UCS2611 - Internet Programming Laboratory
Mini Project - ConsultansEase Full Stack Web Application

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AIM:
To implement a consultancy full-stack web-application using the MERN stack and Google APIs.

REQUIREMENTS:

- The system must have a secure login for registered users using their college email ID.
- It should allow new users to register.
- After logging in, users must be able to enter and manage consultancy project details.
- The details to be entered include industry name, duration of the project, title of the project, principal investigator and co-principal investigator details, academic year, amount sanctioned, amount received, bill settlement details with proof uploads, signed agreement document upload, student details involved in the project, and a 100-word project summary.
- Users should be able to download project details based on filters like academic year, amount thresholds (e.g., above ₹50,000 or ₹1,00,000), faculty name, and industry name.
- The system should send notifications every 15 days to users about new consultancy projects and pending or completed bill settlements.
- All information should be stored and retrieved from Excel sheets, without using a database.

FILE STRUCTURE:

- ☐ consultansease
  - ☐ frontend
    - ☐ src
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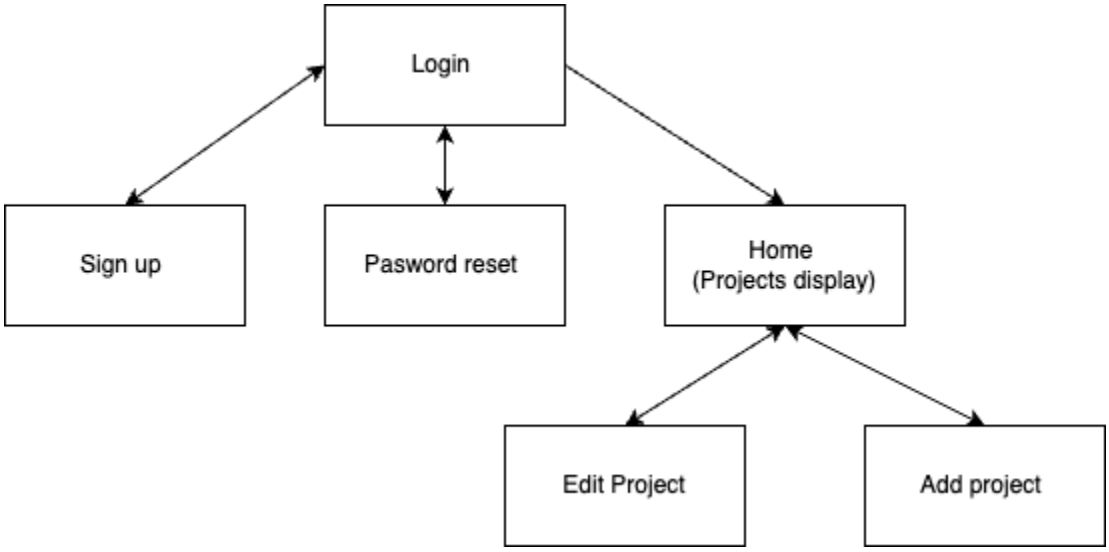
      - ☐ ConsultancyData.jsx
      - ☐ EditProjectForm.jsx
      - ☐ Forms.jsx
      - ☐ ConsultancyData.css
      - ☐ Forms.css
      - ☐ components
        - ☐ styles.css
        - ☐ ForgotPassword
          - ☐ ForgotPassword.jsx
        - ☐ Login
          - ☐ Login.jsx

- SignUp
  - SignUp.jsx
- backend
  - server.js
  - credentials.json
  - loginModel.js
  - uploads
  - routes
    - authRoutes.js
    - displayRoutes.js
    - formRoutes.js

FLOW DIAGRAM:



CODE:

FRONT-END:

App.js:

```
import React from "react";
import { BrowserRouter as Router, Route, Routes } from "react-router-dom";
import EditProjectForm from "./EditProjectForm";
import AddProjectForm from "./Forms";
import ConsultancyData from "./ConsultancyData";
import Login from "./components/Login/Login.jsx";
import Signup from "./components/SignUp/SignUp.jsx";
import ForgotPassword from "./components/ForgotPassword/ForgotPassword.jsx";
import PrivateRoute from "./PrivateRoute";
```

```
function App() {
 return (
   <Router>
     <Routes>
       <Route
         path="/edit/:id"
         element={
           <PrivateRoute>
             <EditProjectForm />
           </PrivateRoute>
         }
       />
       <Route
         path="/add-project"
         element={
           <PrivateRoute>
             <AddProjectForm />
           </PrivateRoute>
         }
       />
       <Route
         path="/home"
         element={
           <PrivateRoute>
             <ConsultancyData />
           </PrivateRoute>
         }
       />
       <Route path="/" element={<Login />} />
       <Route path="/signup" element={<Signup />} />
       <Route path="/forgotpassword" element={<ForgotPassword />} />
     </Routes>
   </Router>
 );
}

export default App;
```

ConsultancyData.jsx:

```
import React, { useEffect, useState, useCallback } from "react";
import { useNavigate } from "react-router-dom";
```

```jsx
import axios from "axios";
import "./ConsultancyData.css";

const ConsultancyData = () => {
 const navigate = useNavigate();
 const [data, setData] = useState([]);
 const [loading, setLoading] = useState(true);
 const [filters, setFilters] = useState({
   academicYear: "",
   pi: "",
   industry: "",
   minSanctioned: "",
 });

 // Wrap fetchData in useCallback to prevent unnecessary re-creation
 const fetchData = useCallback(async () => {
   setLoading(true);
   try {
     const response = await axios.get("http://localhost:5050/api", {
       params: filters,
     });
     setData(response.data || []);
   } catch (error) {
     console.error("Error fetching data:", error);
   } finally {
     setLoading(false);
   }
 }, [filters]); // Include filters as a dependency

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

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

 const handleDelete = async (projectId) => {
```

```
  if (window.confirm("Are you sure you want to delete this entry?")) {
    try {
      await axios.delete(`http://localhost:5050/api/${projectId}`);
      // Refresh data after deletion
      fetchData();
    } catch (error) {
      console.error("Error deleting entry:", error);
      alert("Failed to delete entry. Please try again.");
    }
  }
};

const handleDownload = async () => {
  try {
    // Get filtered data
    const response = await axios.get("http://localhost:5050/api/download", {
      params: filters,
      responseType: "blob",
    });

    // Create download link
    const url = window.URL.createObjectURL(new Blob([response.data]));
    const link = document.createElement("a");
    link.href = url;
    link.setAttribute("download", "consultansease.xlsx");
    document.body.appendChild(link);
    link.click();

    // Clean up
    link.parentNode.removeChild(link);
  } catch (error) {
    console.error("Error downloading data:", error);
    alert("Failed to download data. Please try again.");
  }
};

const handleLogout = () => {
  localStorage.removeItem("isAuthenticated");
  navigate("/");
};

return (
```

```
<div className="container">
  <h4>ConsultansEase Data</h4>

  {/* Filter Inputs */}
  <div className="filter-bar">
    <input
      type="text"
      name="academicYear"
      placeholder="Academic Year"
      value={filters.academicYear}
      onChange={handleInputChange}
    />
    <input
      type="text"
      name="pi"
      placeholder="PI Name"
      value={filters.pi}
      onChange={handleInputChange}
    />
    <input
      type="text"
      name="industry"
      placeholder="Industry Name"
      value={filters.industry}
      onChange={handleInputChange}
    />
    <input
      type="text"
      name="minSanctioned"
      placeholder="Minimum Sanctioned Amount"
      value={filters.minSanctioned}
      onChange={handleInputChange}
    />
    <button
      onClick={() =>
        setFilters({
          academicYear: "",
          pi: "",
          industry: "",
          minSanctioned: "",
        })
      }
```

```
  >
    Reset Filters
  </button>

  <button
    onClick={() => navigate("../add-project")}
    className="add-project-btn"
  >
    {" "}
    Add New Project
  </button>

  {/* Download Button */}
  <button onClick={handleDownload} className="download-btn">
    Download Results
  </button>
</div>

{/* Table */}
{loading ? (
  <div className="loading-spinner">
    <div className="spinner-circle"></div>
    <p>Loading data...</p>
  </div>
) : (
  <div className="table-container">
    <table>
      <thead>
        <tr>
          <th>Project ID</th>
          <th>Industry</th>
          <th>Duration</th>
          <th>Title</th>
          <th>PI</th>
          <th>Co-PI</th>
          <th>Year</th>
          <th>Sanctioned</th>
          <th>Received</th>
          <th>Bill Proof</th>
          <th>Agreement</th>
          <th>Students</th>
          <th>Summary</th>
```

```
    <th>Actions</th>
  </tr>
</thead>
<tbody>
  {data.length === 0 ? (
    <tr>
      <td colSpan="14">No data available.</td>
    </tr>
  ) : (
    data.map((row, idx) => (
      <tr key={idx}>
        <td>{row.projectId}</td>
        <td>{row.industry}</td>
        <td>{row.duration}</td>
        <td>{row.title}</td>
        <td>{row.pi}</td>
        <td>{row.copi}</td>
        <td>{row.academicYear}</td>
        <td>{row.sanctionedAmount}</td>
        <td>{row.receivedAmount}</td>
        <td>{row.billProofLink}</td>
        <td>{row.agreementDocumentLink}</td>
        <td>{row.studentParticipants}</td>
        <td>{row.summary}</td>
        <td>
          <div className="action-buttons">
            <button
              className="edit-btn"
              onClick={() => navigate(`../edit/${row.projectId}`)}
            >
              Edit
            </button>
            <button
              className="delete-btn"
              onClick={() => handleDelete(row.projectId)}
            >
              Delete
            </button>
          </div>
        </td>
      </tr>
    ))
```

```
            )}
          </tbody>
        </table>
      </div>
    )}

    <a href="#!" onClick={handleLogout} className="logout-link">
      Logout &gt;
    </a>
  </div>
 );
};

export default ConsultancyData;
```

ConsultancyData.css:

```
* {
 margin: 0;
 padding: 0;
 box-sizing: border-box;
}

body {
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
 background-color: #fefae0;
 color: #333;
}

h4 {
 color: #8e24aa;
 font-size: 2rem;
 text-align: center;
 margin-bottom: 20px;
 margin-top: 0;
}

.container {
 max-width: 1000px;
 margin: auto;
 padding: 20px;
}
```

```css
.filter-bar {
 display: flex;
 flex-wrap: wrap;
 gap: 15px;
 margin-bottom: 20px;
}

.filter-bar select,
.filter-bar input {
 padding: 10px;
 border: 1px solid #ccc;
 border-radius: 8px;
 font-size: 1rem;
}

.project-card {
 background-color: #ffffff;
 padding: 20px;
 border-radius: 12px;
 box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
 margin-bottom: 15px;
}

button {
 padding: 12px;
 border-radius: 8px;
 border: none;
 background-color: #8e24aa;
 color: white;
 font-weight: 600;
 cursor: pointer;
 font-size: 1rem;
}

button:hover {
 background-color: #6a1b9a;
}

.loading-spinner {
 display: flex;
 flex-direction: column;
 align-items: center;
```

```
 justify-content: center;
 padding: 30px;
 color: #555;
}

.spinner-circle {
 border: 4px solid #f3f3f3;
 border-top: 4px solid #8e24aa;
 border-radius: 50%;
 width: 30px;
 height: 30px;
 animation: spin 1s linear infinite;
 margin-bottom: 10px;
}

@keyframes spin {
 to {
   transform: rotate(360deg);
 }
}

/* Table styles */
.table-container {
 overflow-x: auto;
 margin: 20px 0 20px;
}

table {
 width: 100%;
 border-collapse: collapse;
 background-color: white;
 box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
 border-radius: 8px;
 overflow: hidden;
}

thead {
 background-color: #8e24aa;
 color: white;
}

th,
```

```
td {
 padding: 12px 15px;
 text-align: left;
 border-bottom: 1px solid #ddd;
}

th {
 font-weight: bold;
}

tbody tr:hover {
 background-color: #f5f0ff;
}

tbody tr:last-child td {
 border-bottom: none;
}

.delete-btn:hover {
 background-color: #c62828;
}

.download-btn {
 background-color: #2e7d32;
 margin-left: auto;
}

.download-btn:hover {
 background-color: #1b5e20;
}

.edit-btn:hover {
 background-color: #45a049;
}
.action-buttons {
 display: flex;
 gap: 8px;
 justify-content: center;
}

.edit-btn,
.delete-btn {
```

```
 padding: 6px 12px;
 border: none;
 border-radius: 5px;
 font-weight: bold;
 cursor: pointer;
}

.edit-btn {
 background-color: #28a745; /* green */
 color: white;
}

.delete-btn {
 background-color: #dc3545; /* red */
 color: white;
}

.add-project-btn {
 background-color: #007bff;
}

.add-project-btn:hover {
 background-color: #0056b2;
}

a {
 text-decoration: none;
 color: #1976d2;
 text-align: center;
 margin-top: 10px;
 font-size: 0.95rem;
}

a:hover {
 text-decoration: underline;
 color: #0d47a1;
}
```

Forms.jsx:

```
import React, { useState, useEffect } from "react";
import "./Forms.css";
import { useNavigate } from "react-router-dom";
```

```
const AddProjectForm = () => {
 const navigate = useNavigate();
 const [formData, setFormData] = useState({
   industry: "",
   duration: "",
   title: "",
   pi: "",
   copi: "",
   year: "",
   sanctioned: "",
   received: "",
   billProof: null,
   agreementDoc: null,
   students: "",
   summary: "",
 });

 const [submitted, setSubmitted] = useState(false);

 useEffect(() => {
   if (submitted) {
     const timer = setTimeout(() => {
       setSubmitted(false);
       navigate("/home");
     }, 5000);
     return () => clearTimeout(timer); // Cleanup
   }
 }, [submitted, navigate]);

 const handleChange = (e) => {
   const { name, value, files } = e.target;
   setFormData({
     ...formData,
     [name]: files ? files[0] : value,
   });
 };

 const handleSubmit = async (e) => {
   e.preventDefault();

   const formDataToSend = new FormData();
```

```
  for (const key in formData) {
    formDataToSend.append(key, formData[key]);
  }

  try {
    const response = await fetch("http://localhost:5050/forms", {
      method: "POST",
      body: formDataToSend,
    });

    const contentType = response.headers.get("content-type");
    if (contentType && contentType.includes("application/json")) {
      const data = await response.json();
      console.log(data);
      setSubmitted(true);

      // Redirect to home page after submission
    } else {
      const text = await response.text();
      console.error("Non-JSON response:", text);
    }
  } catch (error) {
    console.error("Error submitting form:", error);
  }
};

return (
  <div className="form-container">
    <form onSubmit={handleSubmit}>
      <label>Industry:</label>
      <input
        type="text"
        name="industry"
        value={formData.industry}
        onChange={handleChange}
        required
      />

      <label>Duration:</label>
      <input
        type="number"
        name="duration"
```

```
  value={formData.duration}
  onChange={handleChange}
  required
/>

<label>Title of Project:</label>
<input
  type="text"
  name="title"
  value={formData.title}
  onChange={handleChange}
  required
/>

<label>Principal Investigator:</label>
<input
  type="text"
  name="pi"
  value={formData.pi}
  onChange={handleChange}
  required
/>

<label>Co-PI:</label>
<input
  type="text"
  name="copi"
  value={formData.copi}
  onChange={handleChange}
  required
/>

<label>Year:</label>
<input
  type="number"
  name="year"
  value={formData.year}
  onChange={handleChange}
  required
/>

<label>Sanctioned Amount:</label>
```

```
<input
  type="number"
  name="sanctioned"
  value={formData.sanctioned}
  onChange={handleChange}
  required
/>

<label>Amount Received:</label>
<input
  type="number"
  name="received"
  value={formData.received}
  onChange={handleChange}
  required
/>

<label>Bill Proof Document:</label>
<input
  type="file"
  name="billProof"
  accept=".pdf,.doc,.docx,.jpg,.jpeg,.png,.xlsx,.xls,.ppt,.pptx,.txt"
  onChange={handleChange}
  required
/>

<label>Agreement Document:</label>
<input
  type="file"
  name="agreementDoc"
  accept=".pdf,.doc,.docx,.jpg,.jpeg,.png,.xlsx,.xls,.ppt,.pptx,.txt"
  onChange={handleChange}
  required
/>

<label>Students Involved:</label>
<input
  type="text"
  name="students"
  value={formData.students}
  onChange={handleChange}
  required
```

```
        />

        <label>Summary of Work Done:</label>
        <textarea
          name="summary"
          value={formData.summary}
          onChange={handleChange}
          required
        ></textarea>

        <button type="submit">Submit</button>

        <a href="/home" id="backToHome">
          Back to Home {">"}
        </a>
      </form>

      {submitted && (
        <div className="success-message">
          Form submitted successfully! Redirecting...
        </div>
      )}
    </div>
  );
};

export default AddProjectForm;
```

Forms.css:

```
/* Base resets and font */
* {
  box-sizing: border-box;
  margin: 0;
  padding: 0;
}

body {
  font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
  background-color: #f7f7f7;
  height: 100vh;
}
```

```css
/* Center the form box */
.form-container {
 display: flex;
 justify-content: center;
 align-items: center;
 min-height: 100vh;
 padding: 20px;
 background-color: #fefae0;
}

/* White form box */
form {
 background-color: #fff;
 padding: 30px 40px;
 border-radius: 12px;
 box-shadow: 0 4px 25px rgba(0, 0, 0, 0.1);
 width: 100%;
 max-width: 500px;
 display: flex;
 flex-direction: column;
}

/* Label styling */
form label {
 margin-top: 10px;
 font-weight: 600;
 color: #333;
 font-size: 0.95rem;
}

/* Input and textarea */
form input[type="text"],
form input[type="email"],
form input[type="password"],
form input[type="number"],
form input[type="file"],
form textarea {
 padding: 10px 12px;
 margin-top: 6px;
 margin-bottom: 15px;
 border: 1px solid #ccc;
 border-radius: 8px;
```

```
 font-size: 0.95rem;
 width: 100%;
 transition: border-color 0.3s ease, box-shadow 0.3s ease;
}

form textarea {
 resize: vertical;
 min-height: 90px;
}

/* Focus styling */
form input:focus,
form textarea:focus {
 border-color: #8e24aa;
 box-shadow: 0 0 6px rgba(142, 36, 170, 0.25);
 outline: none;
}

/* Submit button */
form button {
 margin-top: 15px;
 padding: 10px;
 background-color: #8e24aa;
 color: white;
 font-weight: bold;
 border: none;
 border-radius: 8px;
 cursor: pointer;
 font-size: 1rem;
 transition: background-color 0.2s ease;
}

form button:hover {
 background-color: #6a1b9a;
}

/* Responsive tweaks */
@media (max-width: 600px) {
 form {
   padding: 25px 20px;
 }
```

```
 form input,
 form textarea {
   font-size: 0.9rem;
 }

 form button {
   font-size: 0.95rem;
 }
}

/* Prevent scroll on number input */
input[type="number"]::-webkit-outer-spin-button,
input[type="number"]::-webkit-inner-spin-button {
 -webkit-appearance: none;
 margin: 0;
}

/* Translucent green success box */
.success-message {
 position: fixed;
 bottom: 20px;
 left: 50%;
 transform: translateX(-50%);
 background-color: rgba(76, 175, 80, 0.85); /* green with some transparency */
 color: white;
 padding: 12px 24px;
 border-radius: 8px;
 box-shadow: 0 2px 10px rgba(0, 0, 0, 0.2);
 font-weight: bold;
 animation: fadeIn 0.3s ease-in;
 z-index: 999;
}

#backToHome {
 margin-top: 20px;
}

/* Optional fade in animation */
@keyframes fadeIn {
 from {
   opacity: 0;
   transform: translateX(-50%) translateY(10px);
```

```
 }
 to {
   opacity: 1;
   transform: translateX(-50%) translateY(0);
 }
}
```

EditProjectForm.jsx:

```
import React, { useEffect, useState } from "react";
import { useParams } from "react-router-dom";
import "./Forms.css";
import { useNavigate } from "react-router-dom";

const EditProjectForm = () => {
 const navigate = useNavigate();
 const { id } = useParams();
 const [formData, setFormData] = useState({
   industry: "",
   duration: "",
   title: "",
   pi: "",
   copi: "",
   year: "",
   sanctioned: "",
   received: "",
   billProof: null,
   agreementDoc: null,
   students: "",
   summary: "",
 });

 const [submitted, setSubmitted] = useState(false);
 const [loading, setLoading] = useState(true);

 useEffect(() => {
   if (submitted) {
     const timer = setTimeout(() => {
       setSubmitted(false);
       navigate("/home");
     }, 5000);
     return () => clearTimeout(timer); // Cleanup
   }
```

```
}, [submitted, navigate]);

// Fetch existing data
useEffect(() => {
  const fetchData = async () => {
    try {
      const res = await fetch(`http://localhost:5050/edit/${id}`);
      const data = await res.json();

      setFormData({
        industry: data[1],
        duration: data[2] || "",
        title: data[3] || "",
        pi: data[4] || "",
        copi: data[5] || "",
        year: data[6] || "",
        sanctioned: data[7] || "",
        received: data[8] || "",
        billProof: null,
        agreementDoc: null,
        students: data[11] || "",
        summary: data[12] || "",
      });

      setLoading(false);
    } catch (err) {
      console.error("Error fetching data:", err);
      setLoading(false);
    }
  };

  fetchData();
}, [id]);

const handleChange = (e) => {
  const { name, value, files } = e.target;
  setFormData({
    ...formData,
    [name]: files ? files[0] : value,
  });
};
```

```
const handleSubmit = async (e) => {
  e.preventDefault();

  const updatedFormData = new FormData();
  for (const key in formData) {
    updatedFormData.append(key, formData[key]);
  }

  try {
    const res = await fetch(`http://localhost:5050/edit/${id}`, {
      method: "PUT", // or PATCH depending on backend
      body: updatedFormData,
    });

    const contentType = res.headers.get("content-type");
    if (contentType && contentType.includes("application/json")) {
      const data = await res.json();
      console.log(data);
      setSubmitted(true);
    } else {
      const text = await res.text();
      console.error("Non-JSON response:", text);
    }
  } catch (err) {
    console.error("Error updating form:", err);
  }
};

if (loading) return <div>Loading...</div>;

return (
  <div className="form-container">
    <form onSubmit={handleSubmit}>
      <label>Industry:</label>
      <input
        type="text"
        name="industry"
        value={formData.industry}
        onChange={handleChange}
        required
      />
```

```
<label>Duration:</label>
<input
  type="text"
  name="duration"
  value={formData.duration}
  onChange={handleChange}
  required
/>

<label>Title of Project:</label>
<input
  type="text"
  name="title"
  value={formData.title}
  onChange={handleChange}
  required
/>

<label>Principal Investigator:</label>
<input
  type="text"
  name="pi"
  value={formData.pi}
  onChange={handleChange}
  required
/>

<label>Co-PI:</label>
<input
  type="text"
  name="copi"
  value={formData.copi}
  onChange={handleChange}
  required
/>

<label>Year:</label>
<input
  type="number"
  name="year"
  value={formData.year}
  onChange={handleChange}
```

```
  required
/>

<label>Sanctioned Amount:</label>
<input
  type="number"
  name="sanctioned"
  value={formData.sanctioned}
  onChange={handleChange}
  required
/>

<label>Amount Received:</label>
<input
  type="number"
  name="received"
  value={formData.received}
  onChange={handleChange}
  required
/>

<label>Add New Bill Proof Document:</label>
<input
  type="file"
  name="billProof"
  accept=".pdf,.doc,.docx,.jpg,.jpeg,.png,.xlsx,.xls,.ppt,.pptx,.txt"
  onChange={handleChange}
/>

<label>Add New Agreement Document:</label>
<input
  type="file"
  name="agreementDoc"
  accept=".pdf,.doc,.docx,.jpg,.jpeg,.png,.xlsx,.xls,.ppt,.pptx,.txt"
  onChange={handleChange}
/>

<label>Students Involved:</label>
<input
  type="text"
  name="students"
  value={formData.students}
```

```
          onChange={handleChange}
          required
        />

        <label>Summary of Work Done:</label>
        <textarea
          name="summary"
          value={formData.summary}
          onChange={handleChange}
          required
        ></textarea>

        <button type="submit">Update</button>
      </form>

      {submitted && (
        <div className="success-message">
          Form updated successfully! Redirecting...
        </div>
      )}

      <a href="/home" id="backToHome">
        Back to Home {">"}
      </a>
    </div>
  );
};

export default EditProjectForm;
```

Login.jsx:

```
import React, { useState } from "react";
import { useNavigate } from "react-router-dom";
import "../styles.css";

function Login() {
  const navigate = useNavigate();

  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const [message, setMessage] = useState("");
  const [loginSuccess, setLoginSuccess] = useState(false);
```

```
const handleSubmit = async (e) => {
  e.preventDefault();

  try {
    const res = await fetch("http://localhost:5050/validate-user", {
      method: "POST",
      headers: { "Content-Type": "application/json" },
      body: JSON.stringify({ email, password }),
    });

    const data = await res.json();

    if (res.ok) {
      localStorage.setItem("isAuthenticated", "true");
      setLoginSuccess(true);
      setMessage(data.message);
      setTimeout(() => {
        navigate("/home");
      }, 1000);
    } else {
      setLoginSuccess(false);
      setMessage(data.message);
    }
  } catch (error) {
    console.error("Login error:", error);
    setLoginSuccess(false);
    setMessage("Something went wrong. Please try again.");
  }
};

return (
  <div id="loginPage">
    <div id="loginBox">
      <h4>ConsultansEase</h4>

      <form id="loginForm" onSubmit={handleSubmit}>
        <input
          type="email"
          id="userEmail"
          name="userEmail"
          placeholder="Email"
```

```
            value={email}
            onChange={(e) => setEmail(e.target.value)}
            required
          />

          <input
            type="password"
            id="userPassword"
            name="userPassword"
            placeholder="Password"
            value={password}
            onChange={(e) => setPassword(e.target.value)}
            required
          />

          {message && (
            <p className={loginSuccess ? "success-msg" : "error-msg"}>
              {message}
            </p>
          )}

          <div id="submitDiv">
            <button type="submit">Login</button>
            <a href="/forgotpassword" id="forgetPassword">
              Forgot Password? {">"}
            </a>
            <a href="/signup" id="signUp">
              Don't have an account? Sign up {">"}
            </a>
          </div>
        </form>
      </div>
    </div>
  );
}

export default Login;
```

SignUp.jsx:

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

```
function Signup() {
 const [formData, setFormData] = useState({
   name: "",
   email: "",
   password: "",
 });

 const [message, setMessage] = useState("");
 const [isSuccess, setIsSuccess] = useState(null);

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

 const handleSubmit = async (e) => {
   e.preventDefault();
   setMessage("");

   try {
     const res = await fetch("http://localhost:5050/create-new-user", {
       method: "POST",
       headers: { "Content-Type": "application/json" },
       body: JSON.stringify(formData),
     });

     const data = await res.json();

     if (res.status === 201) {
       setMessage(data.message);
       setIsSuccess(true);
       setFormData({ name: "", email: "", password: "" });
     } else {
       setMessage(data.message);
       setIsSuccess(false);
     }
   } catch (error) {
     console.error("Signup error:", error);
     setMessage("Something went wrong. Please try again.");
     setIsSuccess(false);
   }
 };
```

```
return (
  <div id="signUpPage">
    <form id="signUpForm" onSubmit={handleSubmit}>
      <h4>Welcome to ConsultansEase!</h4>

      <input
        type="text"
        id="userName"
        name="name"
        placeholder="Full Name"
        value={formData.name}
        onChange={handleChange}
        required
      />

      <input
        type="email"
        id="userEmail"
        name="email"
        placeholder="Email"
        value={formData.email}
        onChange={handleChange}
        required
      />

      <input
        type="password"
        id="userPassword"
        name="password"
        placeholder="Password"
        value={formData.password}
        onChange={handleChange}
        required
      />

      {message && (
        <p className={isSuccess ? "success-msg" : "error-msg"}>{message}</p>
      )}

      <button type="submit">Submit</button>
```

```
        <a href="/" id="backToLogin">
          Back to Login {">"}
        </a>
      </form>
    </div>
  );
}

export default Signup;
```

ForgotPassword.jsx:

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

function ForgotPassword() {
  const [email, setEmail] = useState("");
  const [message, setMessage] = useState("");
  const [otpError, setOtpError] = useState("");
  const [showOtpInput, setShowOtpInput] = useState(false);
  const [otp, setOtp] = useState("");
  const [newPassword, setNewPassword] = useState("");
  const [otpVerified, setOtpVerified] = useState(false);
  const [loading, setLoading] = useState(false);
  const [passwordResetDone, setPasswordResetDone] = useState(false);
  const [disableAll, setDisableAll] = useState(false);

  const handleSubmit = async (e) => {
    e.preventDefault();
    if (!email) {
      setMessage("Please enter a valid email.");
      return;
    }

    setLoading(true);
    try {
      const response = await fetch("http://localhost:5050/request-otp", {
        method: "POST",
        headers: { "Content-Type": "application/json" },
        body: JSON.stringify({ email }),
      });

      const data = await response.json();
```

```
    if (response.status === 200) {
      setMessage("OTP sent to your email! Please check your inbox/spam.");
      setShowOtpInput(true);
    } else {
      setMessage(data.message || "Something went wrong. Please try again.");
      setShowOtpInput(false);
    }
  } catch (error) {
    console.error("Error sending OTP:", error);
    setMessage("Error sending OTP. Please try again later.");
    setShowOtpInput(false);
  } finally {
    setLoading(false);
  }
};

const handleOtpSubmit = async (e) => {
  e.preventDefault();
  setLoading(true);
  setOtpError("");

  try {
    const response = await fetch("http://localhost:5050/verify-otp", {
      method: "POST",
      headers: { "Content-Type": "application/json" },
      body: JSON.stringify({ email, otp }),
    });

    const data = await response.json();
    if (response.status === 200) {
      setOtpVerified(true);
      setMessage("OTP verified! You may now reset your password.");
    } else {
      setOtpError(
        data.message || "OTP verification failed. Please try again."
      );
    }
  } catch (error) {
    console.error("Error verifying OTP:", error);
    setOtpError("Server error. Please try again.");
  } finally {
    setLoading(false);
```

```
  }
};

const handleResetPassword = async (e) => {
  e.preventDefault();

  if (!newPassword) {
    setMessage("Please enter a new password.");
    return;
  }

  setLoading(true);
  try {
    const response = await fetch("http://localhost:5050/reset-password", {
      method: "POST",
      headers: { "Content-Type": "application/json" },
      body: JSON.stringify({ email, password: newPassword }),
    });

    const data = await response.json();
    if (response.status === 200) {
      setMessage("Password updated successfully!");
      setPasswordResetDone(true);
      setDisableAll(true);
    } else {
      setMessage(data.message || "Failed to update password.");
    }
  } catch (error) {
    console.error("Error resetting password:", error);
    setMessage("Internal server error.");
  } finally {
    setLoading(false);
  }
};

return (
  <div id="forgotPasswordPage">
    {loading ? (
      <div className="loading-spinner">
        <div className="spinner-circle"></div>
        <p>Loading, please wait...</p>
      </div>
```

```
) : otpVerified ? (
  <form id="resetPasswordForm" onSubmit={handleResetPassword}>
    <input
      type="password"
      id="newPassword"
      placeholder="Enter New Password"
      value={newPassword}
      onChange={(e) => setNewPassword(e.target.value)}
      required
      disabled={disableAll}
    />
    {message && (
      <p
        className={
          passwordResetDone || otpVerified ? "success-msg" : "error-msg"
        }
      >
        {message}
      </p>
    )}
    {!passwordResetDone && (
      <button type="submit" disabled={disableAll}>
        Submit
      </button>
    )}
    <a
      href="/"
      id="backToLogin"
      style={passwordResetDone ? { marginTop: 0 } : {}}
    >
      Back to Login &gt;
    </a>
  </form>
) : (
  <form
    id="emailForm"
    onSubmit={showOtpInput ? handleOtpSubmit : handleSubmit}
  >
    <h4>Forgot your password? No worries.</h4>

    <input
      type="email"
```

```
  id="userEmail"
  name="userEmail"
  placeholder="Email"
  required
  value={email}
  disabled={disableAll || showOtpInput}
  onChange={(e) => setEmail(e.target.value)}
/>

{message && !otpVerified && (
  <p className={showOtpInput ? "success-msg" : "error-msg"}>
    {message}
  </p>
)}

{showOtpInput && (
  <>
    <input
      type="text"
      id="otpInput"
      placeholder="Enter OTP"
      value={otp}
      onChange={(e) => setOtp(e.target.value)}
      required
      disabled={disableAll}
    />
    {otpError && <p className="error-msg">{otpError}</p>}
    <button type="submit" disabled={disableAll}>
      Verify OTP
    </button>
  </>
)}

{!showOtpInput && (
  <button type="submit" disabled={disableAll}>
    Submit
  </button>
)}

<a href="/" id="backToLogin">
  Back to Login &gt;
</a>
```

```
        </form>
      )}
    </div>
  );
}

export default ForgotPassword;
```

styles.css:

```
* {
 margin: 0;
 padding: 0;
 box-sizing: border-box;
}

body {
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
 background-color: #fefae0;
 color: #333;
}

#loginPage,
#signUpPage,
#forgotPasswordPage {
 display: flex;
 justify-content: center;
 align-items: center;
 min-height: 100vh;
 padding: 20px;
 background-color: #fff9db;
}

#loginBox,
#signUpForm,
#emailForm,
#resetPasswordForm {
 width: 100%;
 max-width: 400px;
 background-color: #ffffff;
 padding: 30px;
 border-radius: 12px;
 box-shadow: 0 4px 20px rgba(0, 0, 0, 0.1);
```

```
}

h4 {
 color: #8e24aa;
 font-size: 2rem;
 text-align: center;
 margin-bottom: 30px;
}

form {
 display: flex;
 flex-direction: column;
}

input[type="text"],
input[type="email"],
input[type="password"] {
 padding: 12px 15px;
 margin-bottom: 20px;
 width: 100%;
 border: 1px solid #ccc;
 border-radius: 8px;
 font-size: 1rem;
 transition: all 0.3s ease;
}

input:focus {
 border-color: #8e24aa;
 box-shadow: 0 0 5px rgba(142, 36, 170, 0.3);
 outline: none;
}

button {
 padding: 12px;
 border-radius: 8px;
 border: none;
 width: 100%;
 background-color: #8e24aa;
 color: white;
 font-weight: 600;
 cursor: pointer;
 transition: background-color 0.2s ease;
```

```
 font-size: 1rem;
}

button:hover {
 background-color: #6a1b9a;
}

a {
 text-decoration: none;
 color: #1976d2;
 text-align: center;
 margin-top: 10px;
 font-size: 0.95rem;
}

a:hover {
 text-decoration: underline;
 color: #0d47a1;
}

#submitDiv {
 display: flex;
 flex-direction: column;
 align-items: center;
 gap: 12px;
 margin-top: 10px;
}

#backToLogin {
 margin-top: 20px;
}

.success-msg {
 color: #4caf50;
 background-color: #e8f5e9;
 font-size: 0.9rem;
 margin-bottom: 20px;
 text-align: center;
 padding: 8px;
 border-radius: 5px;
}
```

```css
.error-msg {
 color: #f44336;
 background-color: #ffebee;
 font-size: 0.9rem;
 margin-bottom: 20px;
 text-align: center;
 padding: 8px;
 border-radius: 5px;
}

.loading-spinner {
 display: flex;
 flex-direction: column;
 align-items: center;
 justify-content: center;
 background-color: white;
 padding: 30px;
 border-radius: 10px;
 box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
 color: #333;
 margin: 20px auto;
 max-width: 400px;
 text-align: center;
}

.loading-spinner p {
 margin-top: 15px;
 font-size: 1rem;
 color: #555;
}

.spinner-circle {
 border: 4px solid #f3f3f3;
 border-top: 4px solid #8e24aa;
 border-radius: 50%;
 width: 30px;
 height: 30px;
 animation: spin 1s linear infinite;
 margin-bottom: 10px;
}

@keyframes spin {
```

```
 0% {
   transform: rotate(0deg);
 }
 100% {
   transform: rotate(360deg);
 }
}

@media (max-width: 480px) {
 h4 {
   font-size: 1.5rem;
 }

 #loginBox,
 #signUpForm,
 #emailForm {
   padding: 20px;
 }

 button {
   font-size: 0.95rem;
   padding: 10px;
 }

 input {
   font-size: 0.95rem;
 }
}
```

BACK-END:

server.js:

```
import express from "express";
import cors from "cors";
import mongoose from "mongoose";

import formRoutes from "./routes/formRoutes.js";
import displayRoutes from "./routes/displayRoutes.js";
import authRoutes from "./routes/authRoutes.js";

const app = express();

app.use(cors());
```

```
app.use(express.json());
app.use(express.urlencoded({ extended: true }));

const PORT = 5050;
const MONGO_URL = "mongodb://localhost:27017/consultansease";

const startServer = async () => {
 try {
   await mongoose.connect(MONGO_URL);
   console.log("Database connected successfully!");

   app.listen(PORT, () => {
     console.log(`Server running on PORT ${PORT}`);
   });
 } catch (error) {
   console.error("Failed to connect to MongoDB:", error.message);
 }
};

app.use("/", formRoutes);
app.use("/", displayRoutes);
app.use("/", authRoutes);

startServer();
```

loginModel.js:

```
import mongoose from "mongoose";

const loginSchema = new mongoose.Schema(
 {
   name: {
     type: String,
     required: true,
     trim: true,
   },
   email: {
     type: String,
     required: true,
     unique: true,
     lowercase: true,
     trim: true,
   },
```

```
    password: {
      type: String,
      required: true,
    },
  },
  {
    collection: "login",
  }
);

const LoginModel = mongoose.model("login", loginSchema);
export default LoginModel;
```

authRoutes.js:

```
import express from "express";
import argon2 from "argon2";
import nodemailer from "nodemailer";
import LoginModel from "../loginModel.js";

const router = express.Router();

router.post("/get-user", async (req, res) => {
  try {
    const user = await LoginModel.findOne({ email: req.body.email });

    if (!user) {
      return res.status(404).json({ message: "No user found with this email" });
    }

    const validPassword = await argon2.verify(user.password, req.body.password);

    if (!validPassword) {
      return res.status(401).json({ message: "Invalid password" });
    }

    res.status(200).json({ message: "Login successful", user });
  } catch (error) {
    console.error(error);
    res.status(500).json({ message: "Internal server error" });
  }
});
```

```
router.post("/create-new-user", async (req, res) => {
 try {
   const payload = req.body;

   const userExists = await LoginModel.findOne({ email: payload.email });
   if (userExists) {
     return res.status(400).json({
       message: "Email already exists in our database! Try 'Forgot Password'?",
     });
   }

   const hashedPassword = await argon2.hash(payload.password);

   const newUser = new LoginModel({
     name: payload.name,
     email: payload.email,
     password: hashedPassword,
   });

   await newUser.save();

   res
     .status(201)
     .json({ message: "User created successfully", user: newUser });
 } catch (error) {
   console.error(error);
   res.status(500).json({ message: "Internal server error" });
 }
});

router.post("/validate-user", async (req, res) => {
 try {
   const { email, password } = req.body;

   const user = await LoginModel.findOne({ email });

   if (!user) {
     return res.status(404).json({ message: "User not found" });
   }

   const isPasswordValid = await argon2.verify(user.password, password);
```

```
    if (!isPasswordValid) {
      return res.status(401).json({ message: "Invalid password" });
    }

    res.status(200).json({ message: "Login successful", user: user });
  } catch (error) {
    console.error("Error validating user:", error);
    res.status(500).json({ message: "Internal server error" });
  }
});

const otpStore = new Map();

router.post("/request-otp", async (req, res) => {
  const email = req.body.email;

  const user = await LoginModel.findOne({ email });
  if (!user) {
    return res.status(404).json({ message: "User not found! Try signing up?" });
  }

  const otp = Math.floor(100000 + Math.random() * 900000).toString();
  const expiresAt = Date.now() + 5 * 60 * 1000;

  otpStore.set(email, { otp, expiresAt });

  const transporter = nodemailer.createTransport({
    service: "gmail",
    auth: {
      user: "consultansease@gmail.com",
      pass: "tlbl djnc qmtt kqit",
    },
  });

  const mailOptions = {
    from: "ConsultansEase <consultansease@gmail.com>",
    to: email,
    subject: "OTP for Password Reset - ConsultansEase",
    html: `
    <p>Dear User,</p>
    <p>Your OTP for Password Reset is <strong>${otp}</strong>. It is valid for 5
minutes.</p>
```

```
    <p>Thanks and Regards,<br>Team ConsultansEase</p>
  `,
  };

  try {
    await transporter.sendMail(mailOptions);
    res.status(200).json({ message: "OTP sent to your email!" });
  } catch (error) {
    console.error(error);
    res.status(500).json({ message: "Failed to send OTP" });
  }
});

router.post("/verify-otp", (req, res) => {
  const email = req.body.email;
  const otp = req.body.otp;
  const stored = otpStore.get(email);

  if (!stored) {
    return res.status(400).json({ message: "No OTP requested!" });
  }

  if (Date.now() > stored.expiresAt) {
    otpStore.delete(email);
    return res.status(400).json({ message: "OTP expired!" });
  }

  if (stored.otp !== otp) {
    return res.status(400).json({ message: "Incorrect OTP!" });
  }

  res.status(200).json({ message: "OTP verified!" });
});

router.post("/reset-password", async (req, res) => {
  try {
    const { email, password } = req.body;
    if (!email || !password) {
      return res
        .status(400)
        .json({ message: "Email and password are required." });
    }
```

```
    const user = await LoginModel.findOne({ email });
    if (!user) {
      return res.status(404).json({ message: "User not found!" });
    }

    const newPassword = await argon2.hash(password);
    user.password = newPassword;
    await user.save();

    otpStore.delete(email);

    res.status(200).json({ message: "Password updated successfully!" });
  } catch (error) {
    console.error("Error resetting password:", error);
    res.status(500).json({ message: "Internal server error." });
  }
});

export default router;
```

displayRoutes.js:

```
import express from "express";
import { google } from "googleapis";
import ExcelJS from "exceljs";
import fs from "fs";
import path from "path";

// Create Express app
const router = express.Router();

// Main API endpoint
router.get("/api", async (req, res) => {
  try {
    const auth = new google.auth.GoogleAuth({
      keyFile: "credentials.json",
      scopes: "https://www.googleapis.com/auth/spreadsheets",
    });

    const client = await auth.getClient();
    const sheets = google.sheets({ version: "v4", auth: client });
```

```
const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

const getRows = await sheets.spreadsheets.values.get({
  spreadsheetId,
  range: "Sheet1",
});

const [headers, ...rows] = getRows.data.values;

const mappedHeaders = {
  projectID: "projectId",
  industry: "industry",
  duration: "duration",
  title: "title",
  pi: "pi",
  copi: "copi",
  year: "academicYear",
  sanctioned: "sanctionedAmount",
  received: "receivedAmount",
  billProof: "billProofLink",
  agreementDoc: "agreementDocumentLink",
  students: "studentParticipants",
  summary: "summary",
};

// Convert each row to an object using mapped headers
const formattedRows = rows.map((row) => {
  const entry = {};
  headers.forEach((header, i) => {
    const key = mappedHeaders[header.trim()] || header;
    entry[key] = row[i] || "";
  });
  return entry;
});

// Apply query param filtering
const filters = req.query;
const filteredRows = formattedRows.filter((row) => {
  if (
    filters.minSanctioned &&
    Number(row.sanctionedAmount) < Number(filters.minSanctioned)
  ) {
```

```
        return false;
      }

      // Handle other filters
      return Object.entries(filters).every(([key, value]) => {
        if (key === "minSanctioned") return true; // Already handled above
        if (!value) return true; // Skip empty filters
        return row[key]?.toString().toLowerCase().includes(value.toLowerCase());
      });
    });

    res.json(filteredRows);
  } catch (error) {
    console.error("Error fetching data:", error);
    res.status(500).json({ error: "Something went wrong" });
  }
});

// Delete entry by project ID
router.delete("/api/:projectId", async (req, res) => {
  try {
    const { projectId } = req.params;

    const auth = new google.auth.GoogleAuth({
      keyFile: "credentials.json",
      scopes: "https://www.googleapis.com/auth/spreadsheets",
    });

    const client = await auth.getClient();
    const sheets = google.sheets({ version: "v4", auth: client });

    const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

    // Step 1: Get all rows from the sheet
    const getRows = await sheets.spreadsheets.values.get({
      spreadsheetId,
      range: "Sheet1",
    });

    const values = getRows.data.values;
    const headers = values[0];
```

```
const projectIdIndex = headers.findIndex(
  (header) => header === "projectID"
);

if (projectIdIndex === -1) {
  return res.status(400).json({ error: "Project ID column not found" });
}

// Step 2: Find the row with matching projectId
const rowIndexToDelete = values.findIndex((row, index) => {
  if (index === 0) return false;
  return row[projectIdIndex] === projectId;
});

if (rowIndexToDelete === -1) {
  return res.status(404).json({ error: "Project not found" });
}

const row = values[rowIndexToDelete];
const billProofPath = row[9]; // 10th column
const agreementDocPath = row[10]; // 11th column

// Step 3: Delete the associated files
const deleteFileIfExists = (filePath) => {
  if (filePath && fs.existsSync(filePath)) {
    try {
      fs.unlinkSync(filePath);
    } catch (err) {
      console.error(`Failed to delete file: ${filePath}`, err);
    }
  }
};

deleteFileIfExists(billProofPath);
deleteFileIfExists(agreementDocPath);

// Step 4: Delete the row in Google Sheets
await sheets.spreadsheets.batchUpdate({
  spreadsheetId,
  resource: {
    requests: [
      {
```

```
            deleteDimension: {
              range: {
                sheetId: 0, // Assuming Sheet1 has ID 0
                dimension: "ROWS",
                startIndex: rowIndexToDelete,
                endIndex: rowIndexToDelete + 1,
              },
            },
          },
        ],
      },
    });

    res.json({
      success: true,
      message: "Entry and files deleted successfully",
    });
  } catch (error) {
    console.error("Error deleting entry:", error);
    res.status(500).json({ error: "Something went wrong" });
  }
});

// Download endpoint for filtered data
router.get("/api/download", async (req, res) => {
  try {
    const auth = new google.auth.GoogleAuth({
      keyFile: "credentials.json",
      scopes: "https://www.googleapis.com/auth/spreadsheets",
    });

    const client = await auth.getClient();
    const sheets = google.sheets({ version: "v4", auth: client });

    const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

    const getRows = await sheets.spreadsheets.values.get({
      spreadsheetId,
      range: "Sheet1",
    });

    const [headers, ...rows] = getRows.data.values;
```

```
const mappedHeaders = {
  "project id": "projectId",
  industry: "industry",
  duration: "duration",
  title: "title",
  pi: "pi",
  copi: "copi",
  year: "academicYear",
  sanctioned: "sanctionedAmount",
  received: "receivedAmount",
  billProof: "billProofLink",
  agreementDoc: "agreementDocumentLink",
  students: "studentParticipants",
  summary: "summary",
};

// Convert each row to an object using mapped headers
const formattedRows = rows.map((row) => {
  const entry = {};
  headers.forEach((header, i) => {
    const key = mappedHeaders[header.trim()] || header;
    entry[key] = row[i] || "";
  });
  return entry;
});

// Apply query param filtering
const filters = req.query;
const filteredRows = formattedRows.filter((row) => {
  if (
    filters.minSanctioned &&
    Number(row.sanctionedAmount) < Number(filters.minSanctioned)
  ) {
    return false;
  }

  return Object.entries(filters).every(([key, value]) => {
    if (key === "minSanctioned") return true;
    if (!value) return true;
    return row[key]?.toString().toLowerCase().includes(value.toLowerCase());
  });
```

```
});

// Create an Excel workbook using ExcelJS
const workbook = new ExcelJS.Workbook();
const worksheet = workbook.addWorksheet("Filtered Data");

// Add headers
worksheet.addRow(headers);

// Add data rows
filteredRows.forEach((row) => {
  const rowData = headers.map((header) => {
    const key = mappedHeaders[header.trim()] || header;
    return row[key] || "";
  });
  worksheet.addRow(rowData);
});

// Set column widths to auto
worksheet.columns.forEach((column) => {
  column.width = 15;
});

// Style the header row
worksheet.getRow(1).font = { bold: true };
worksheet.getRow(1).fill = {
  type: "pattern",
  pattern: "solid",
  fgColor: { argb: "FFE0E0E0" },
};

// Write to buffer
const buffer = await workbook.xlsx.writeBuffer();

// Send the response
res.setHeader(
  "Content-Type",
  "application/vnd.openxmlformats-officedocument.spreadsheetml.sheet"
);
res.setHeader(
  "Content-Disposition",
  "attachment; filename=consultancy_data.xlsx"
```

```
    );
    res.send(buffer);
  } catch (error) {
    console.error("Error downloading data:", error);
    res.status(500).json({ error: "Something went wrong" });
  }
});

export default router;
```

formRoutes.js:

```
import express from "express";
import { google } from "googleapis";
import multer from "multer";
import path from "path";
import fs from "fs";
import { v4 as uuidv4 } from "uuid";

const router = express.Router();

const __filename = new URL(import.meta.url).pathname;
const __dirname = path.dirname(__filename);

// Ensure uploads directory exists
const uploadDir = path.join(__dirname, "..", "uploads");
if (!fs.existsSync(uploadDir)) {
  fs.mkdirSync(uploadDir);
}

// Multer setup
const storage = multer.diskStorage({
  destination: (req, file, cb) => {
    cb(null, uploadDir);
  },
  filename: (req, file, cb) => {
    cb(null, Date.now() + path.extname(file.originalname));
  },
});
const upload = multer({ storage: storage });

// POST /forms
router.post(
```

```
"/forms",
upload.fields([{ name: "billProof" }, { name: "agreementDoc" }]),
async (req, res) => {
  try {
    const auth = new google.auth.GoogleAuth({
      keyFile: "credentials.json",
      scopes: "https://www.googleapis.com/auth/spreadsheets",
    });

    const client = await auth.getClient();
    const googleSheets = google.sheets({ version: "v4", auth: client });
    const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

    const formData = req.body;
    formData.billProof = req.files.billProof
      ? req.files.billProof[0].path
      : "";
    formData.agreementDoc = req.files.agreementDoc
      ? req.files.agreementDoc[0].path
      : "";

    const projectId = uuidv4();

    const rowData = [
      [
        projectId,
        formData.industry,
        formData.duration,
        formData.title,
        formData.pi,
        formData.copi,
        formData.year,
        formData.sanctioned,
        formData.received,
        formData.billProof,
        formData.agreementDoc,
        formData.students,
        formData.summary,
      ],
    ];

    await googleSheets.spreadsheets.values.append({
```

```
        spreadsheetId,
        range: "Sheet1!A:M",
        valueInputOption: "USER_ENTERED",
        resource: { values: rowData },
      });

      res.status(200).json({ message: "Data written to spreadsheet" });
    } catch (error) {
      console.error("Error writing to spreadsheet:", error.stack || error);
      res.status(500).json({ error: "Error writing to spreadsheet" });
    }
  }
);

// GET /edit/:id
router.get("/edit/:id", async (req, res) => {
 const { id } = req.params;
 try {
   const auth = new google.auth.GoogleAuth({
     keyFile: "credentials.json",
     scopes: "https://www.googleapis.com/auth/spreadsheets",
   });

   const client = await auth.getClient();
   const googleSheets = google.sheets({ version: "v4", auth: client });
   const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

   const response = await googleSheets.spreadsheets.values.get({
     spreadsheetId,
     range: "Sheet1!A:M",
   });

   const rows = response.data.values;
   const rowIndex = rows.findIndex((row) => row[0] === id);

   if (rowIndex === -1) {
     return res.status(404).json({ error: "Page not found" });
   }

   res.status(200).json(rows[rowIndex]);
 } catch (error) {
   console.error("Error fetching data:", error);
```

```
    res.status(500).json({ error: "Error fetching data" });
  }
});
// PUT /edit/:id
router.put(
  "/edit/:id",
  upload.fields([{ name: "billProof" }, { name: "agreementDoc" }]),
  async (req, res) => {
    const { id } = req.params;
    try {
      const auth = new google.auth.GoogleAuth({
        keyFile: "credentials.json",
        scopes: "https://www.googleapis.com/auth/spreadsheets",
      });

      const client = await auth.getClient();
      const googleSheets = google.sheets({ version: "v4", auth: client });
      const spreadsheetId = "1_T8zggpboigzMz9pG29FHoo8kN_gA2a_S12bz4ijdZs";

      // Fetch existing project data to find the old files
      const response = await googleSheets.spreadsheets.values.get({
        spreadsheetId,
        range: `Sheet1!A:M`,
      });

      const rows = response.data.values;
      const rowIndex = rows.findIndex((row) => row[0] === id);

      if (rowIndex === -1) {
        return res.status(404).json({ error: "Page not found" });
      }

      // Get the old files' paths
      const oldBillProof = rows[rowIndex][9]; // Assuming billProof is in the 10th
column (index 9)
      const oldAgreementDoc = rows[rowIndex][10]; // Assuming agreementDoc is in the
11th column (index 10)

      // Process the new form data
      const formData = req.body;
      let newBillProof = formData.billProof;
      let newAgreementDoc = formData.agreementDoc;
```

```
    // Only overwrite file paths if new files are uploaded
    if (req.files.billProof) {
      newBillProof = req.files.billProof[0].path;
      // Delete the old file if a new one is uploaded
      if (oldBillProof && fs.existsSync(oldBillProof)) {
        fs.unlinkSync(oldBillProof); // Delete the old billProof file
      }
    } else {
      newBillProof = oldBillProof; // Keep the old file if no new one is uploaded
    }

    if (req.files.agreementDoc) {
      newAgreementDoc = req.files.agreementDoc[0].path;
      // Delete the old file if a new one is uploaded
      if (oldAgreementDoc && fs.existsSync(oldAgreementDoc)) {
        fs.unlinkSync(oldAgreementDoc); // Delete the old agreementDoc file
      }
    } else {
      newAgreementDoc = oldAgreementDoc; // Keep the old file if no new one is
uploaded
    }

    // Update the row with the new data
    rows[rowIndex] = [
      id,
      formData.industry,
      formData.duration,
      formData.title,
      formData.pi,
      formData.copi,
      formData.year,
      formData.sanctioned,
      formData.received,
      newBillProof,
      newAgreementDoc,
      formData.students,
      formData.summary,
    ];

    // Update the spreadsheet with the modified row
    await googleSheets.spreadsheets.values.update({
```

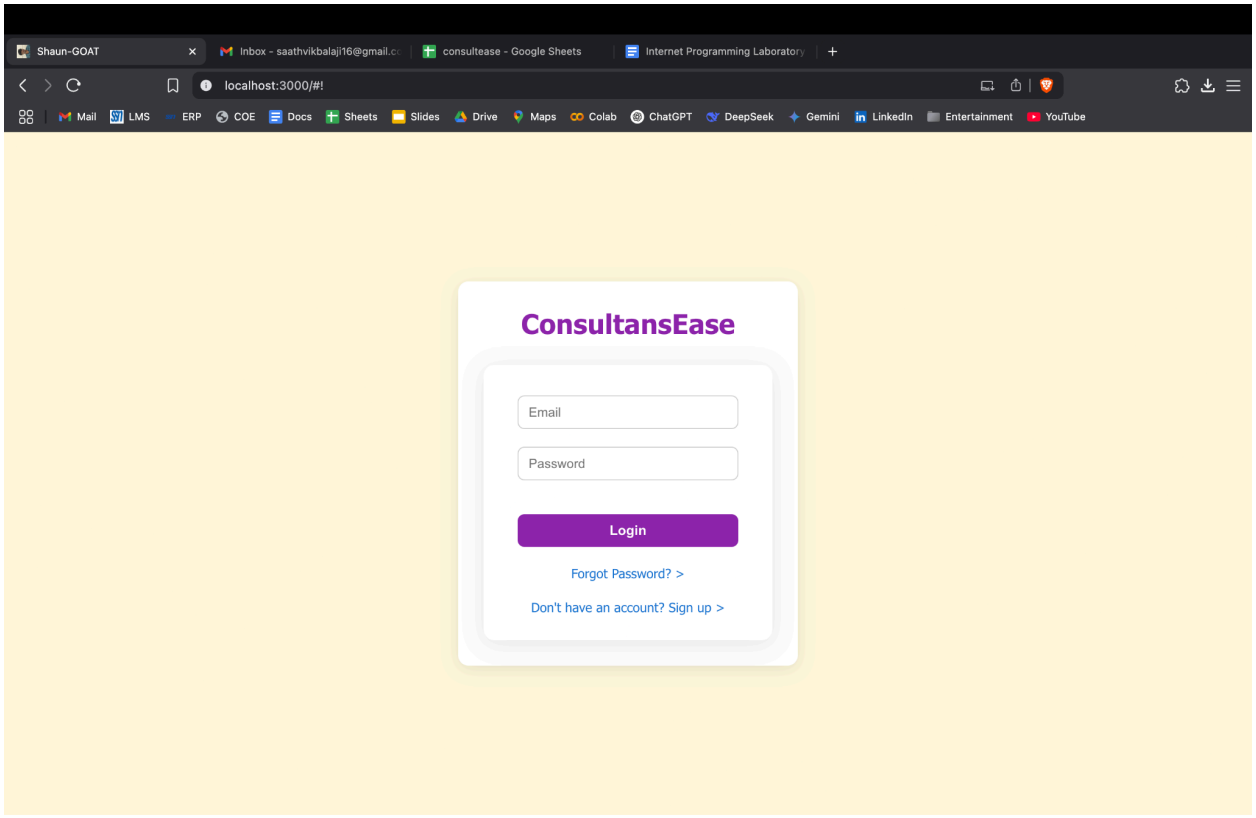
```
        spreadsheetId,
        range: `Sheet1!A:M`,
        valueInputOption: "USER_ENTERED",
        resource: { values: rows },
      });

      res.status(200).json({ message: "Data updated successfully" });
    } catch (error) {
      console.error("Error updating data:", error);
      res.status(500).json({ error: "Error updating data" });
    }
  }
);

export default router;
```

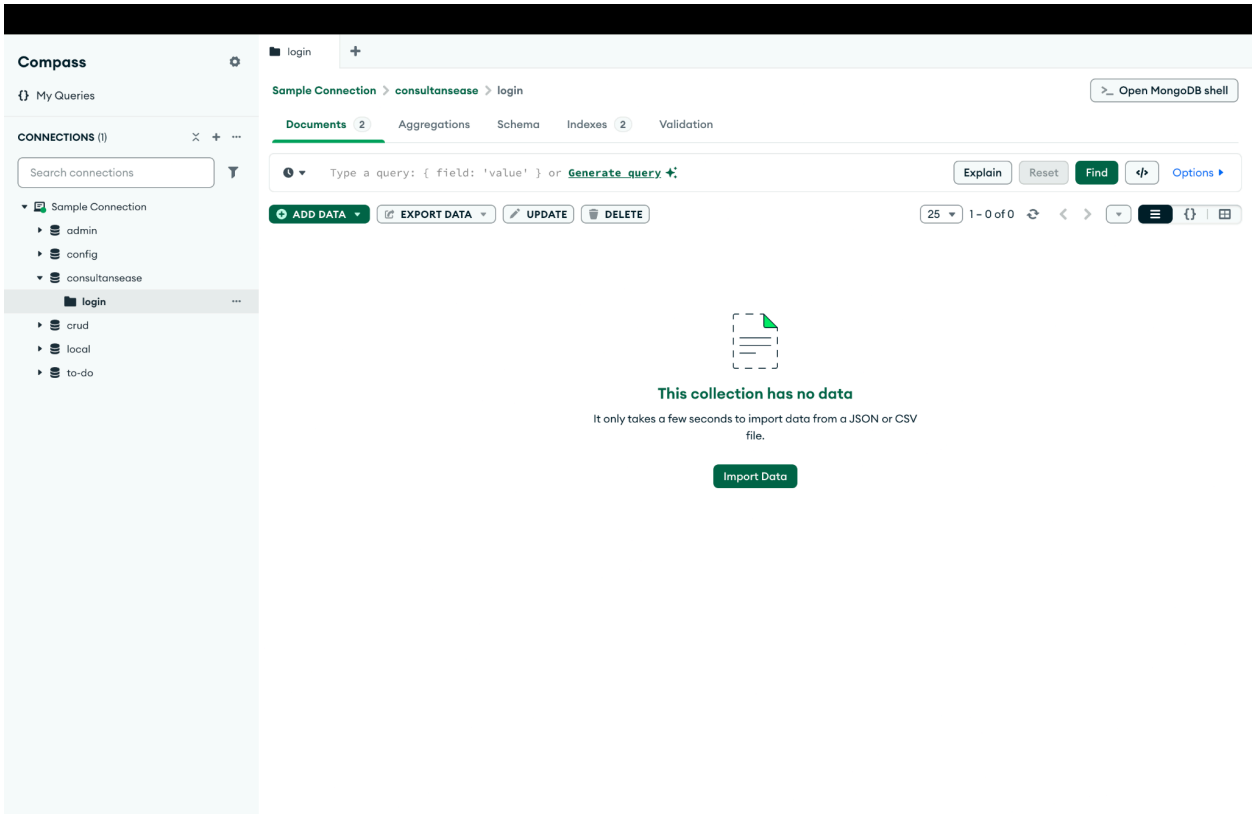
OUTPUT:

Initial State:

```
Compiled successfully!

You can now view consultansease in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://10.121.34.213:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

```
(base) saathvik@Saathviks-MacBook-Air backend % npm start

> backend@1.0.0 start
> nodemon server.js

[nodemon] 3.1.9
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node server.js`
Database connected successfully!
Server running on PORT 5050
```

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CONNECTIONS (1)
Search connections
Sample Connection
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login
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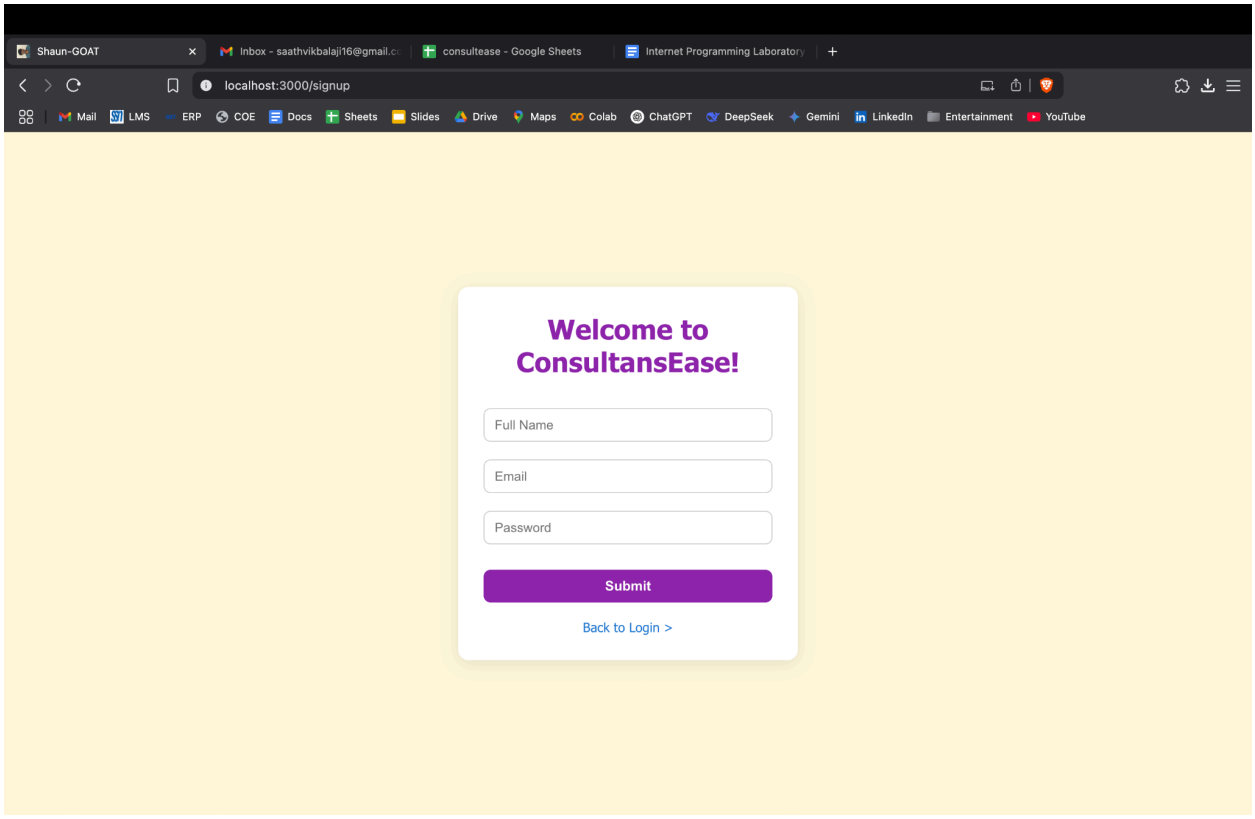
Sample Connection > consultansease > login
Open MongoDB shell
Documents 2
Aggregations
Schema
Indexes 2
Validation
Type a query: { field: 'value' } or Generate query
Explain
Reset
Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
25
1 - 0 of 0
This collection has no data
It only takes a few seconds to import data from a JSON or CSV file.
Import Data

Sign-up: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Password
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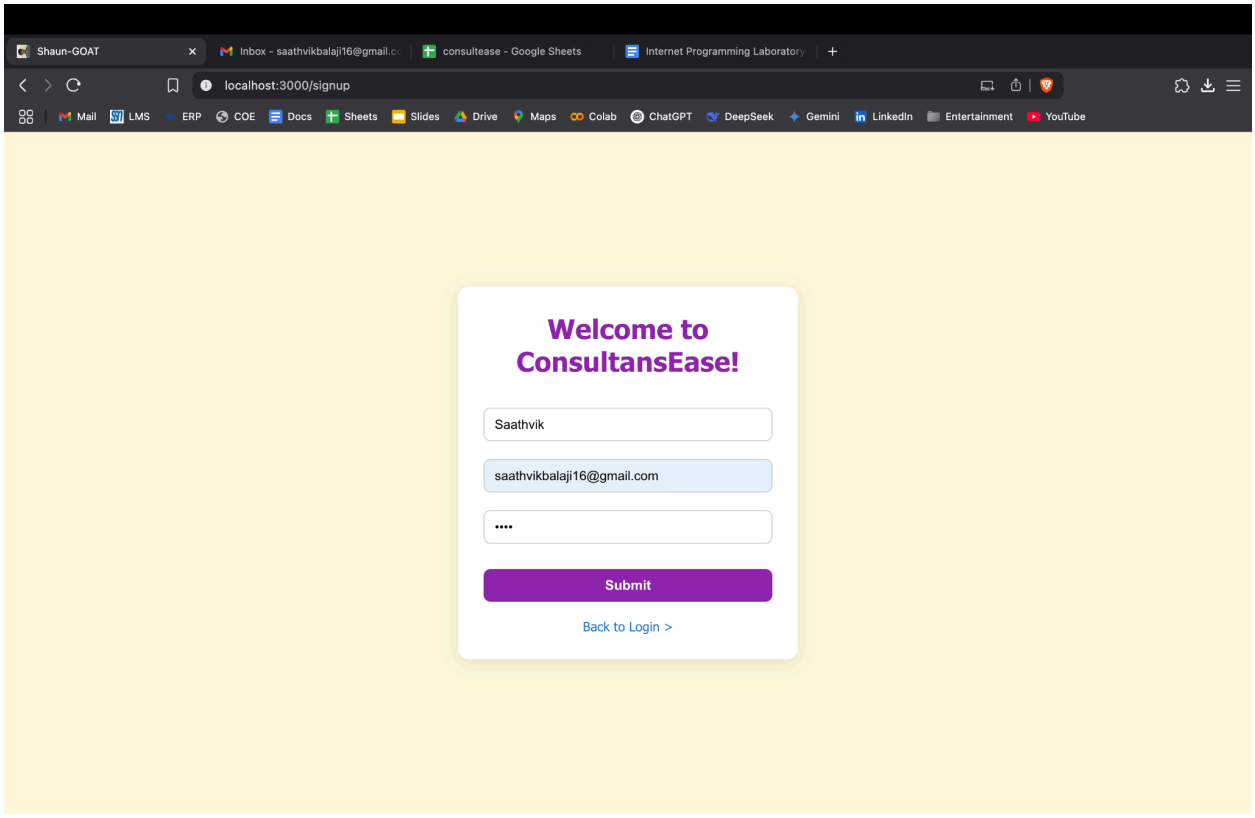
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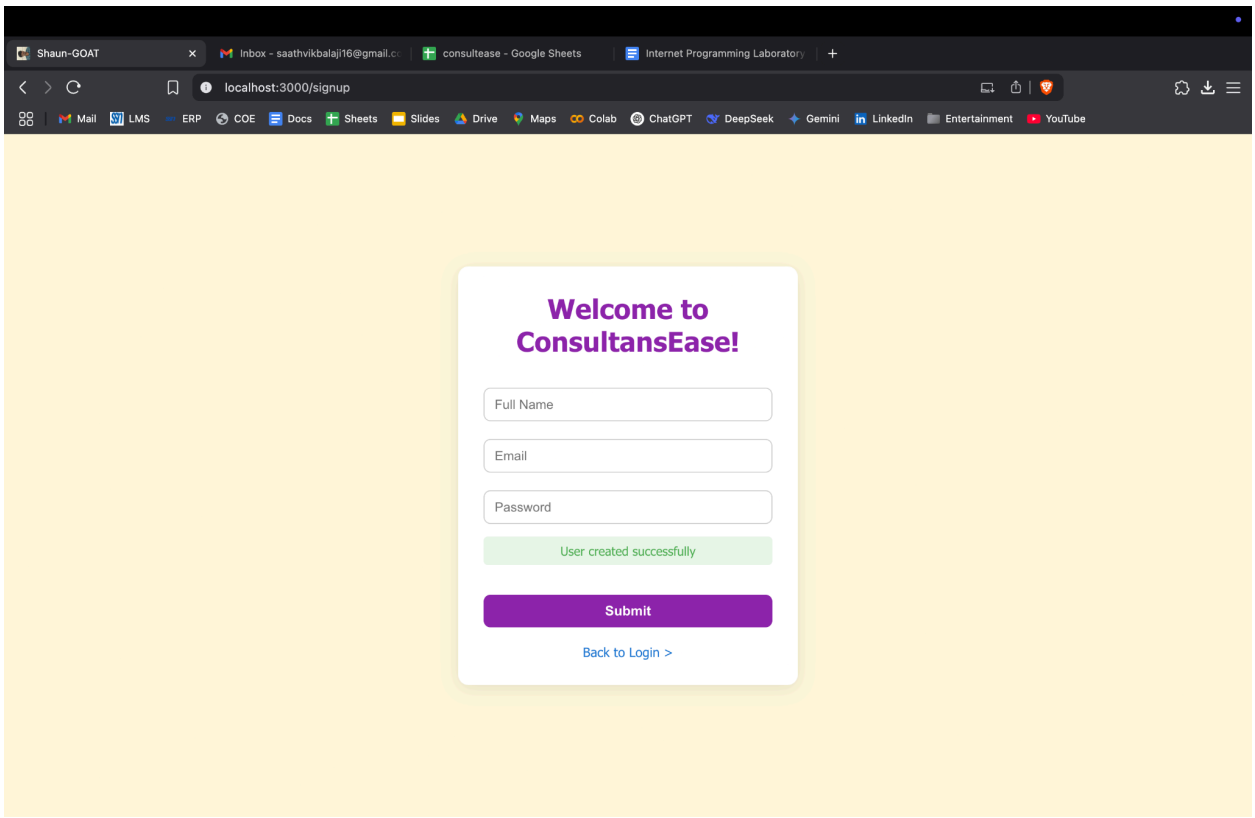
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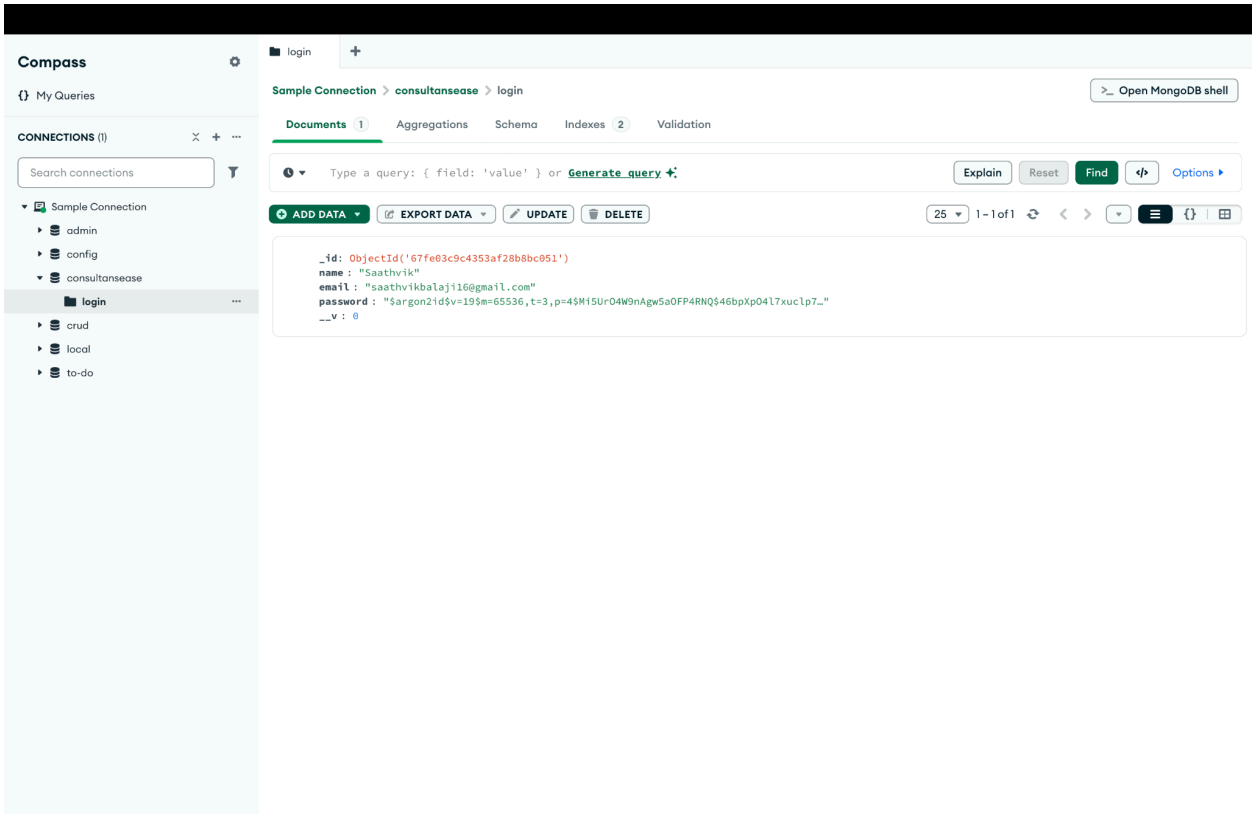
Welcome to ConsultansEase!
Full Name
Email
Password
User created successfully
Submit
Back to Login >



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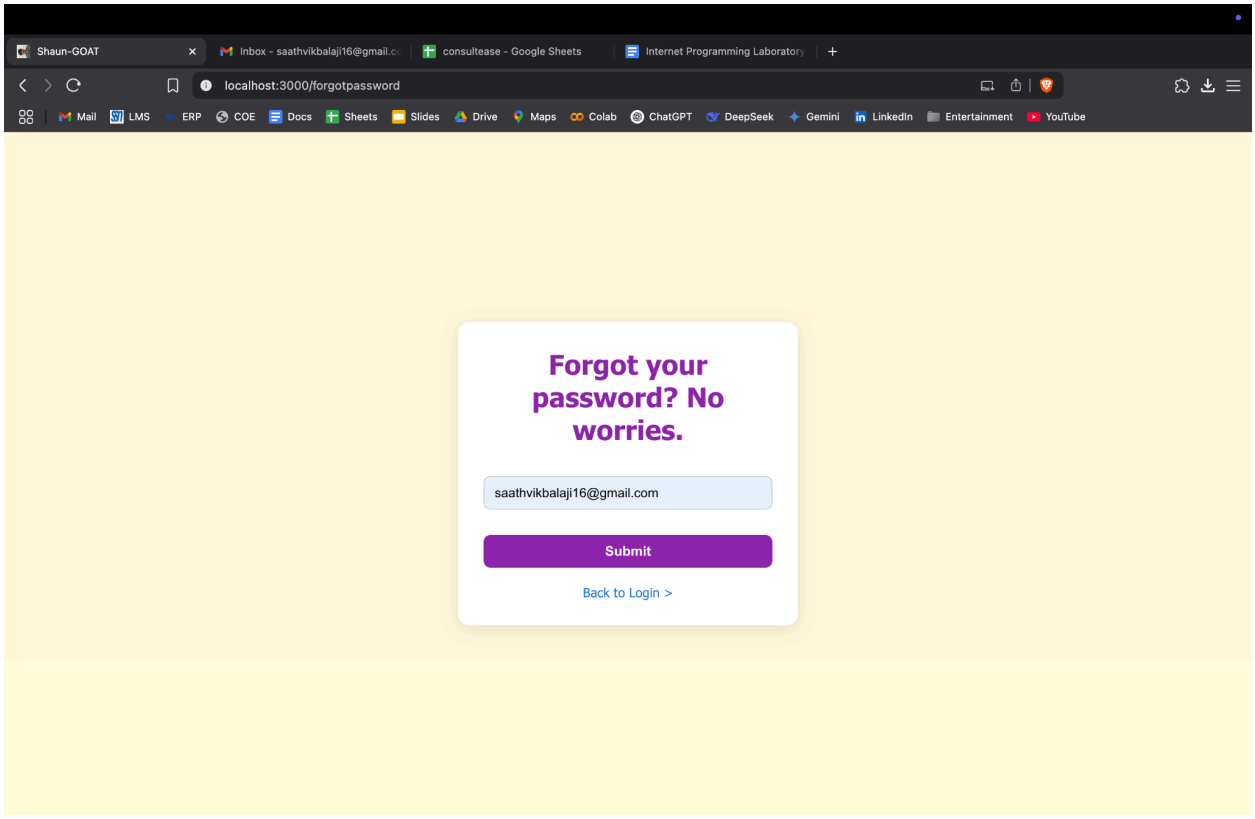

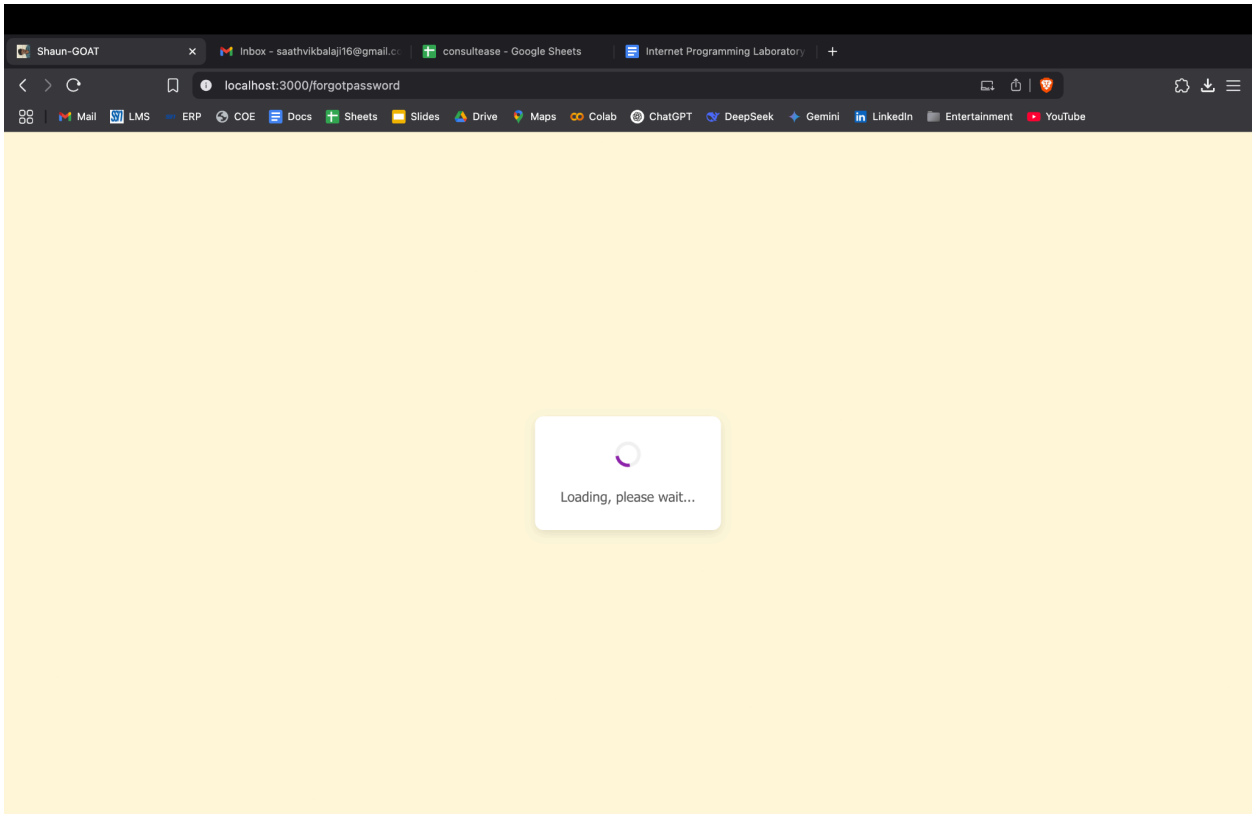
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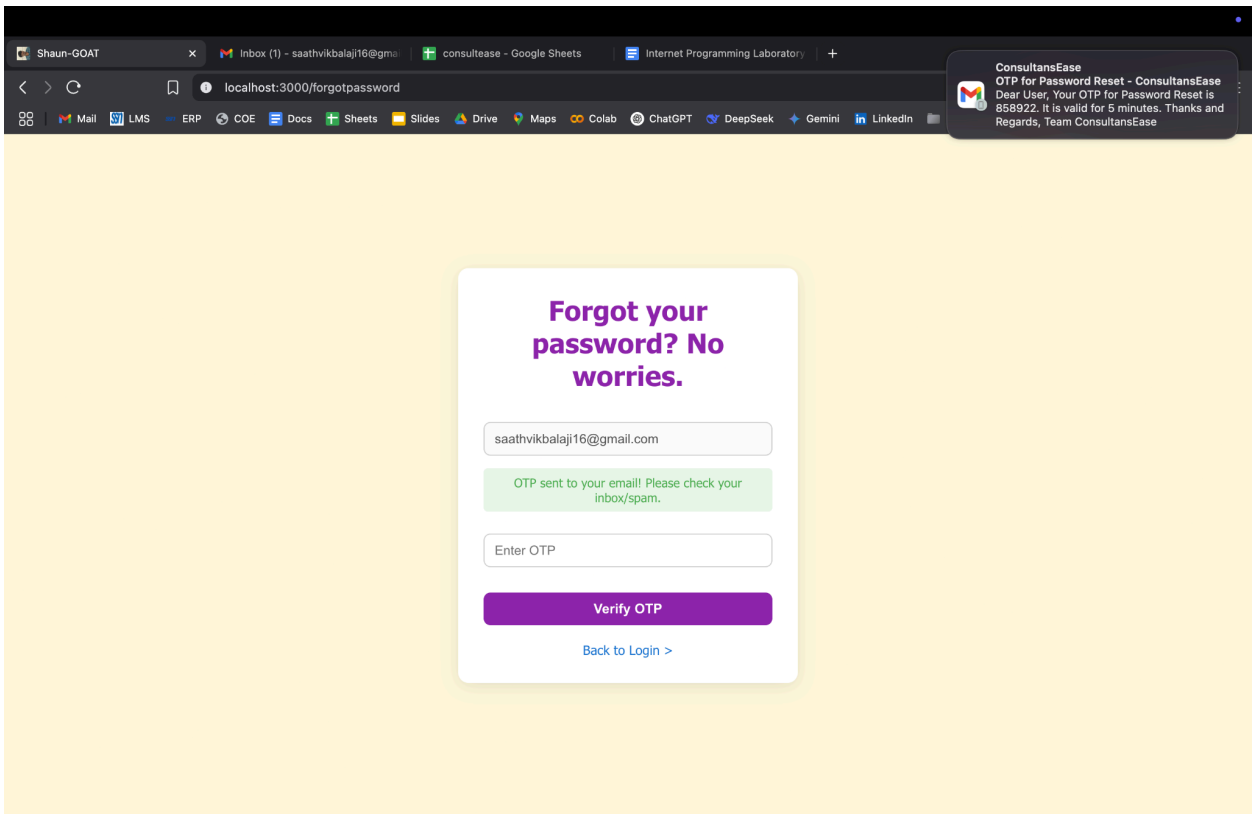
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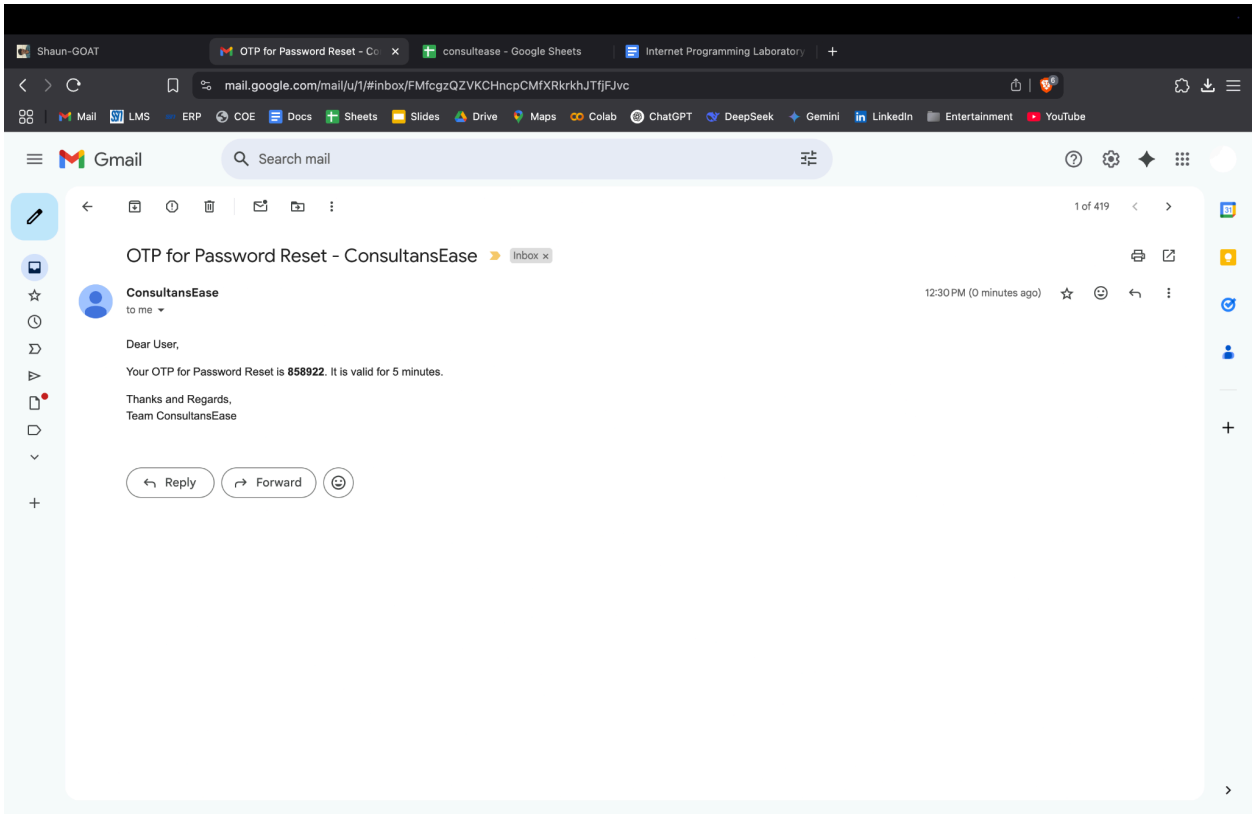
OTP sent to your email! Please check your inbox/spam.
Enter OTP
Verify OTP
Back to Login >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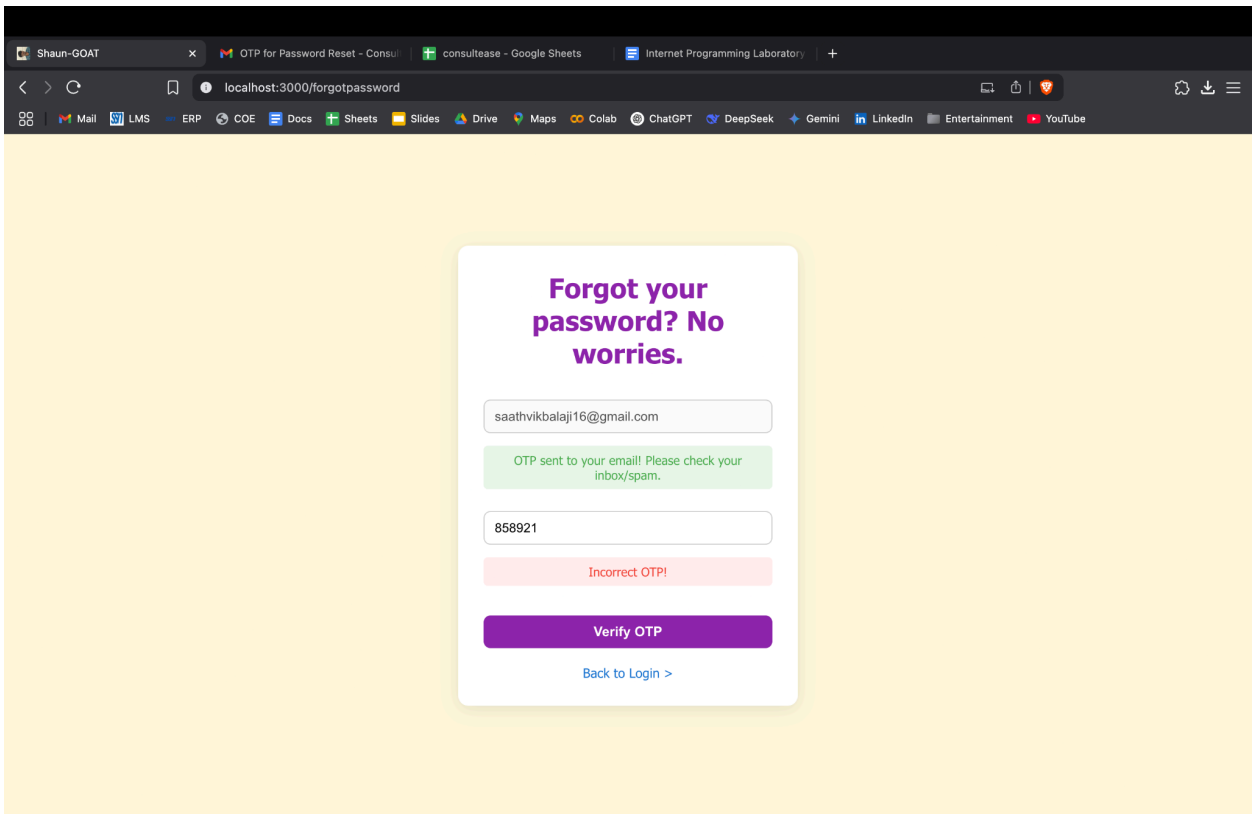
Inbox
ConsultansEase
to me
12:30 PM (0 minutes ago)
Dear User,
Your OTP for Password Reset is 858922. It is valid for 5 minutes.
Thanks and Regards,
Team ConsultansEase
Reply
Forward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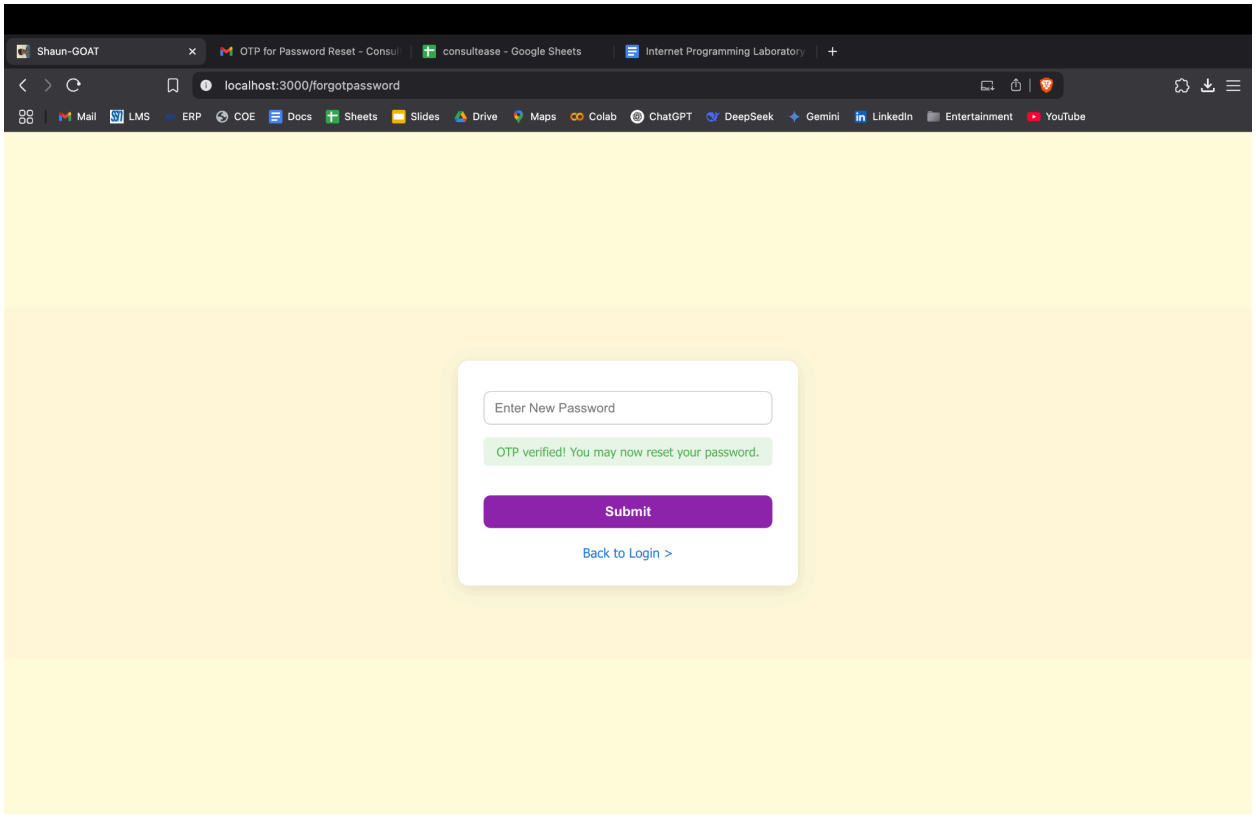
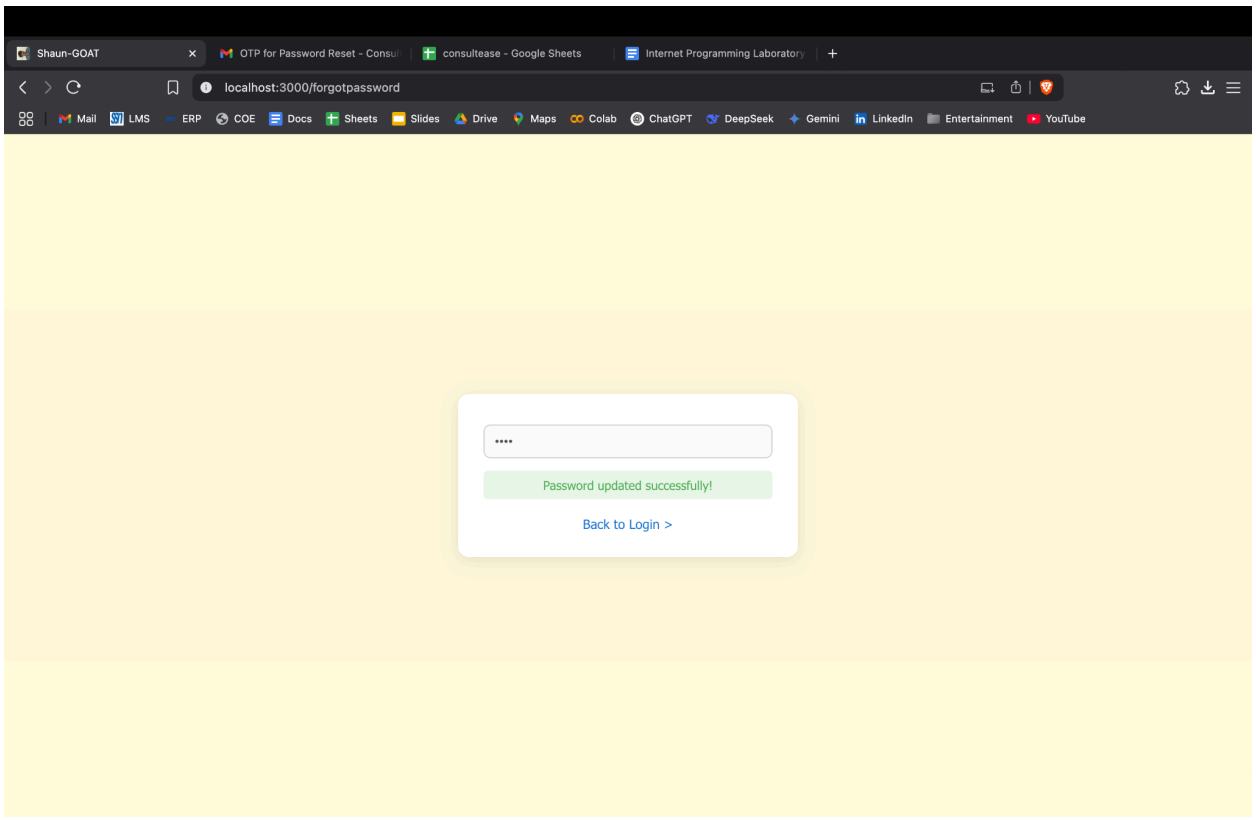
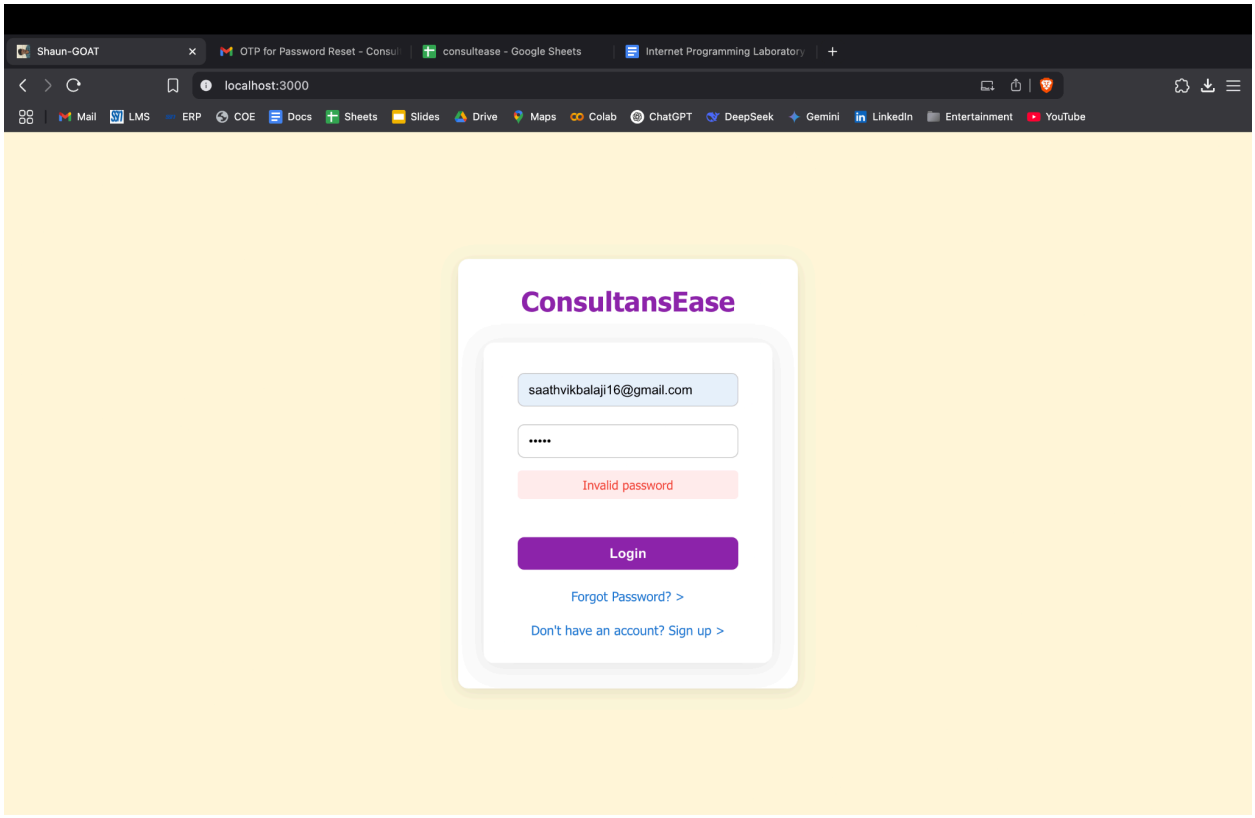




Login - Home Screen: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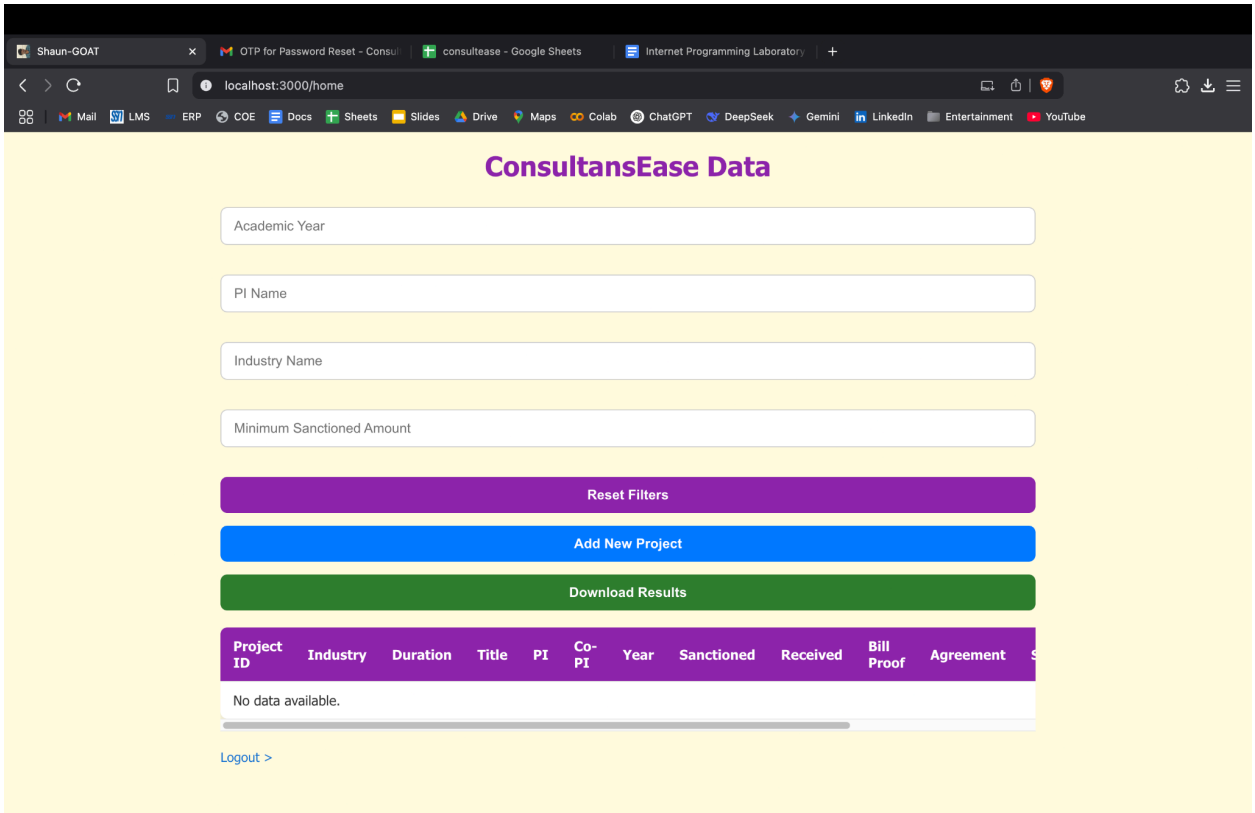
Forgot Password? >
Don't have an account? Sign up >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Add New Project
Download Results
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Year
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Bill Proof
Agreement
No data available.
Logout >

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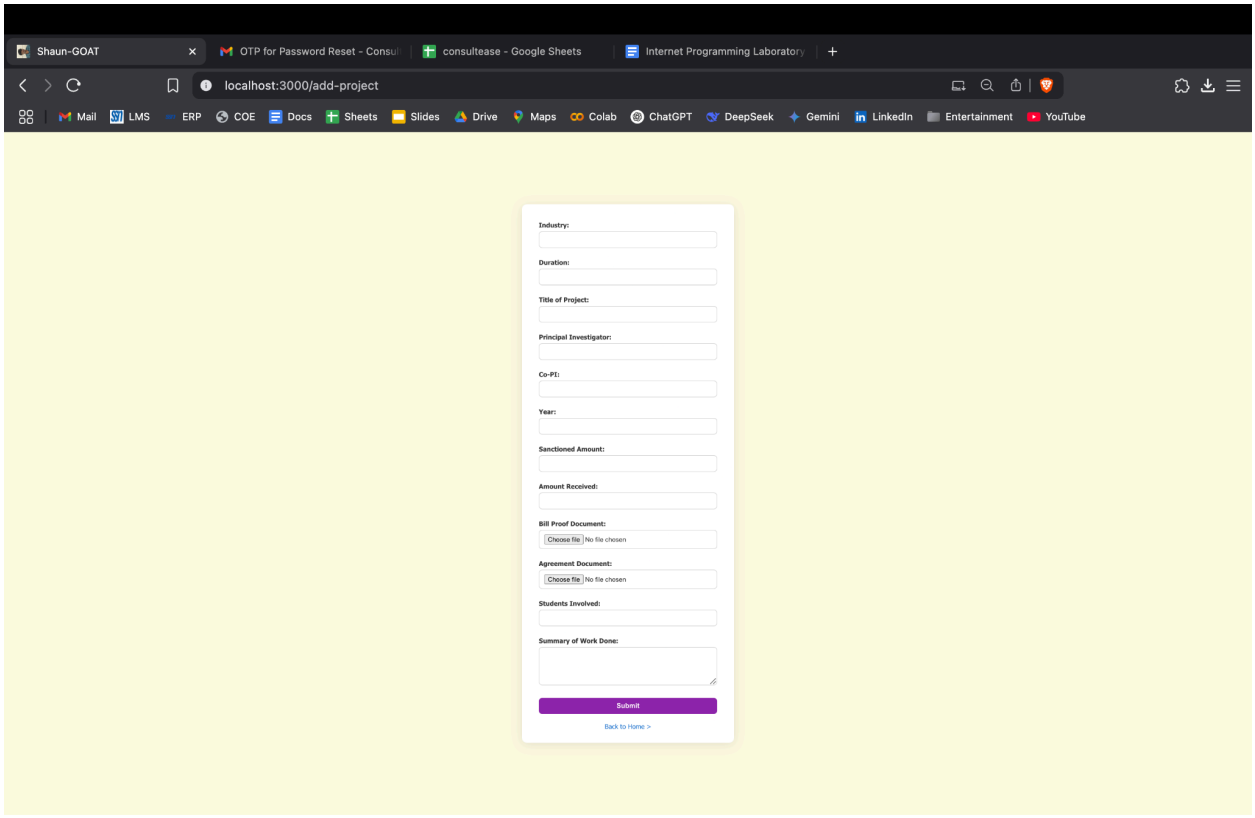
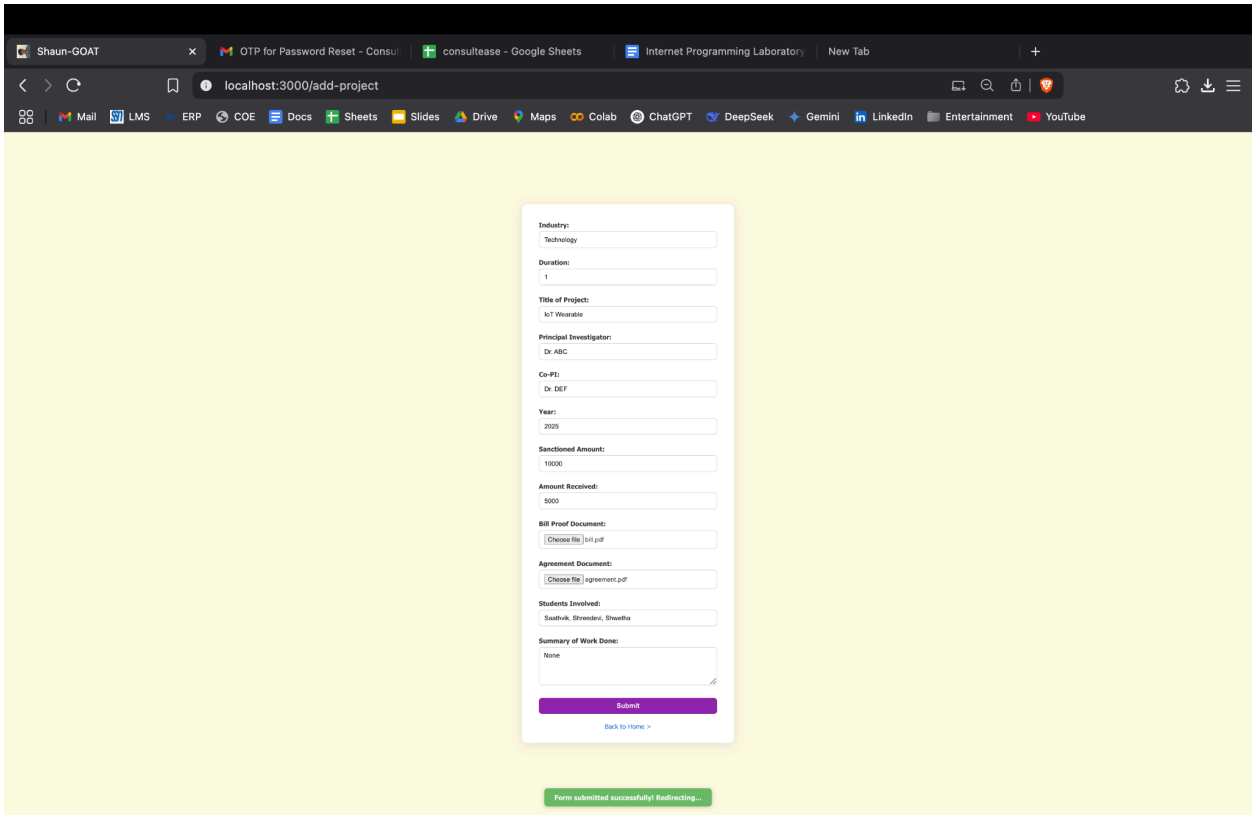
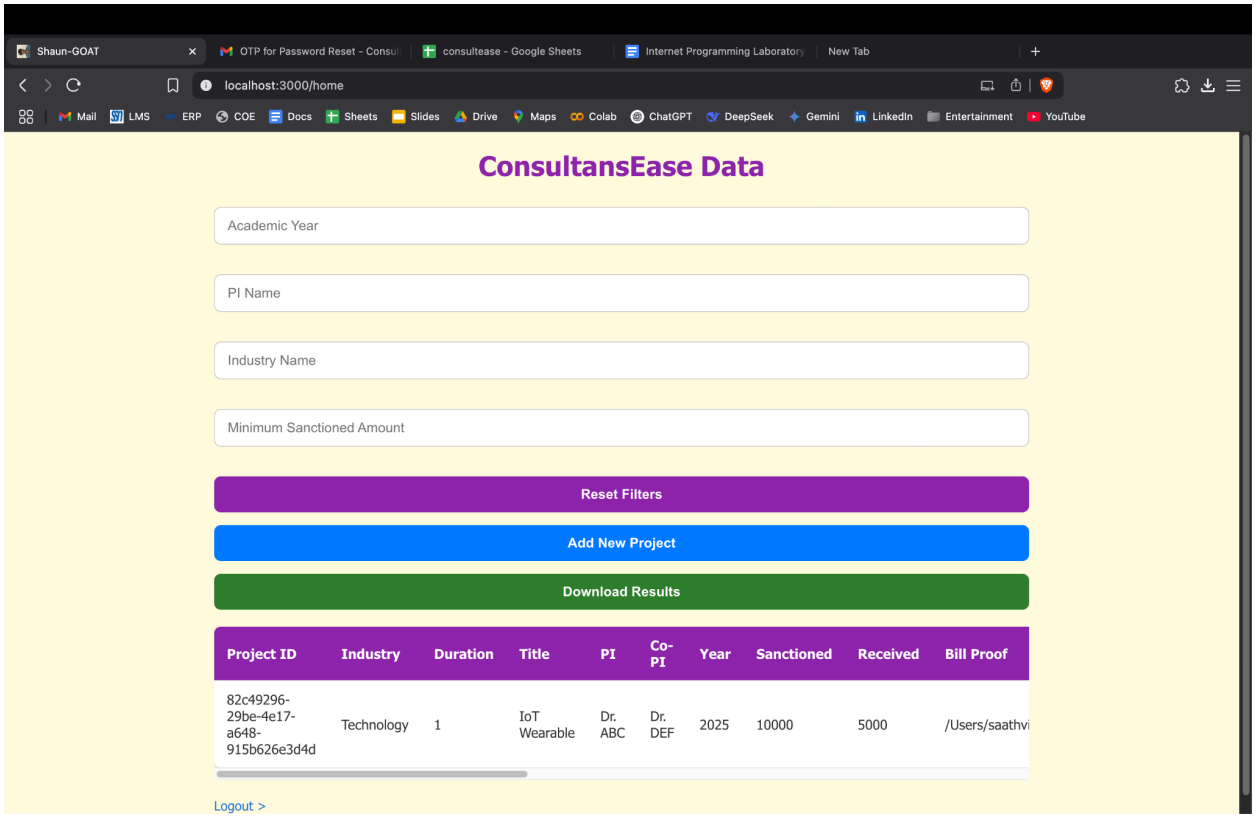
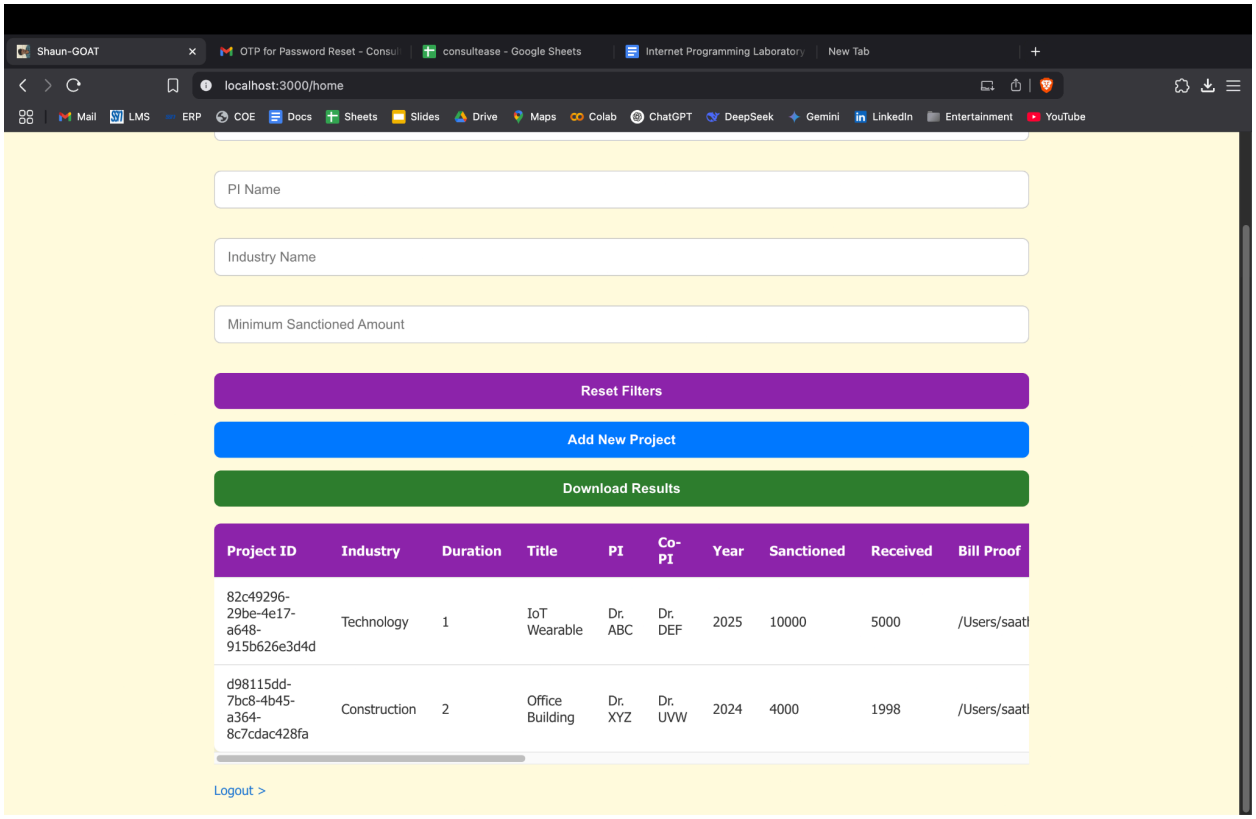


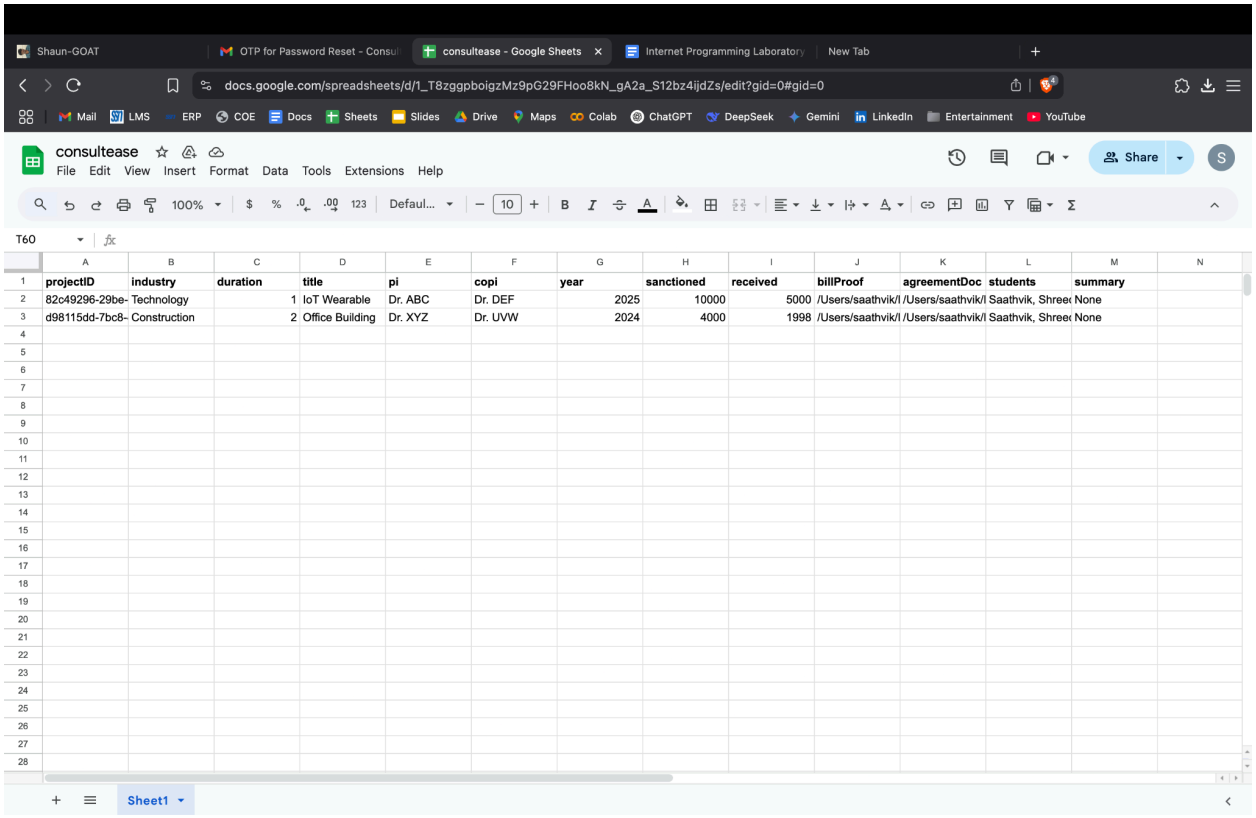




Adding More Projects:



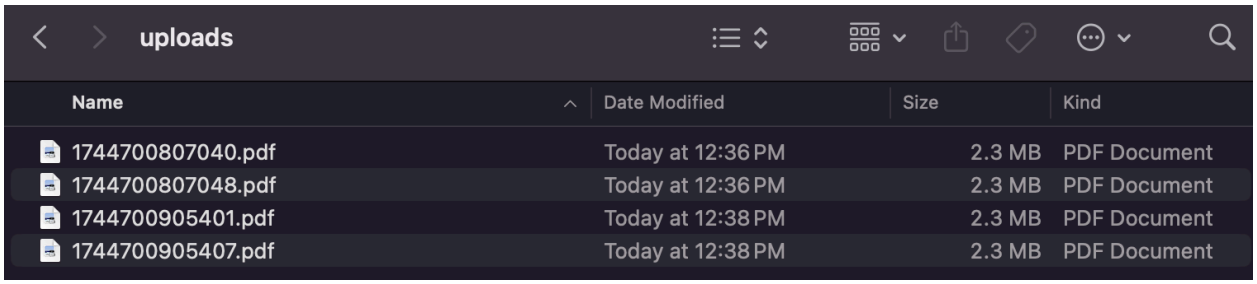
Sheets (updated):



consultease

projectID	industry	duration	title	pi	copi	year	sanctioned	received	billProof	agreementDoc	students	summary
82c49296-29be-	Technology	1	IoT Wearable	Dr. ABC	Dr. DEF	2025	10000	5000	/Users/saathvik/I	/Users/saathvik/I	Saathvik, Shreek	None
d98115dd-7bc8-	Construction	2	Office Building	Dr. XYZ	Dr. UVW	2024	4000	1998	/Users/saathvik/I	/Users/saathvik/I	Saathvik, Shreek	None

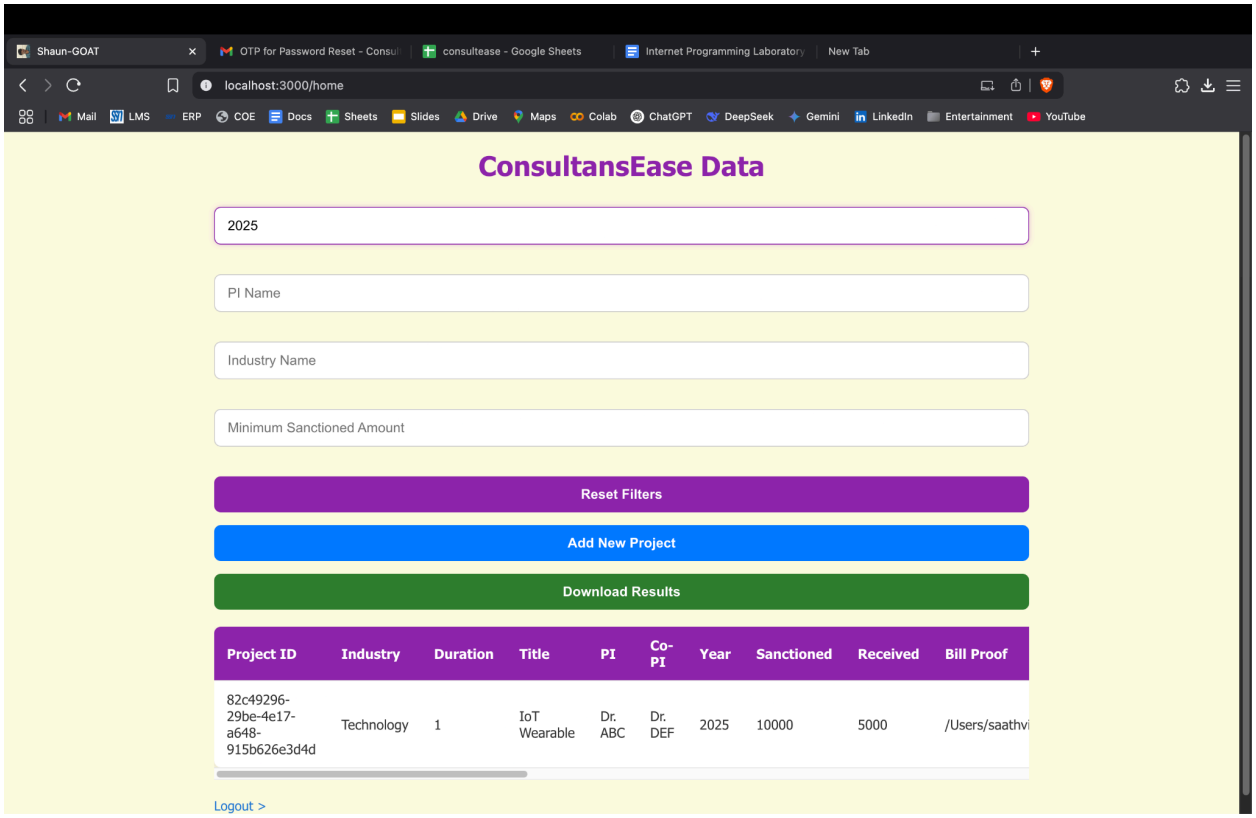
uploads:



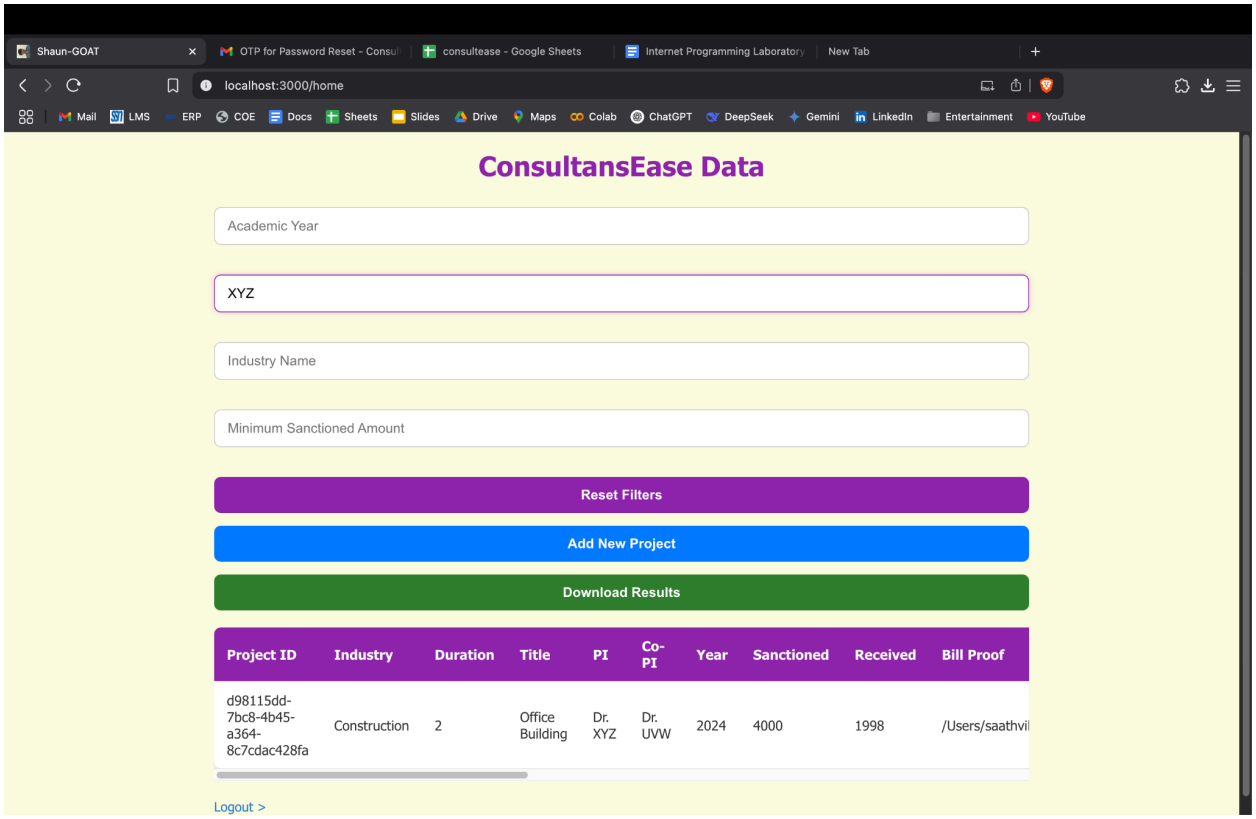
uploads

Name	Date Modified	Size	Kind
1744700807040.pdf	Today at 12:36 PM	2.3 MB	PDF Document
1744700807048.pdf	Today at 12:36 PM	2.3 MB	PDF Document
1744700905401.pdf	Today at 12:38 PM	2.3 MB	PDF Document
1744700905407.pdf	Today at 12:38 PM	2.3 MB	PDF Document

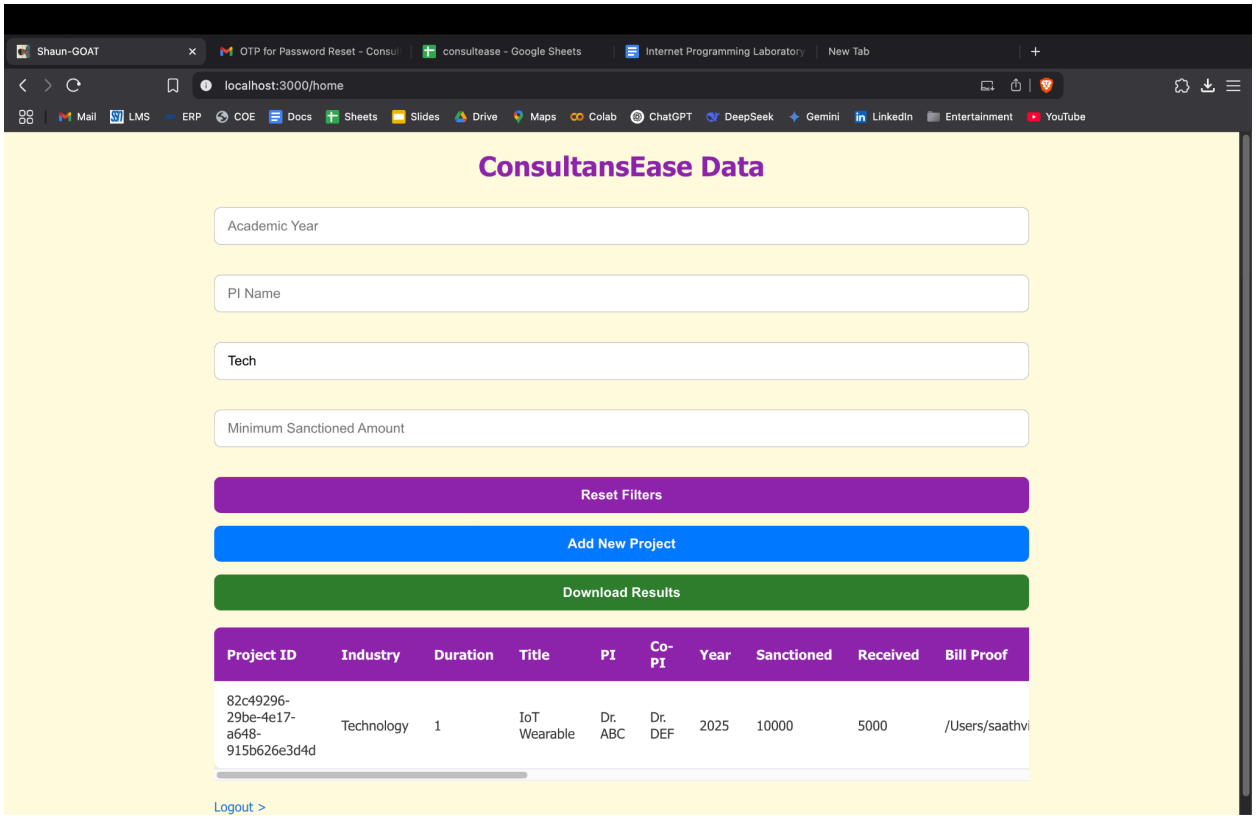
Search by Year:



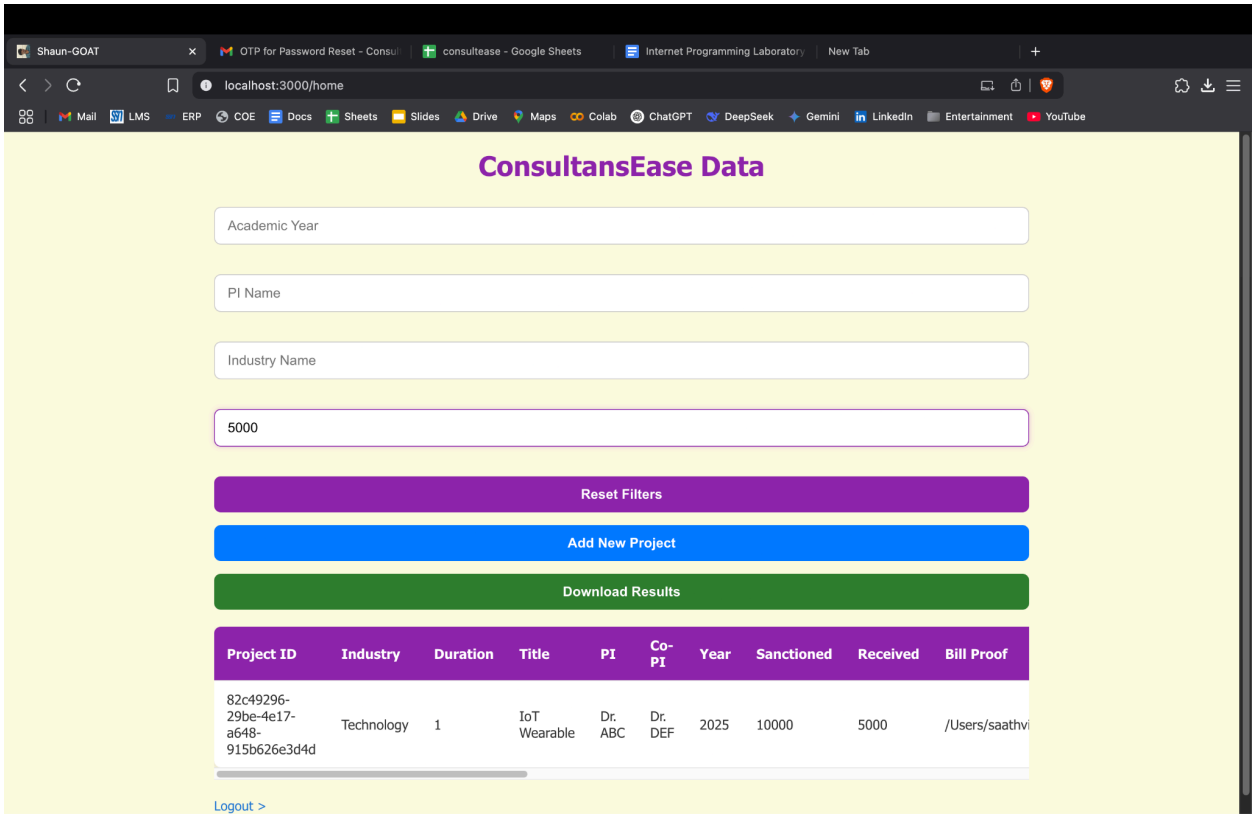
Search by PI Name:



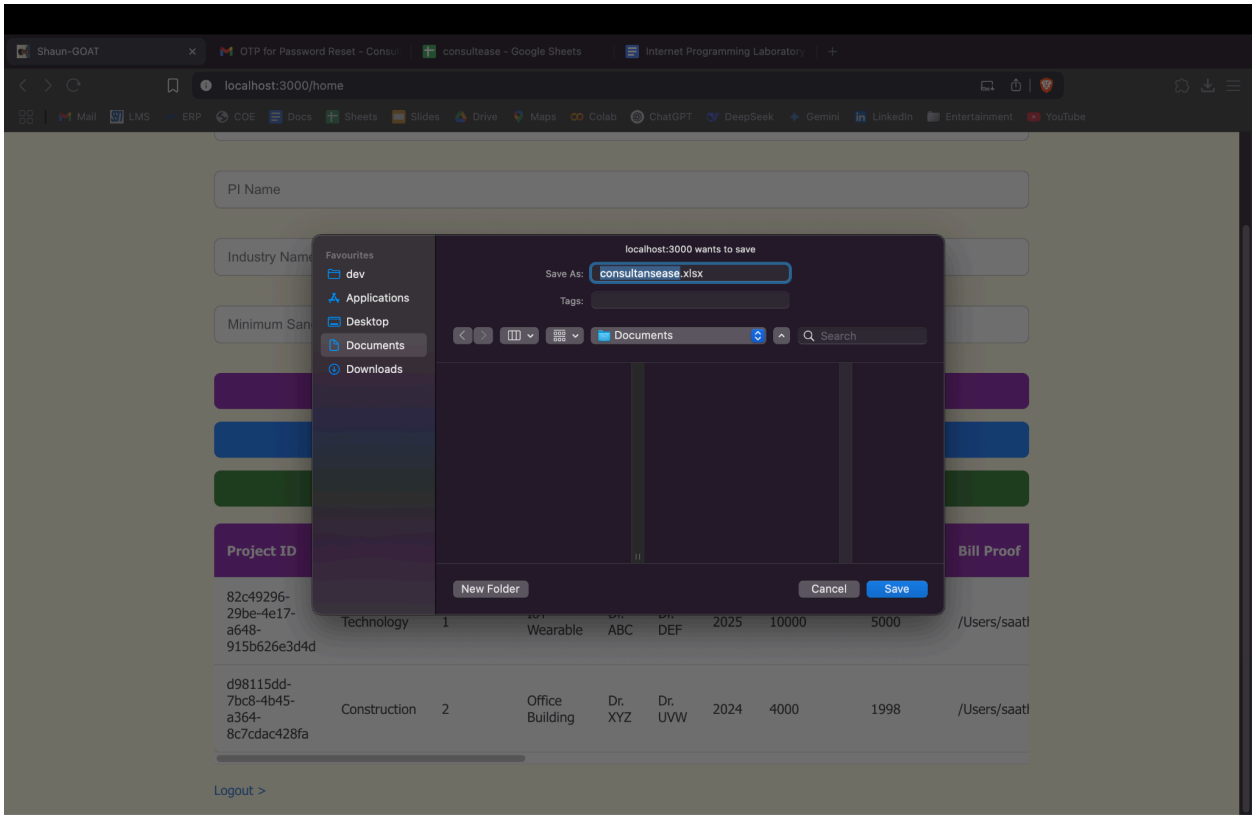
Search by Industry:

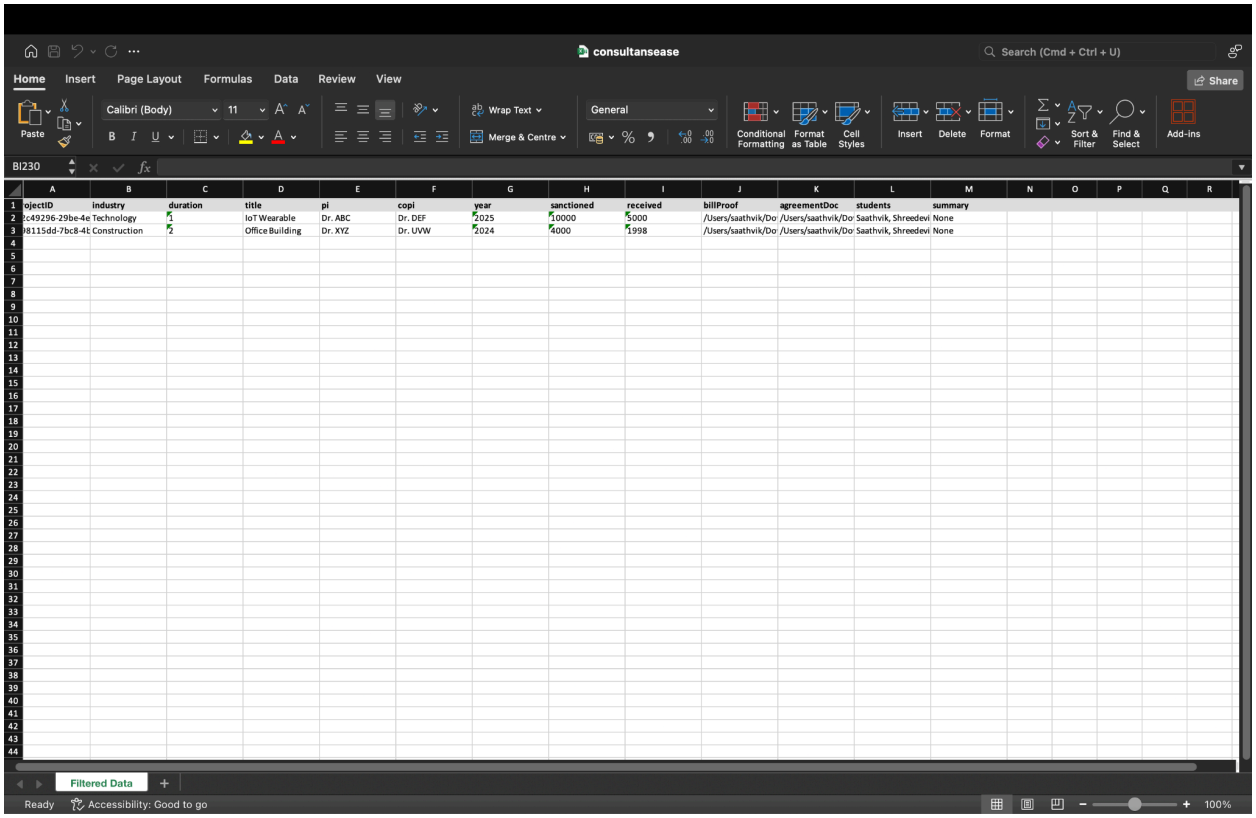


Search by Amount:



Export Details:





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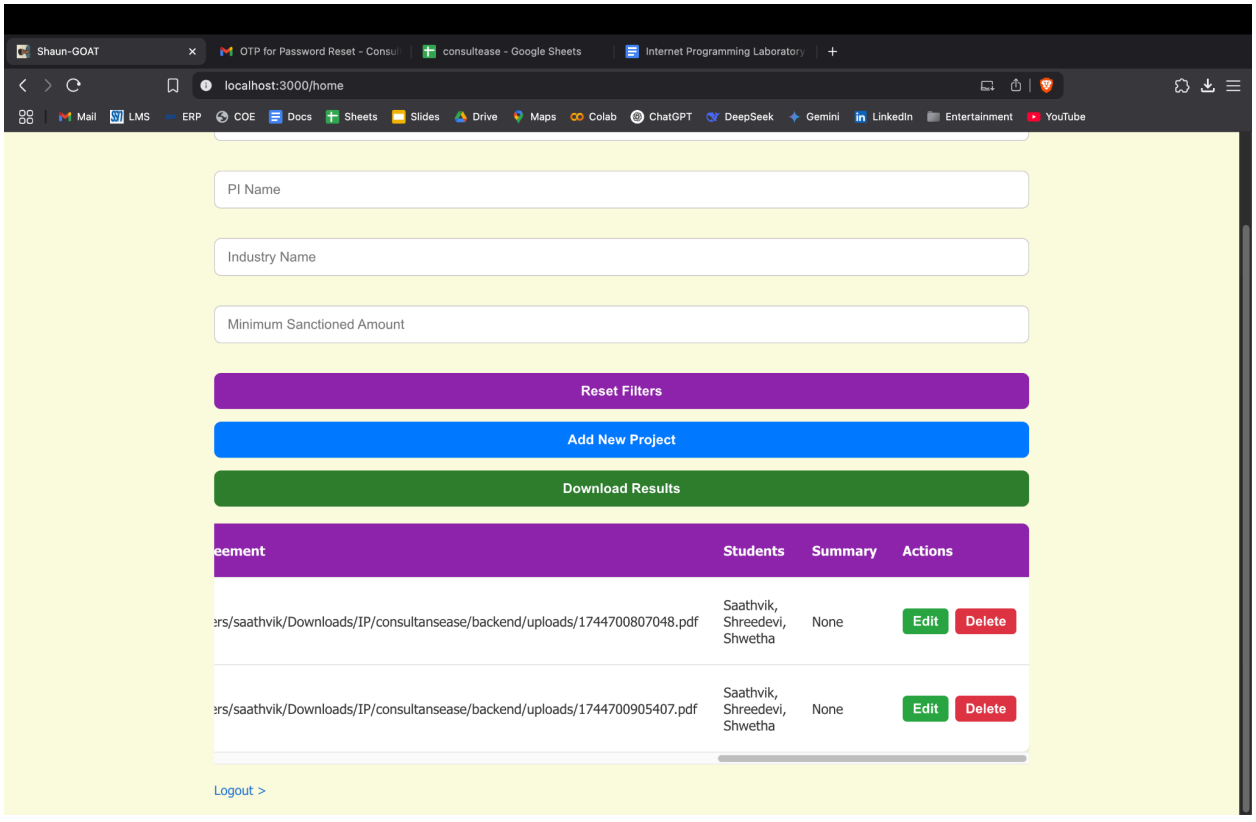
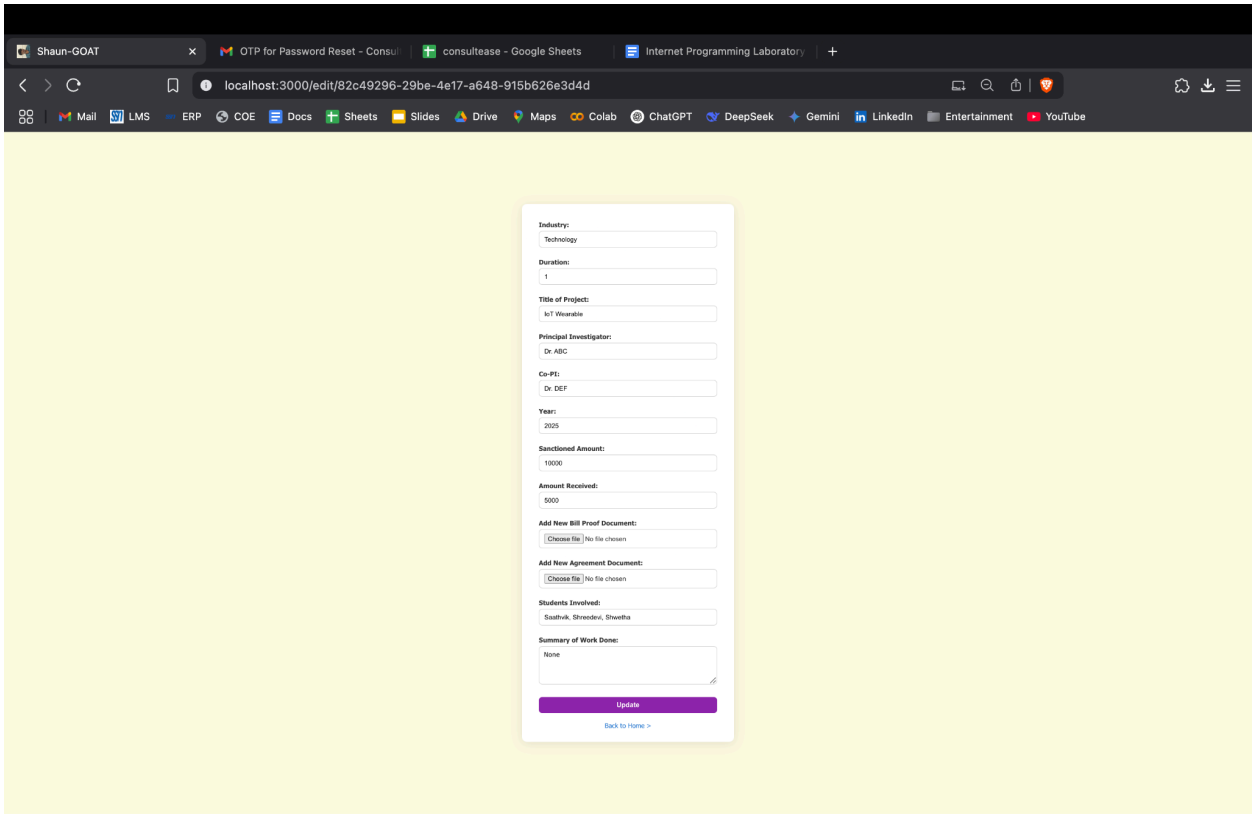
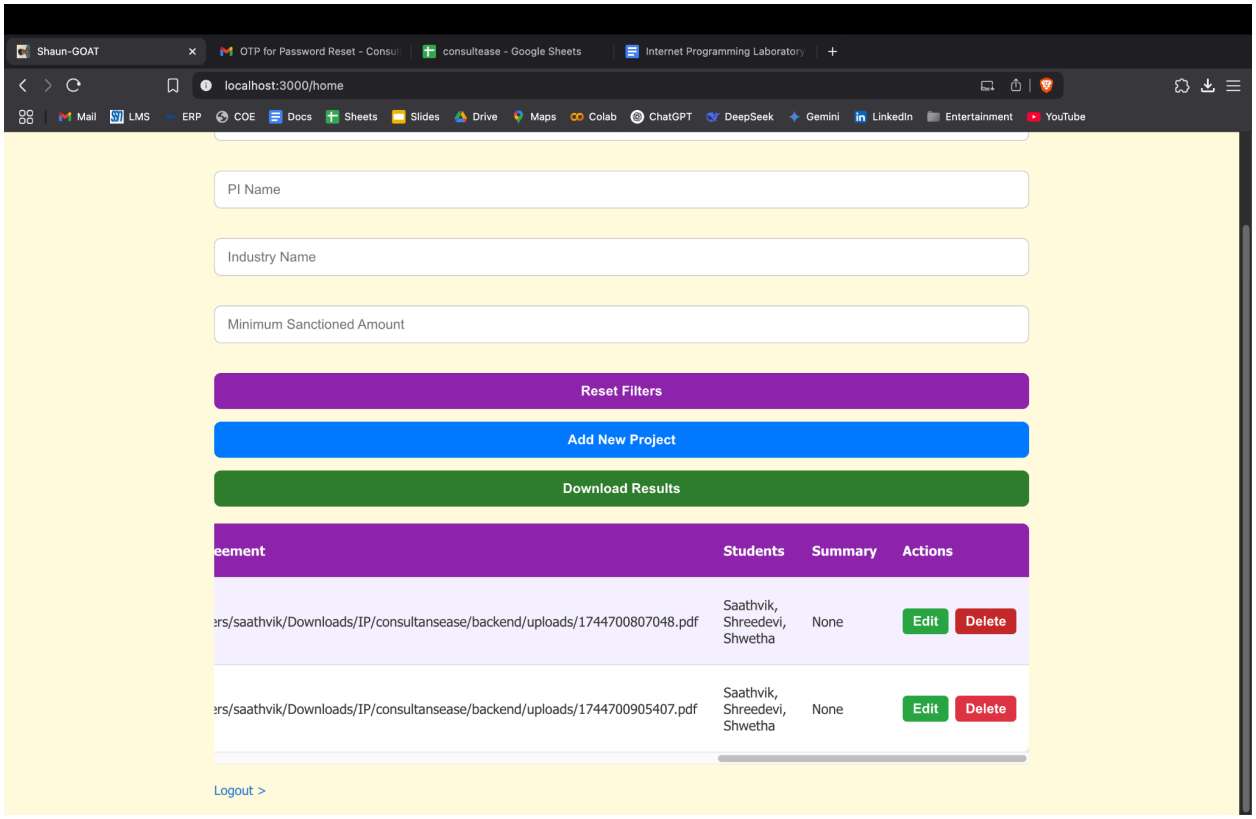
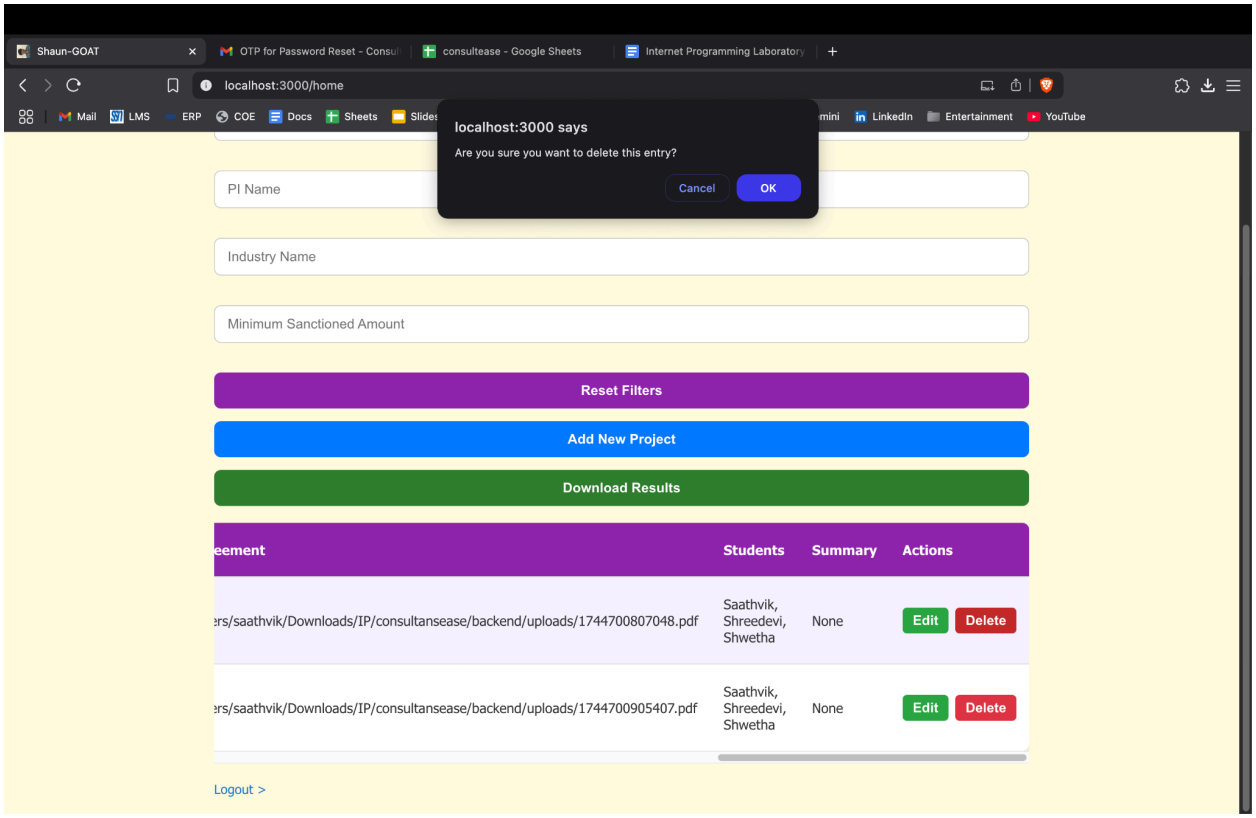
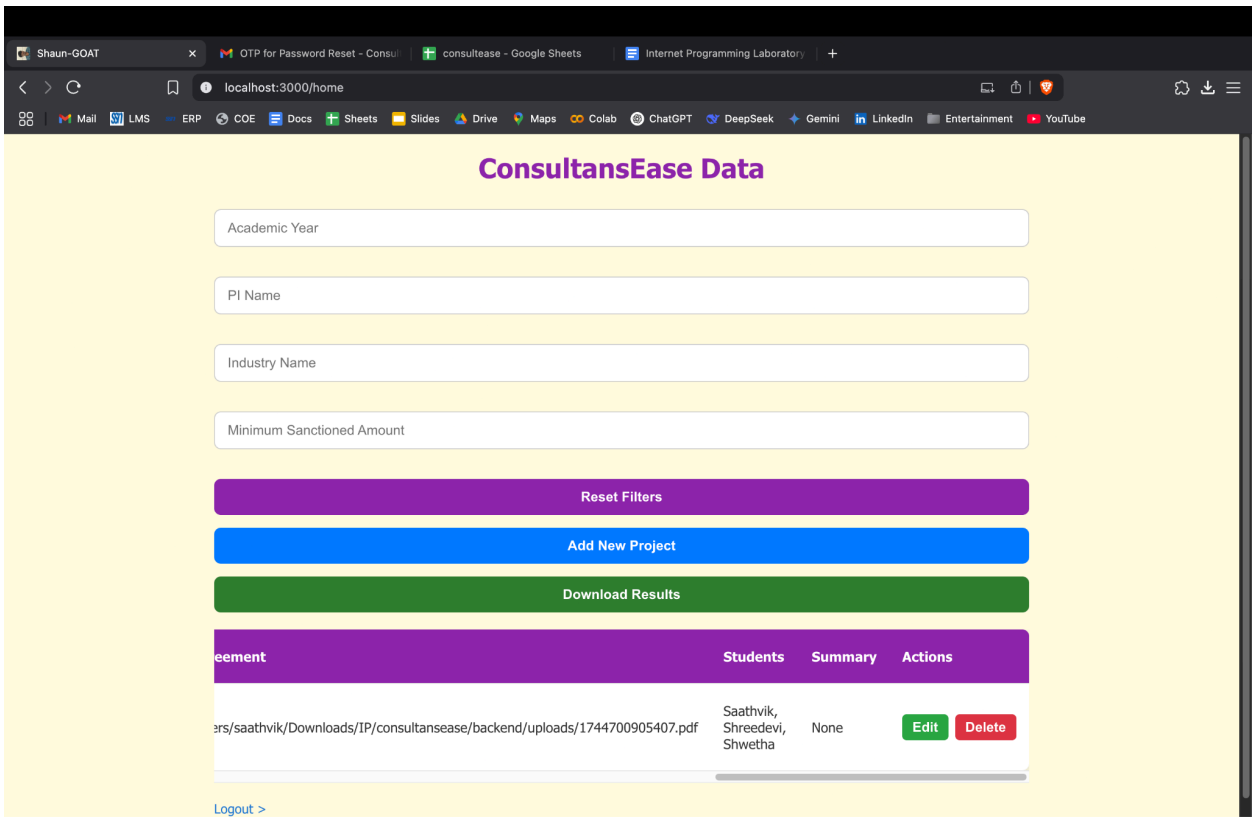




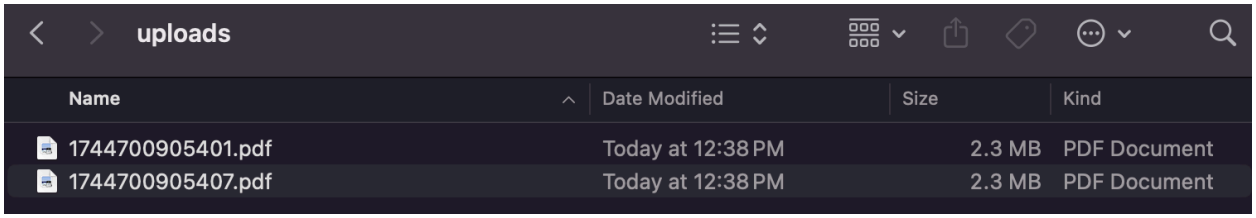
Delete Functionality:







Uploaded files are deleted as well:



LEARNING OUTCOME:

We have learnt to implement a complete full-stack web-application using the MERN stack and Google APIs.