NARASARAOPETA
NEC ENGINEERING COLLEGE
(AUTONOMOUS)

React Project

Peer Learning: React.js

Project Name	:	**Safe Drinking Water**	
Team Members	:	A.Jagadeesh	(22471A0502)
		SK.M.Farooq	(22471A0552)
		SK.M.Noushik	(22471A0551)
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Department of Computer Science and Engineering

NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPETA

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the project work entitled "Safe Drinking Water" is a bonafide work done by the team "A. Jagadeesh (22471A0502), SK.M.Farooq (22471A0552), SK.M. Noushik (22471A0551) & N. Bala Krishna (22471A0542)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY in the Department of COMPUTER SCIENCE AND ENGINEERING** during 2024-2025.

PROJECT GUIDE
Sd.Rizwana, M.Tech,
Asst.Professor

PROJECT CO-ORDINATOR
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HEAD OF THE DEPARTMENT
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Professor & HOD

Details of the project

Title of the Project	**:**	Safe Drinking Water
Names of Team members	**:**	A.Jagadeesh, SK.M.Farooq , SK.M.Noushik, & N.Bala Krishna.
Roll No	**:**	22471A0502, 22471A0552, 22471A0551, 22471A0542
Section	**:**	CSE-A
Technology Stack :		
Frontend	**:**	ReactJs
Backend	**:**	Node.JS and Express
Database	**:**	MY SQL

Project Overview:

SAFE DRINKING WATER

- Safe drinking water is important for public health and can contribute to economic growth and poverty reduction.
- Drinking Water Week, celebrated the first week of May each year.
- Celebrate World Water Day on March 22 and promote the access to safe water for everyone.

Principles of Safe Drinking Water

- Water pollution is a widespread problem that can contaminate drinking water sources with harmful substances.
- More than one billion people in the world do not have access to safe drinking water.
- Polluted drinking water is a major cause for many different diseases, e.g., cancers, and reproductive and digestive problems.

ADVANTAGES OF SAFE DRINKING WATER

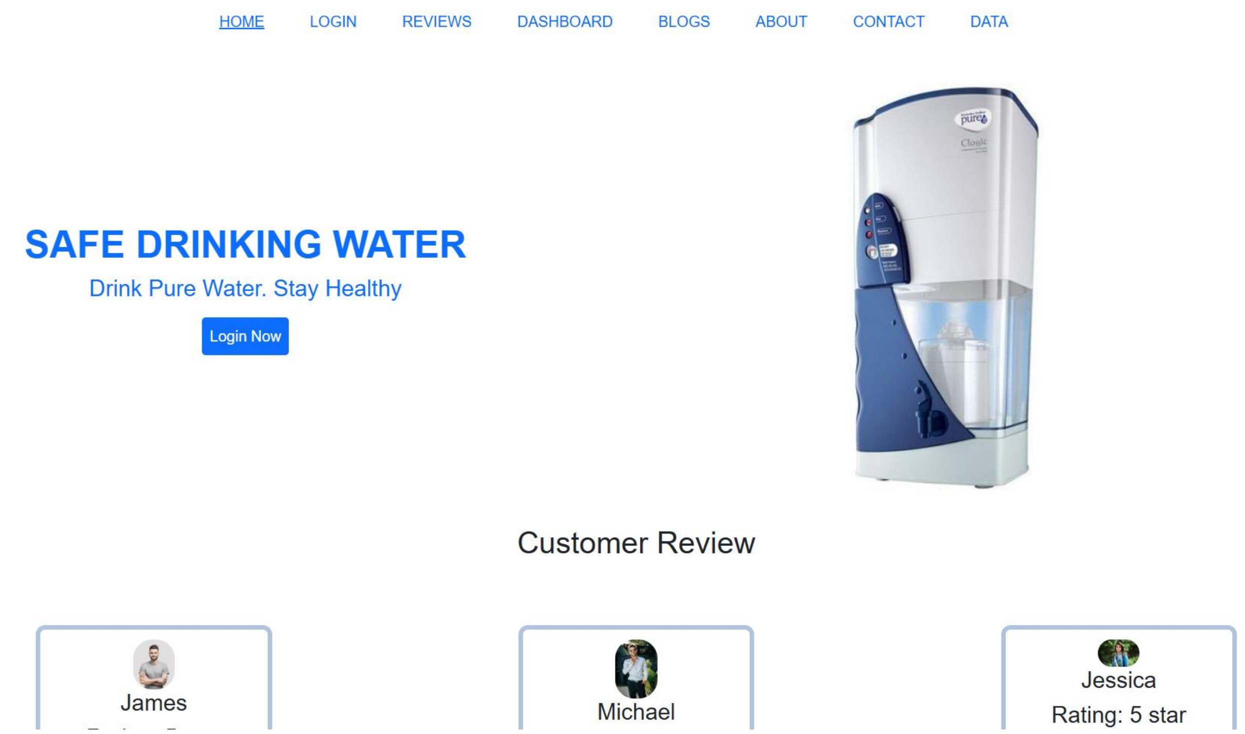
- **Improved health:** Access to safe drinking water can help prevent diseases and promote overall health.
- **Reduced poverty:** Improved water supply and sanitation can contribute to poverty reduction.
- **Increased life expectancy:** Access to safe drinking water can increase life expectancy.
- **Improved education:** Women and girls who don't have to walk miles to fetch water have more time to learn.

Drinking water quality

- Water is most fundamental in shaping the land and regulating the climate.
- It is one of the most important resources that profoundly influence life.
- Water quality is the most fundamental controlling factor when it comes to health and the state of diseases in both humans and animals.
- Depending on the purpose of water quality analysis, water quality can be defined based on a set of biological, physical and chemical variable, which are closely linked to the water's intended use.
- Once the groundwater is contaminated, its quality cannot be restored back easily, the best way is to protect it.

Photos of Project Implementation:

Screenshot 1: Home Page



SAFE DRINKING WATER

Drink Pure Water. Stay Healthy

Customer Review

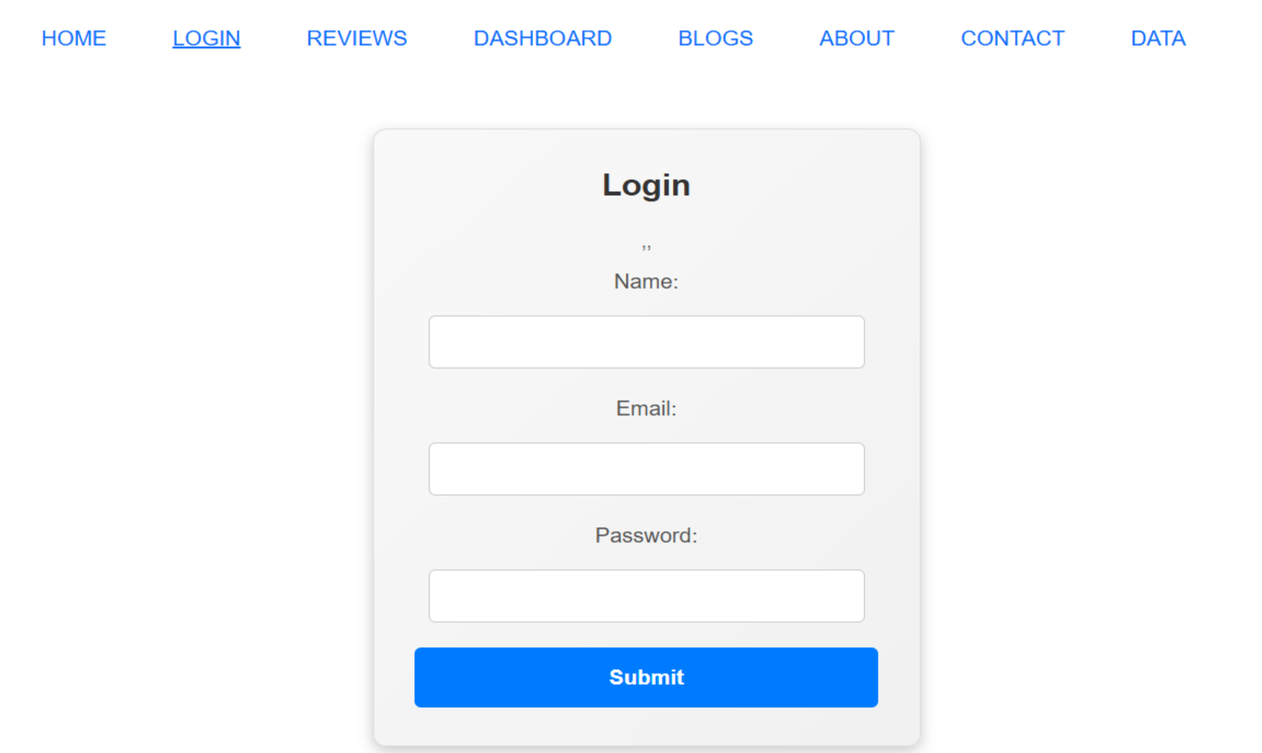
James

Michael

Jessica

Rating: 5 star

Screenshot 2: Login page



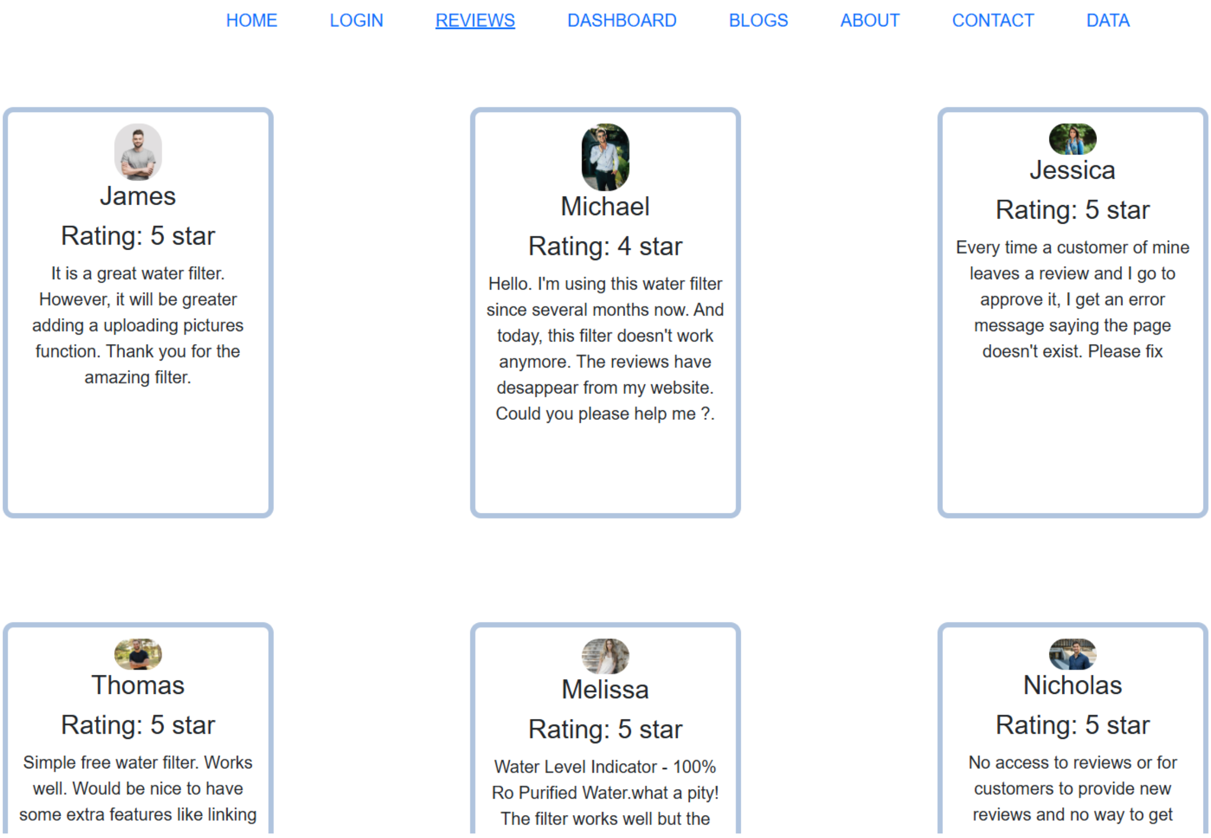
Login

Name:

Email:

Password:

Screenshot 3: Reviews Page



HOME LOGIN REVIEWS DASHBOARD BLOGS ABOUT CONTACT DATA

James

Rating: 5 star

It is a great water filter. However, it will be greater adding a uploading pictures function. Thank you for the amazing filter.

Michael

Rating: 4 star

Hello. I'm using this water filter since several months now. And today, this filter doesn't work anymore. The reviews have desappear from my website. Could you please help me ?.

Jessica

Rating: 5 star

Every time a customer of mine leaves a review and I go to approve it, I get an error message saying the page doesn't exist. Please fix

Thomas

Rating: 5 star

Simple free water filter. Works well. Would be nice to have some extra features like linking

Melissa

Rating: 5 star

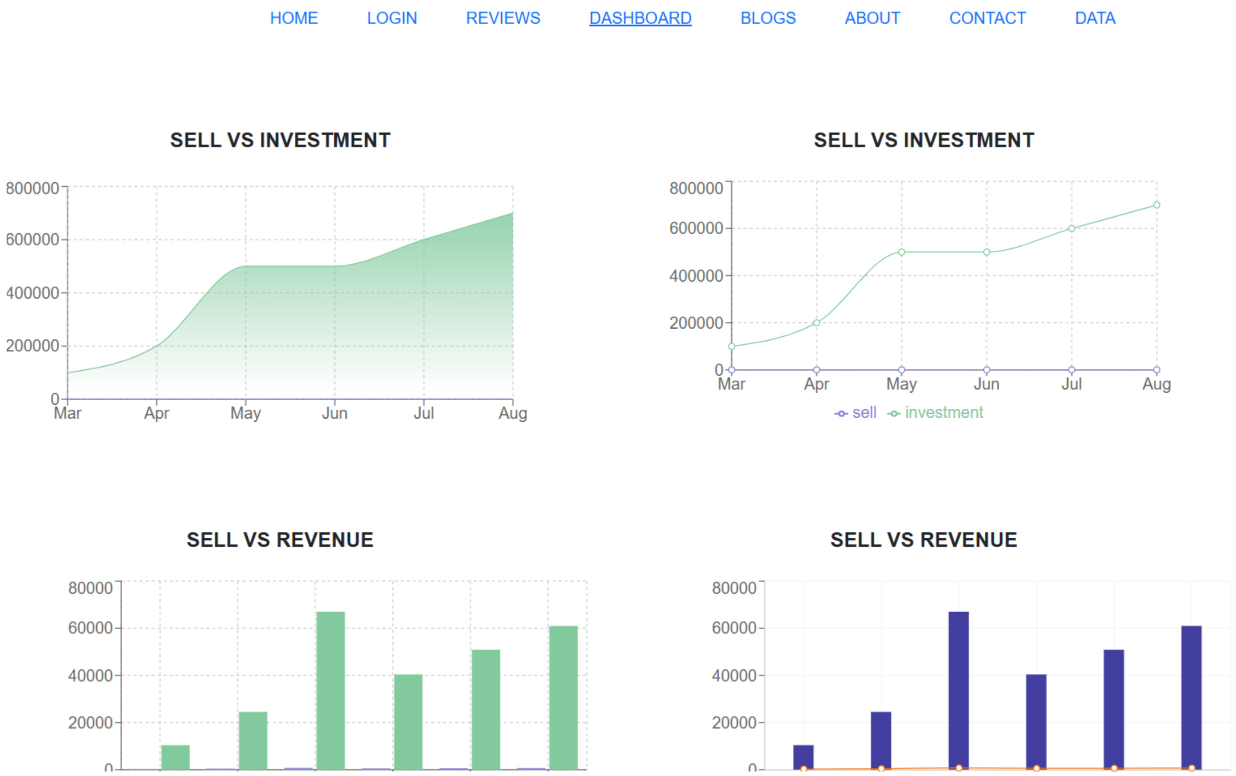
Water Level Indicator - 100% Ro Purified Water.what a pity! The filter works well but the

Nicholas

Rating: 5 star

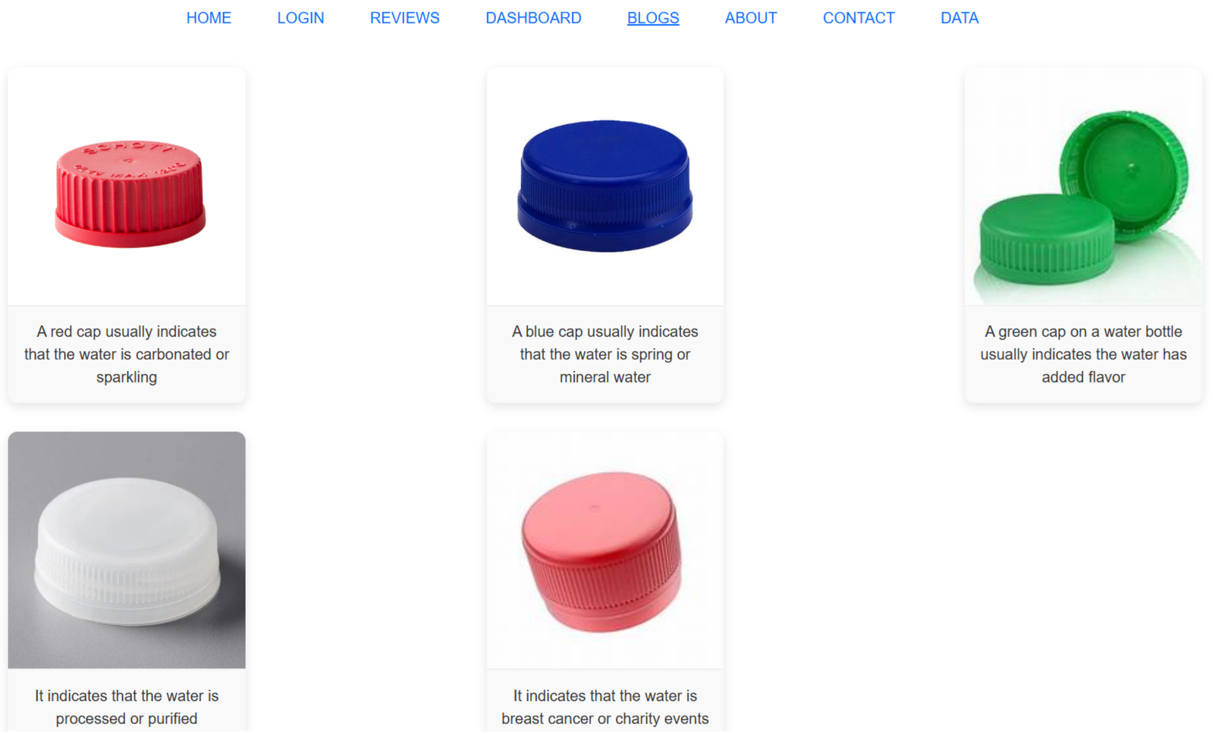
No access to reviews or for customers to provide new reviews and no way to get

Screenshot 4: Dashboard Page



HOME LOGIN REVIEWS DASHBOARD BLOGS ABOUT CONTACT DATA

Screenshot 5: Blogs page



A red cap usually indicates that the water is carbonated or sparkling

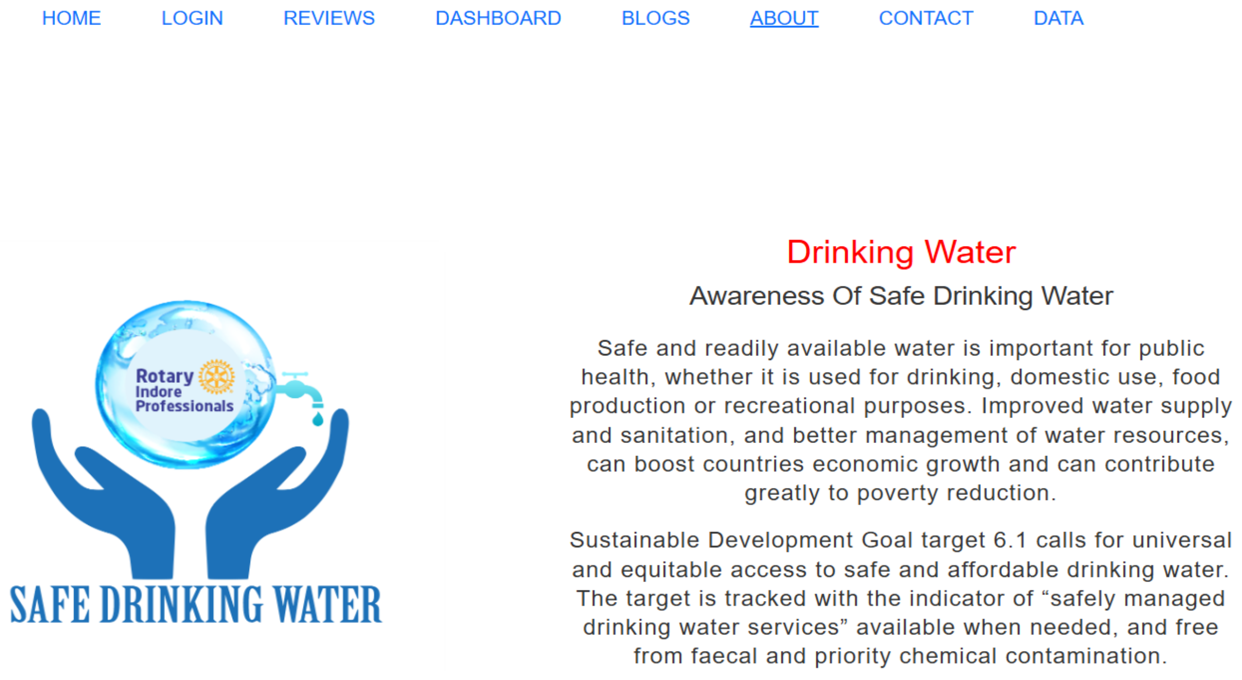
A blue cap usually indicates that the water is spring or mineral water

A green cap on a water bottle usually indicates the water has added flavor

It indicates that the water is processed or purified

It indicates that the water is breast cancer or charity events

Screenshot 6: About Page



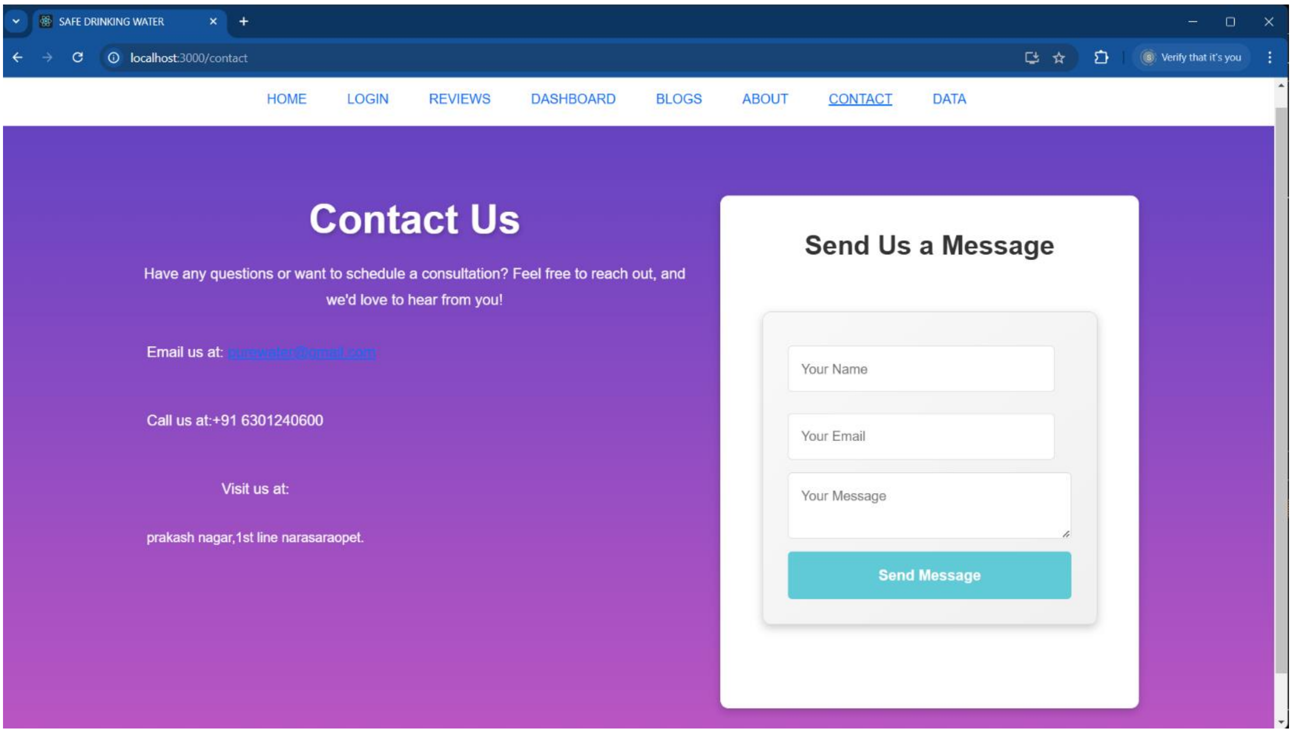
Drinking Water

Awareness Of Safe Drinking Water

Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. Improved water supply and sanitation, and better management of water resources, can boost countries economic growth and can contribute greatly to poverty reduction.

Sustainable Development Goal target 6.1 calls for universal and equitable access to safe and affordable drinking water. The target is tracked with the indicator of “safely managed drinking water services” available when needed, and free from faecal and priority chemical contamination.

Screenshot 7: Contact Page



Contact Us

Have any questions or want to schedule a consultation? Feel free to reach out, and we'd love to hear from you!

Email us at: purewater@gmail.com

Call us at:+91 6301240600

Visit us at:

prakash nagar,1st line narasaraopet.

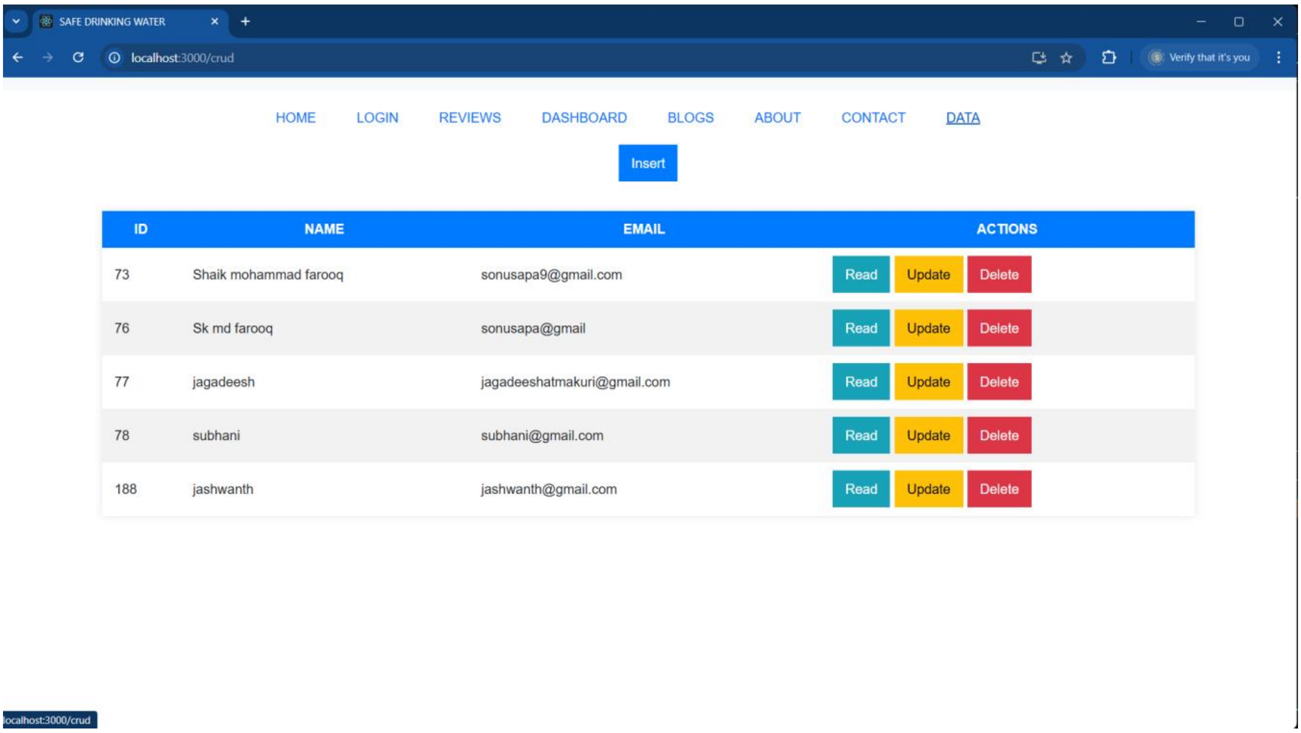
Send Us a Message

Your Name

Your Email

Your Message

Screenshot 8: Data page



ID	NAME	EMAIL	ACTIONS
73	Shaik mohammad farooq	sonusapa9@gmail.com	Read Update Delete
76	Sk md farooq	sonusapa@gmail	Read Update Delete
77	jagadeesh	jagadeeshatmakuri@gmail.com	Read Update Delete
78	subhani	subhani@gmail.com	Read Update Delete
188	jashwanth	jashwanth@gmail.com	Read Update Delete

Server.js:

```
const express = require('express');
const mysql = require('mysql2');
const cors = require('cors');
const app = express();
const port = 5000;

// Middleware
app.use(cors());
app.use(express.json());

// MySQL connection
const db = mysql.createConnection({
  host: 'localhost',
  user: 'root', // Use your MySQL username
  password: "123456", // Use your MySQL password
  database: 'Jagadeesh', // Database name
});

// Connect to MySQL
db.connect((err) => {
  if (err) {
    console.error('Error connecting to MySQL database:', err);
    return;
  }
  console.log('Connected to MySQL database');
});

// Routes
// Get all users
app.get('/api/users/', (req, res) => {
  db.query('SELECT * FROM users', (err, results) => {
    if (err) {
      return res.status(500).json({ error: err.message });
    }
    res.json(results);
  });
});

// Get a user by ID
app.get('/api/users/:id', (req, res) => {
  const { id } = req.params;
  db.query('SELECT * FROM users WHERE id = ?', [id], (err, results) => {
    if (err) {
      return res.status(500).json({ error: err.message });
    }
    if (results.length === 0) {
      return res.status(404).json({ message: 'User not found' });
    }
    res.json(results[0]);
  });
});

// Insert a new user
app.post('/api/users', (req, res) => {
  const { name, email } = req.body;
  const query = 'INSERT INTO users (name, email) VALUES (?, ?)';
  db.query(query, [name, email], (err, results) => {
    if (err) {
      return res.status(500).json({ error: err.message });
    }
    res.status(201).json({ id: results.insertId, name, email });
  });
});

// Update an existing user
app.put('/api/users/:id', (req, res) => {
  const { id } = req.params;
  const { name, email } = req.body;
  const query = 'UPDATE users SET name = ?, email = ? WHERE id = ?';
  db.query(query, [name, email, id], (err, results) => {
    if (err) {
      return res.status(500).json({ error: err.message });
    }
    if (results.affectedRows === 0) {
      return res.status(404).json({ message: 'User not found' });
    }
    res.json({ id, name, email });
  });
});

// Delete a user
app.delete('/api/users/:id', (req, res) => {
  const { id } = req.params;
  const query = 'DELETE FROM users WHERE id = ?';
  db.query(query, [id], (err, results) => {
    if (err) {
      return res.status(500).json({ error: err.message });
    }
    if (results.affectedRows === 0) {
      return res.status(404).json({ message: 'User not found' });
    }
    res.status(204).send();
  });
});

// Start server
app.listen(port, () => {
  console.log(`Server is running on http://localhost:${port}`);
});
```

Database.js:

```
const mysql = require('mysql2');

// Create a connection pool (recommended for production environments)
const pool = mysql.createPool({
  host: process.env.DB_HOST,         // Database host
  user: process.env.DB_USER,         // Database username
  password: process.env.DB_PASSWORD, // Database password
  database: process.env.DB_NAME      // Database name
});

// Create a promise wrapper for the pool to use async/await
const promisePool = pool.promise();

module.exports = promisePool;
```

Frontend codes:

App.js:

```
import { Route, Routes } from 'react-router-dom';
import './App.css';
import Header from './components/Header/Header';
import Home from './components/Home/Home';
import Reviews from './components/Reviews/Reviews';
import Dashboard from './components/Dashboard/Dashboard';
import Blogs from './components/Blogs/Blogs';
import About from './components/About/About';
import Error from './components/Error/Error';
import Login from './components/Login/Login';
import Contact from './components/Contact/Contact';
import Crud from './components/Crud/Crud';


function App() {
  return (
    <div className="App">
      <Header></Header>
      <Routes>
        <Route path='/' element={<Home></Home>}></Route>
        <Route path='/home' element={<Home></Home>}></Route>
        <Route path='/login' element={<Login></Login>}></Route>
        <Route path='/reviews' element={<Reviews></Reviews>}></Route>
        <Route path='/dashboard' element={<Dashboard></Dashboard>}></Route>
        <Route path='/blogs' element={<Blogs></Blogs>}></Route>
        <Route path='/about' element={<About></About>}></Route>
        <Route path='/contact' element={<Contact></Contact>}></Route>
        <Route path='/crud' element={<Crud></Crud>}></Route>
        <Route path='*' element={<Error></Error>}></Route>
      </Routes>
    </div>
  );
}

export default App;
```

Home.js:

```
import React from 'react';
import { Link } from 'react-router-dom';
import useReviews from '../../Hook/useReviews';
import './Home.css';

const Home = () => {
  const [review,setReview] = useReviews();
  return (
      <div className='container mb-5'>
        <div className='row'>
          <div className='col-md-6 d-flex align-items-center'>
            <div>
            <h1 className='fw-bold text-primary '>SAFE DRINKING WATER</h1>
             <h4 className='text-primary'>Drink Pure Water. Stay Healthy</h4>



             <div>
                <button className='p-2 rounded px-2 mt-2 bg-primary border-0 text-white'><Link
className='text-decoration-none text-white' to="/login">Login Now</Link></button>
             </div>
            </div>


          </div>
          <div className='col-md-6'>
            <img src="https://static-01.daraz.com.bd/p/18b4aa9268a6a1609e370de6f6d0e18b.jpg"
alt="" />
          </div>
        </div>
        {/* review section */}
        <h2>Customer Review</h2>
        <div className='container review-itemss'>

         {
         review.slice(0,3).map(reviews => <div className='review-items ' key={reviews.id}>
          <div className='review-item my-5'>
             <img className='user-img' src={reviews.picture} alt="" />
             <h4>{reviews.name}</h4>
             <h4>Rating: {reviews.rating} star</h4>
             <p>{reviews.text}</p>
          </div>

         </div>)
       }

        </div>
        <button className='p-2 rounded px-3 py-1 mt-2 bg-primary border-0 '> <Link
className='text-decoration-none text-white' to="/reviews">see all reviews</Link></button>
      </div>
  );
};

export default Home;
```

Home.css ;

```
.user-img{
   width: 20%;
   border-radius: 20px;
}
.review-item{
   border: 5px solid LightSteelBlue;
   width: 250px;
   height: 380px;
   padding: 10px;
   border-radius: 10px;

}
.review-itemss{
   display: flex;
   justify-content: space-between;

}
```

Login.JS:

```
import React,{useState} from "react";
import './Login.css';

function Login(){
   const [name,setName]=useState("");
   const [email,setEmail]=useState("");
   const [password,setPassword]=useState("");
   const handleSubmit=(e)=>{
      e.preventDefault();
      console.log(name,email,password);
   }

   return(
      <>
      <form>
         <h1>Login</h1>
         <p>{name},{email},{password}</p>
         <label>Name:</label>
         <input type="text" placeholder="" value={name}
onChange={(e)=>setName(e.target.value)}/><br/>
         <label>Email:</label>
         <input type="email" placeholder="" value={email}
onChange={(e)=>setEmail(e.target.value)}/><br/>
         <label>Password:</label>
         <input type="password" placeholder="" value={password}
onChange={(e)=>setPassword(e.target.value)}/><br/>
         <button onClick={handleSubmit}>Submit</button>

      </form>
```

```
        </>

    )


}
export default Login;
```

About.js;

```
// src/About.js
import React from 'react';
import './About.css';

const About = () => {
    return (
      <body>
      <section class="about-us">
        <div class="about">
          <img src="https://i1.wp.com/www.rotaryindoreprofessionals.org/wp-content/uploads/2020/07/Safe-Drinking-Water-logo.png?fit=1056%2C1011&ssl=1" class="pic" />
          <div class="text">
            <h3>Drinking Water</h3>
            <h5>Awareness Of Safe Drinking Water</h5>
            <p>Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. Improved water supply and sanitation, and better management of water resources, can boost countries economic growth and can contribute greatly to poverty reduction.</p>
            <p>Sustainable Development Goal target 6.1 calls for universal and equitable access to safe and affordable drinking water. The target is tracked with the indicator of “safely managed drinking water services” available when needed, and free from faecal and
              priority chemical contamination.</p>

          </div>
        </div>
      </section>
    </body>
    );
};

export default About;
```

Crud.js

```
import React, { useState, useEffect } from "react";
import axios from "axios";
import './Crud.css';

const App = () => {
  const [data, setData] = useState([]);
  const [isModalOpen, setIsModalOpen] = useState(false);
  const [modalMode, setModalMode] = useState("Insert"); // Insert, Read, Update
  const [formData, setFormData] = useState({ id: "", name: "", email: "" });
  const [currentId, setCurrentId] = useState(null);

  useEffect(() => {
    // Fetch all users from the backend
    axios.get('http://localhost:5000/api/users')
      .then(response => {
        setData(response.data);
      })
      .catch(error => {
        console.error('There was an error fetching the data!', error);
      });
  }, []);

  const openModal = (mode, id = null) => {
    setModalMode(mode);
    setIsModalOpen(true);
    if (mode === "Update" || mode === "Read") {
      const selectedRow = data.find((item) => item.id === id);
      setFormData({ ...selectedRow });
      setCurrentId(id);
    } else {
      setFormData({ id: "", name: "", email: "" });
    }
  };

  const closeModal = () => {
    setIsModalOpen(false);
    setFormData({ id: "", name: "", email: "" });
    setCurrentId(null);
  };

  const handleInputChange = (e) => {
    const { name, value } = e.target;
    setFormData({ ...formData, [name]: value });
  };

  const handleSubmit = () => {
    if (modalMode === "Insert") {
      axios.post('http://localhost:5000/api/users', formData)
        .then(response => {
          setData([...data, response.data]);
          closeModal();
        })
        .catch(error => {
          console.error('There was an error submitting the data!', error);
        });
    } else if (modalMode === "Update") {
      axios.put(`http://localhost:5000/api/users/${currentId}`, formData)
```

```
      .then(response => {
        setData(data.map(item => (item.id === currentId ? response.data : item)));
        closeModal();
      })
      .catch(error => {
        console.error('There was an error updating the data!', error);
      });
  }
};

const handleDelete = (id) => {
  axios.delete(`http://localhost:5000/api/users/${id}`)
    .then(() => {
      setData(data.filter(item => item.id !== id));
    })
    .catch(error => {
      console.error('There was an error deleting the data!', error);
    });
};

return (
  <div className="container">
    <button className="insert-button" onClick={() => openModal("Insert")}>
      Insert
    </button>

    {isModalOpen && (
      <div className="modal">
        <div className="modal-content">
          <h3>{modalMode} Data</h3>
          {(modalMode === "Insert" || modalMode === "Update") && (
            <form>
              <div>
                <label>Name:</label>
                <input
                  type="text"
                  name="name"
                  value={formData.name}
                  onChange={handleInputChange}
                />
              </div>
              <div>
                <label>Email:</label>
                <input
                  type="email"
                  name="email"
                  value={formData.email}
                  onChange={handleInputChange}
                />
              </div>
            </form>
      )}
      {modalMode === "Read" && (
       <div>
        <p>
         <strong>Name:</strong> {formData.name}
        </p>
        <p>
         <strong>Email:</strong> {formData.email}
        </p>
       </div>
      )}
      <div>
       <button className="close-btn" onClick={closeModal}>
        Close
       </button>&nbsp;
       {(modalMode === "Insert" || modalMode === "Update") && (
        <button2 onClick={handleSubmit}>Submit</button2>
       )}
      </div>
     </div>
    </div>
   )}
   <table>
    <thead>
     <tr>
      <th>ID</th>
      <th>Name</th>
      <th>Email</th>
      <th>Actions</th>
     </tr>
    </thead>
    <tbody>
     {data.map((item) => (
      <tr key={item.id}>
       <td>{item.id}</td>
       <td>{item.name}</td>
       <td>{item.email}</td>
       <td className="actions">
        <button className="read-btn" onClick={() => openModal("Read", item.id)}>Read</button>
        <button className="update-btn" onClick={() => openModal("Update",
item.id)}>Update</button>
        <button className="delete-btn" onClick={() => handleDelete(item.id)}>Delete</button>
       </td>
      </tr>
     ))}
    </tbody>
   </table>
  </div>
 );
};
```

```
export default App;
```

Conclusion:

As water is a basic need for human life, access to clean, safe drinking water is a basic human right. As a criterion, an adequate, reliable, clean, acceptable and safe drinking water supply has to be available for various users. Moreover, everyone needs access to safe water in adequate quantities for drinking, cooking and personal hygiene and sanitation facilities that do not compromise health or dignity. Access to water is one of the most important catalysts given high priority by the UN for sustainable development. Despite these facts, there are inequalities in access to safe drinking water in the world.

Thanking You