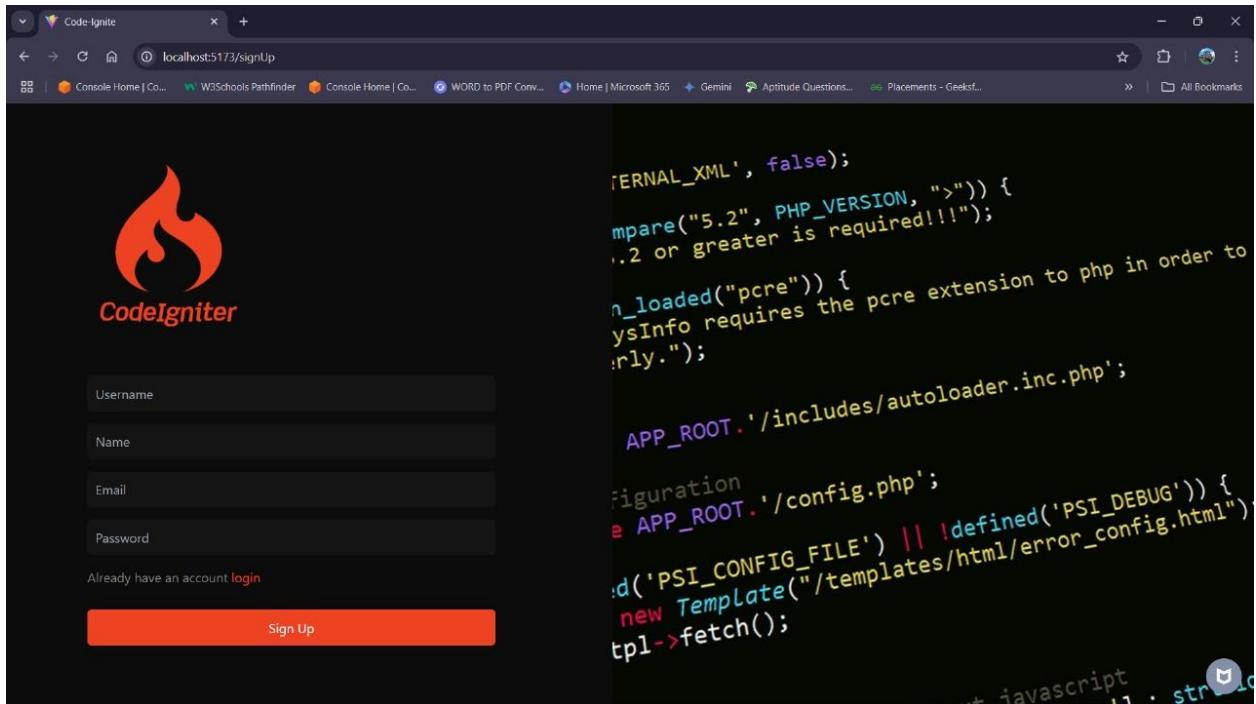
```

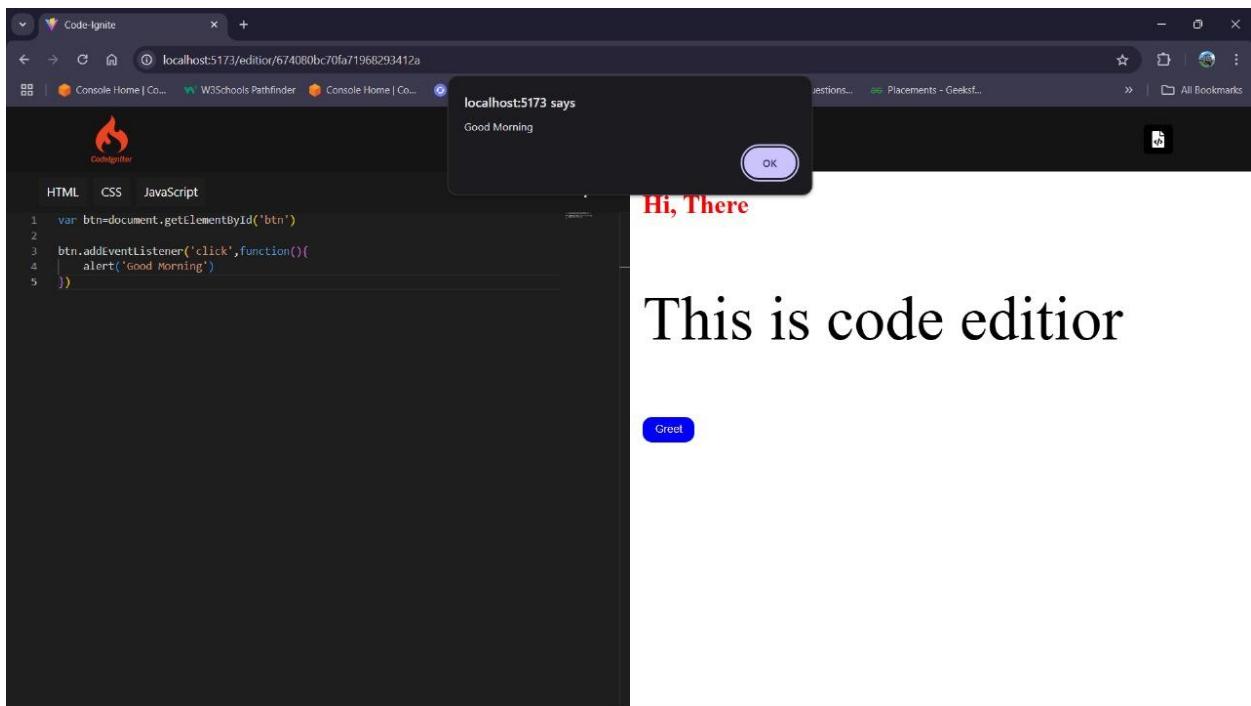
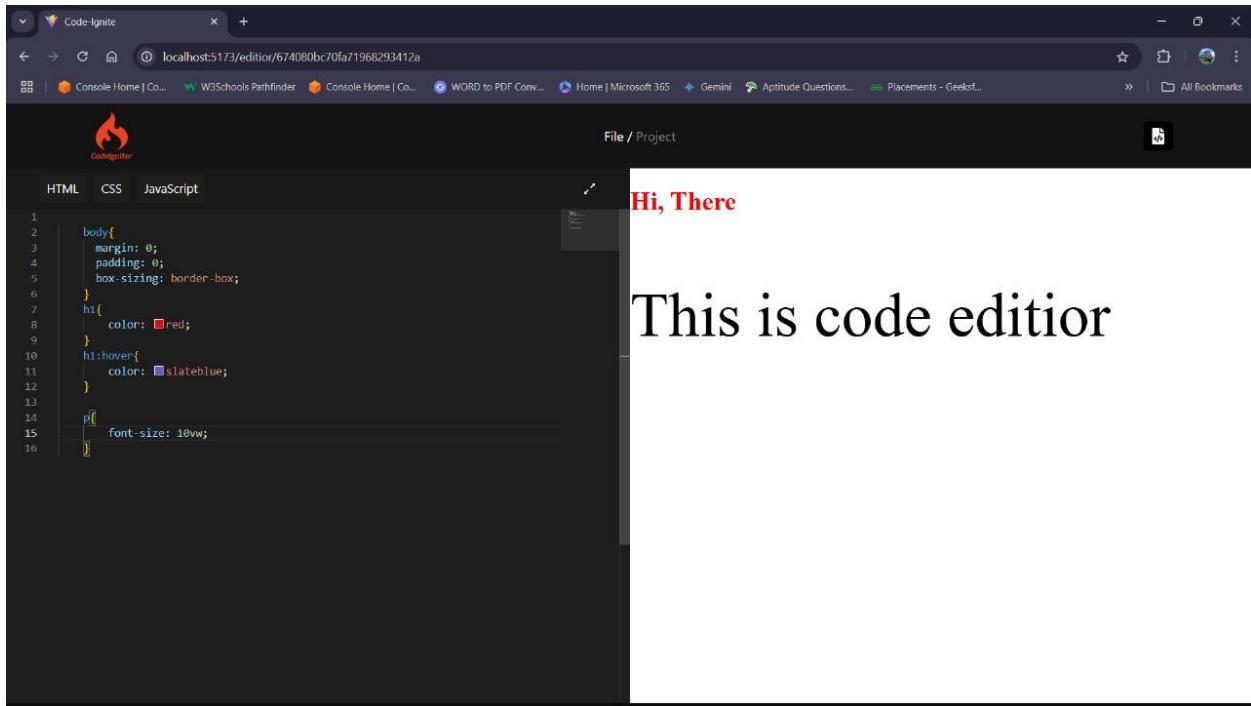
```
name: String,  
username: String,  
email: String,  
password: String,  
date:{  
    type: Date,  
    default: Date.now  
},  
isBlocked: {  
    type: Boolean,  
    default: false  
},  
isAdmin: {  
    type: Boolean,  
    default: false  
}  
});  
  
module.exports = mongoose.model('User', userSchema); // 'User' is the name of the collection
```

output:









## MongoDB Compass: MYDB -> codeIDE -> projects

The screenshot shows the MongoDB Compass interface. The left sidebar lists connections: MyDB, admin, and codeIDE. Under codeIDE, there is a folder named 'projects' which contains a sub-folder 'users'. The main panel displays the 'projects' collection. One document is shown in detail:

```

_id: ObjectId('6738604b8564fa25c33d5564')
title: "Demo"
createdBy: "6738602f8564fa25c33d5558"
htmlCode: "<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <body>
        margin: 0;
        padding: 0;
        box-sizing: border-box;
    </body>
</html>"
cssCode: ""
jsCode: "console.log("Hello World")"
date: 2024-11-16T09:05:15.453+00:00
__v: 0

```

A download progress bar at the bottom indicates 'Compass 1.44.7 is downloading'.

## MongoDB Compass: MYDB -> codeIDE -> users

The screenshot shows the MongoDB Compass interface. The left sidebar lists connections: MyDB, admin, and codeIDE. Under codeIDE, there is a folder named 'users'. The main panel displays the 'users' collection. Two documents are shown in detail:

```

_id: ObjectId('67385fef8564fa25c33d5555')
name: "Vishwas"
username: "Vishwas45"
email: "vishwas123@gmail.com"
password: "52a5195zbbbItu0s3CBdy5njXY.nOTajgC.Oao/eoE5W.I.3F3r3YCR5fd0a"
isBlocked: false
isAdmin: false
date: 2024-11-16T09:03:43.769+00:00
__v: 0

_id: ObjectId('6738602f8564fa25c33d5558')
name: "Vinit"
username: "vinit45"
email: "vinit123@gmail.com"
password: "52a5195zbbbItu0s3CBdy5njXY.nOTajgC.Oao/eoE5W.I.3F3r3YCR5fd0a"
isBlocked: false
isAdmin: false
date: 2024-11-16T09:04:47.421+00:00
__v: 0

```