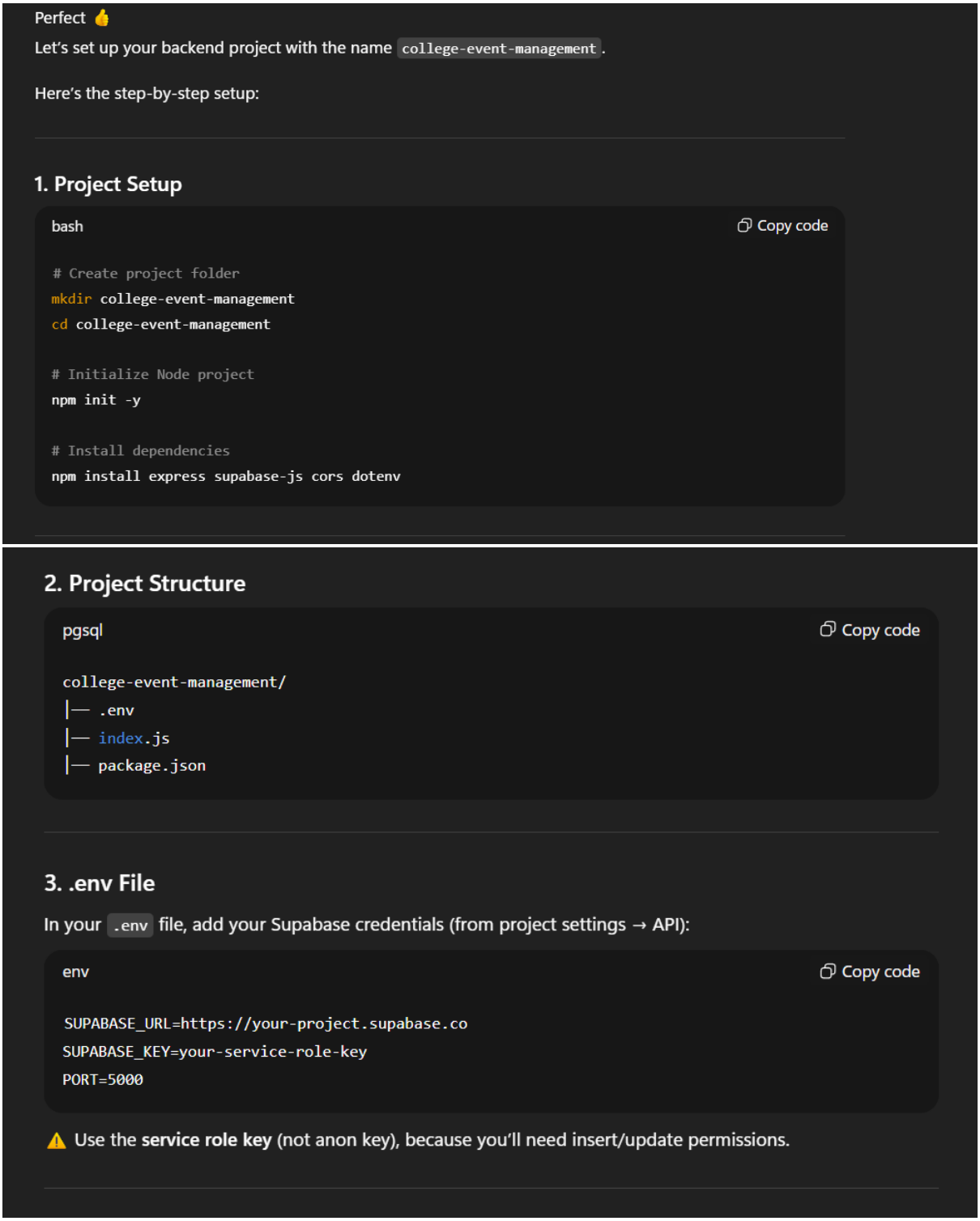
1. AI Conversation Log

I used ChatGPT for project , to setup and to solve the errors
I created first backend of admin portal and student side server



Perfect 👍

Let's set up your backend project with the name `college-event-management`.

Here's the step-by-step setup:

1. Project Setup

bash — Copy code

```
# Create project folder
mkdir college-event-management
cd college-event-management

# Initialize Node project
npm init -y

# Install dependencies
npm install express supabase-js cors dotenv
```

2. Project Structure

pgsql — Copy code

```
college-event-management/
|— .env
|— index.js
|— package.json
```

3. .env File

In your `.env` file, add your Supabase credentials (from project settings → API):

env — Copy code

```
SUPABASE_URL=https://your-project.supabase.co
SUPABASE_KEY=your-service-role-key
PORT=5000
```

⚠️ Use the **service role key** (not anon key), because you'll need insert/update permissions.

5. Start the Backend

bash Copy code

```
node index.js
```

Now your backend is running at http://localhost:5000 ↗ 🎉

✅ With this setup, you have your `college-event-management` **backend ready.**

- It connects to Supabase
- Handles Events, Registrations, Attendance, Feedback
- Generates Reports

Do you want me to also give you the **SQL functions (Supabase RPC)** for:

- Attendance % per event
- Average feedback per event

  so you can directly test reports in Postman?

📁 Project Structure

csharp Copy code

```
college-event-management/
├── .env
├── package.json
├── server.js              # entry point
├── src/
│   ├── app.js             # main express app
│   ├── config/
│   │   └── supabaseClient.js   # supabase connection
│   ├── routes/
│   │   ├── eventRoutes.js
│   │   ├── studentRoutes.js
│   │   └── reportRoutes.js
│   ├── controllers/
│   │   ├── eventController.js
│   │   ├── studentController.js
│   │   └── reportController.js
│   └── utils/
│       └── errorHandler.js   # (optional, clean error responses)
```

Perfect 🚀 Let me give you a **README.md template** that matches your project structure.
You can copy it into your `README.md` file and then **rewrite the explanations in your own words** (⚠️ important for Webknot rule).

📘 College Event Management – Backend

📌 Overview

This project is a backend system for managing college events.
It allows admins to create events, students to register, mark attendance, and provide feedback.
It also provides reports such as event popularity, student participation, attendance percentage, and average feedback.

This is part of the **Webknot Technologies Campus Drive Assignment**.

⚙️ Tech Stack

- **Backend:** Node.js, Express
- **Database:** Supabase (PostgreSQL)
- **Language:** JavaScript (ES Modules)

🛠️ API Endpoints

🎉 Events

- **POST /events** → Create a new event

💁‍♀️ Students

- **POST /students/register** → Register student to event
- **PUT /students/attendance/:reg_id** → Mark attendance
- **PUT /students/feedback/:reg_id** → Submit feedback

📊 Reports

- **GET /reports/events/popularity** → Events sorted by number of registrations
- **GET /reports/events/attendance** → Attendance percentage per event
- **GET /reports/events/feedback** → Average feedback score per event
- **GET /reports/students/participation** → Events attended by each student

2. Design Document

This project is a full-stack web application for college event management.The backend and frontend is divided into two distinct services.

The college-event-management which is the backend handles all the business logic and API routes while the admin-portal which is the frontend manages the user interface for admins and admin features.

Backend:College Event Management: Using Node.js and Express.js the college-event-management is implemented to serve as RESTful API.

It uses Supabase(Postgre) as its database,which makes it easy to authenticate and store data.

The directory structure is organized with specific folders for various components and features.

server.js:This is considered as application's entry point which initializes and starts the Express server.

src/app.js:The middleware,CORS configuration,the API routes declared in the routes directory is handled by this file.

src/config/supabaseClient.js:This is the point where the connection to the Supabase database is set up and initialized and also where an object client is passed to other parts of the application.

src/controllers:This is the point where the majority of the logic for every API endpoint resides.For example,authController.js processes user registration and login on the other hand eventController.js processes event creation and updating src/middleware/verifyAdmin.js:This is applied to routes such as POST/admin/events to verify that only authorized and logged-in administrators can access them and also it is an important security middleware function.

src/routes:For specifying the API endpoints and mapping them to the respective controller functions this folder is used.

The primary functions are API endpoints/auth,/admin,/students,and /reports:authentication,admin activities such as creating events,student actions and report generations.

Frontend:Admin Portal: The admin-portal serves as the administrator user interface and it is a React+Vite application It an up-to-date development toolchain featuring Vite and Tailwind CSS and it is a single-page application

src/App.jsx:This is the top-level component whivh manages the application usually responsible for routing and state management.

src/pages:This is the folder containing various views of the application,each mapping to a particular route.

Login.jsx and Register.jsx:this is a top-level landing pagewhich probably shows a summary of event metrics utilizing components such as ChartCard.jsx Events.jsx:This is an admin page which handles events,talking to the /admin/events endpoint. Reports.jsx:This page provides insights into events and student activity and graphs data from the backend's reporting endpoints.

Students.jsx:This is an admin page for handling student-related data,such as attendance and feedback.

src/components:This directory includes reusable UI components like Navbar.jsx and Sidebar.jsx which provides a consistent navigation experience across the application.

Tailwind.config.jsx:This is the file which enables quick styling in the JSX files directly and configures Tailwind CSS,a utility-first framework for designing the UI.

Frontend:React.js,Vite,Tailwind CSS which is deployed on Render.

Deployment:Both frontend and backend are deployed individually on Render,which is the component practice for web applications that supports independent scaling and upkeep of the two services.

The frontend sends API calls to the deployed URL of the backend to retrieve and send data

Technologies and Deployment:
Backend:Node.js,Express.js,Supabase,deployed on Render
Frontend:React.js,Vite,Tailwind CSS,deployed on Render.

3. Prototype Implementation

- ```
- college-event-management
- ├── package.json
- ├── README.md
- ├── server.js
- └── src
- ├── app.js
- ├── config
- │ └── supabaseClient.js
- ├── controllers
- │ ├── adminController.js
- │ ├── authController.js
- │ ├── eventController.js
- │ ├── reportController.js
- │ └── studentController.js
- ├── Middleware
- │ └── verifyAdmin.js
- ├── routes
- │ ├── adminRoutes.js
- │ ├── authRoutes.js
- │ ├── eventRoutes.js
- │ ├── reportRoutes.js
- │ └── studentRoutes.js
- └── utils
- └── errorHandler.js

Database Schema Visualization

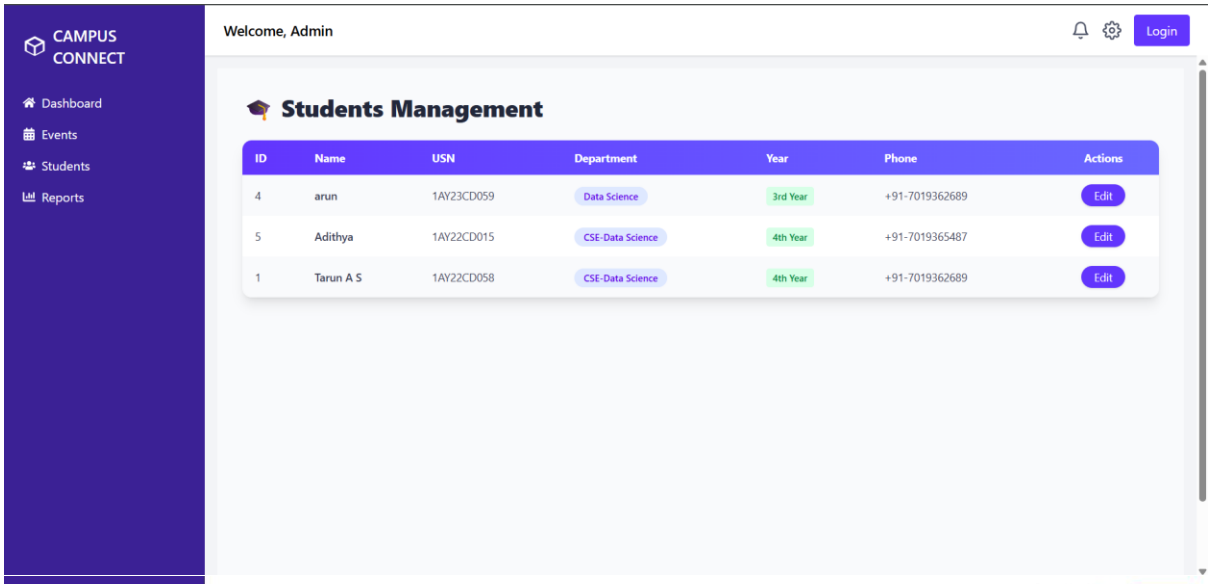
4.Reports/outputs

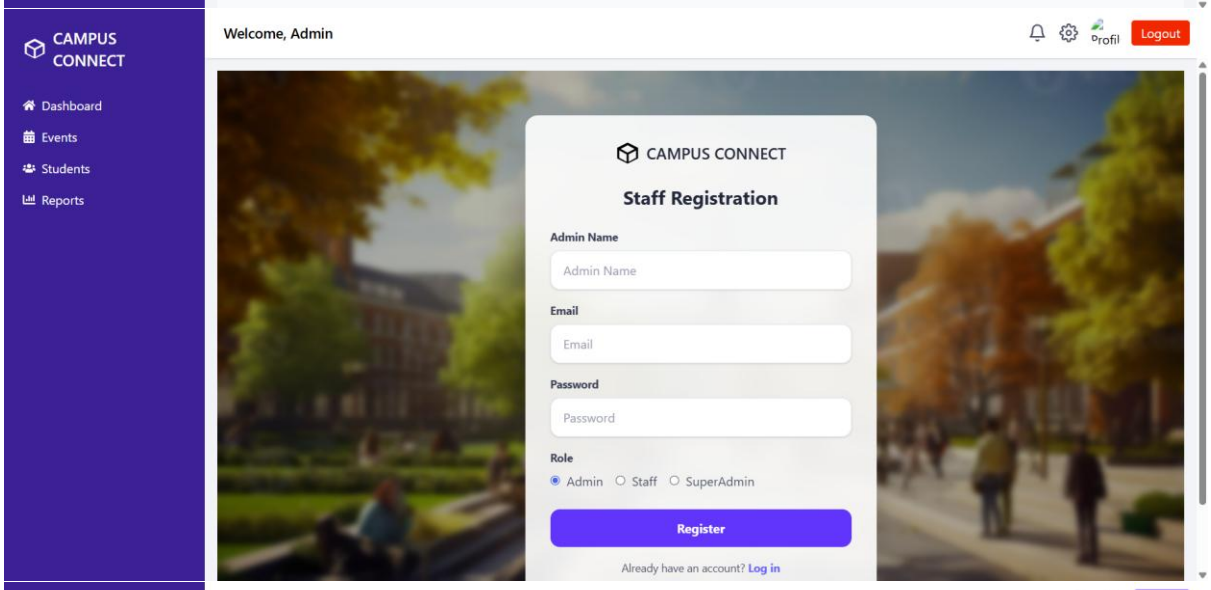
```
-- 1. Event Popularity
create or replace function event_popularity_report()
returns table (
  event_id int,
  total_registrations bigint
) language sql as $$
  select event_id, count(*)::bigint as total_registrations
  from registrations
  group by event_id;
$$;
-- 2. Attendance %
create or replace function event_attendance_report()
returns table (
  event_id int,
  total_registrations bigint,
  attended bigint,
  attendance_percent numeric
) language sql as $$
  select
    event_id,
    count(*)::bigint as total_registrations,
    count(*) filter (where attendance = true)::bigint as attended,
    round(
      (count() filter (where attendance = true) * 100.0) / nullif(count(),0),
      2
    ) as attendance_percent
  from registrations
  group by event_id;
$$;
```

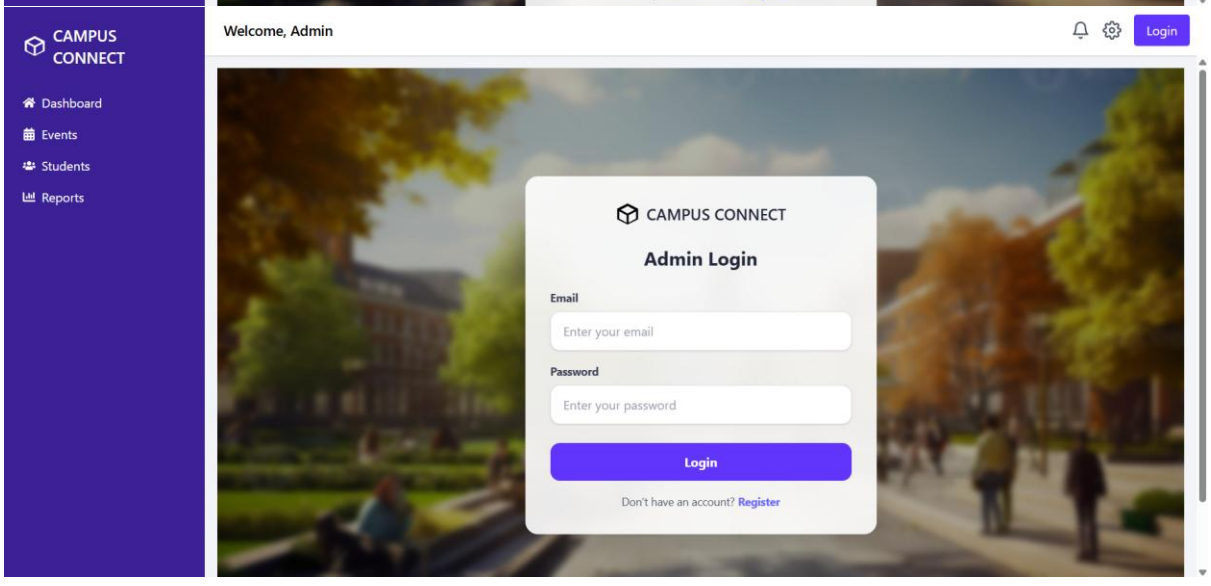
```
-- 3. Average Feedback
create or replace function event_feedback_report()
returns table (
  event_id int,
  avg_feedback numeric
) language sql as $$
  select event_id, round(avg(feedback)::numeric,2) as avg_feedback
  from registrations
  where feedback is not null
  group by event_id;
$$;

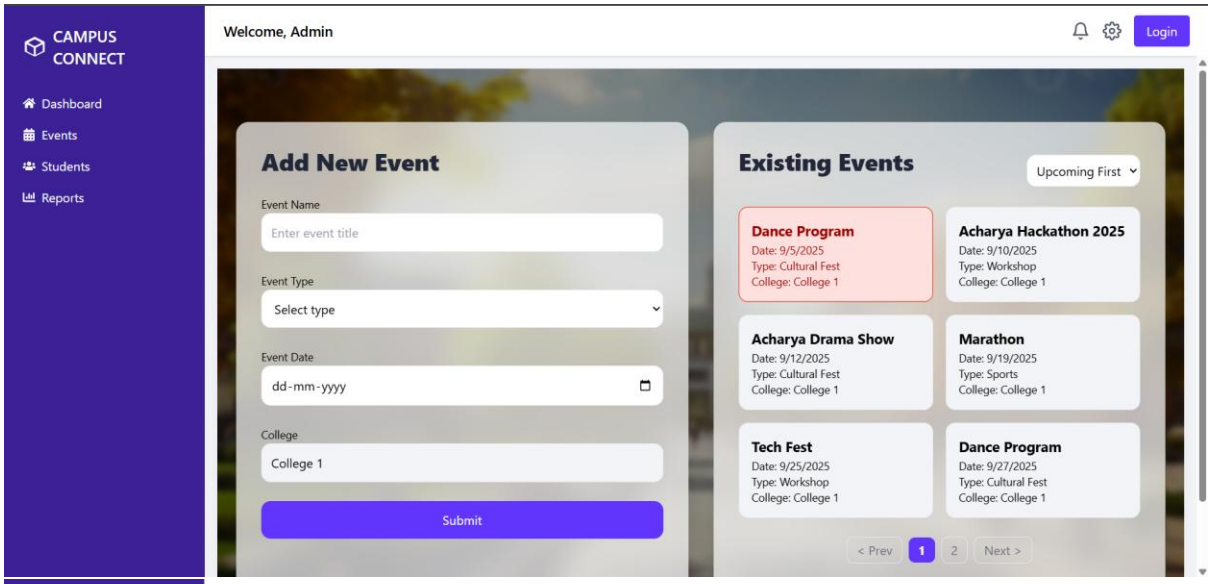
-- 4. Student Participation
create or replace function student_participation_report()
returns table (
  student_id int,
  events_attended bigint
) language sql as $$
  select student_id, count(*)::bigint as events_attended
  from registrations
  group by student_id;
$$;
```

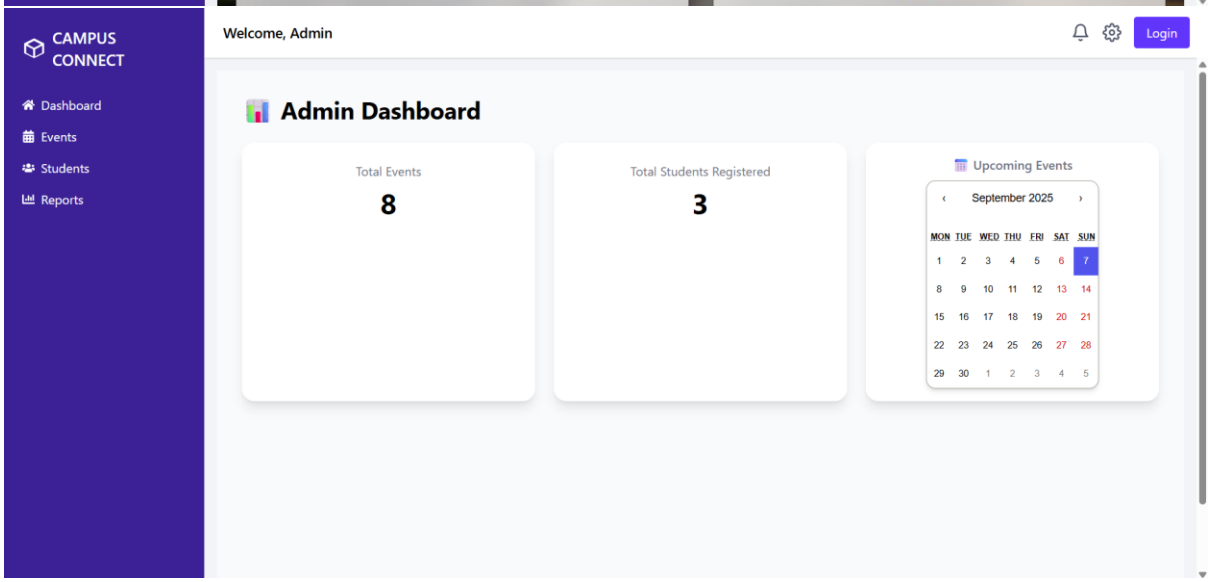
Website Link: https://admin-portal-3f7t.onrender.com

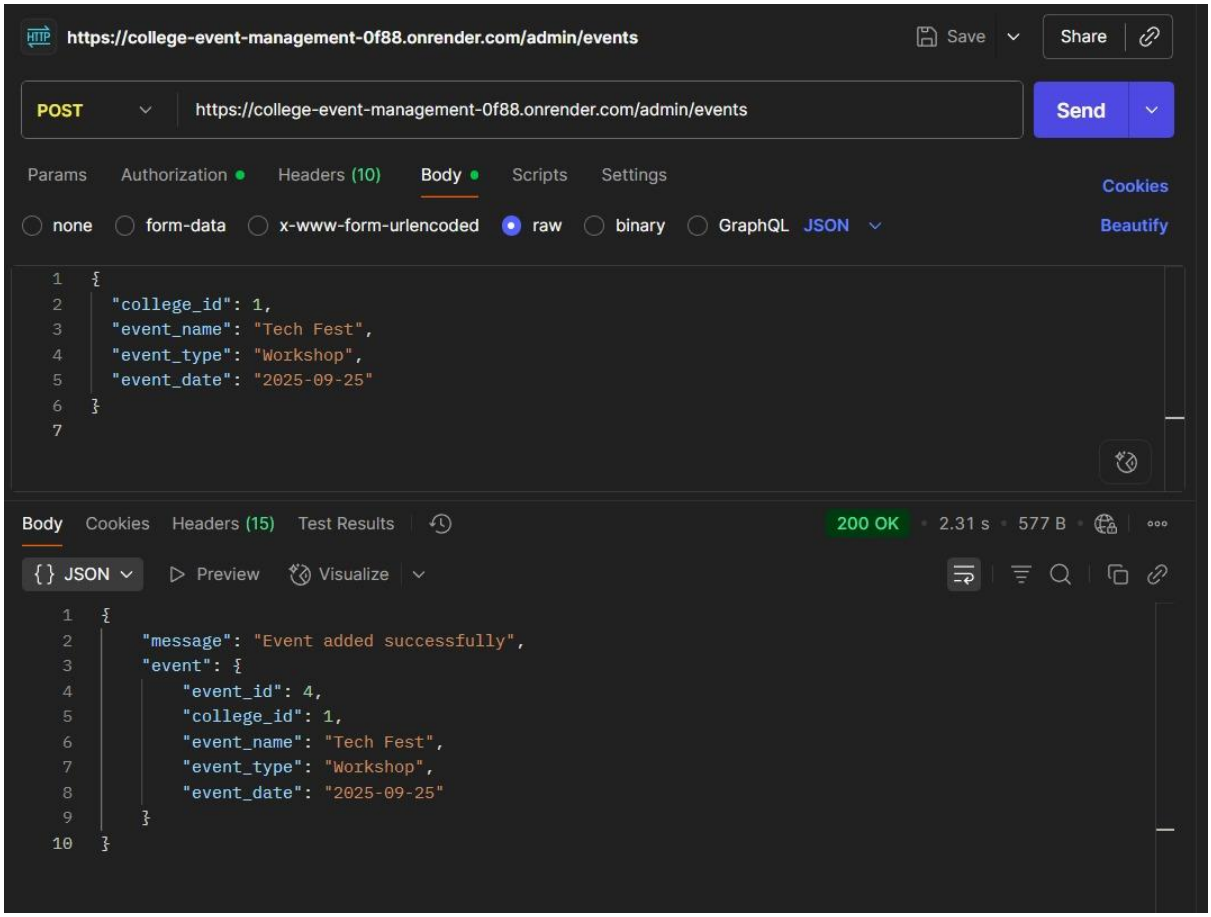

CAMPUS CONNECT
Dashboard
Events
Students
Reports
Welcome, Admin
Login
Students Management
ID
Name
USN
Department
Year
Phone
Actions
4
arun
1AY23CD059
Data Science
3rd Year
+91-7019362689
Edit
5
Adithya
1AY22CD015
CSE-Data Science
4th Year
+91-7019365487
Edit
1
Tarun A S
1AY22CD058
CSE-Data Science
4th Year
+91-7019362689
Edit

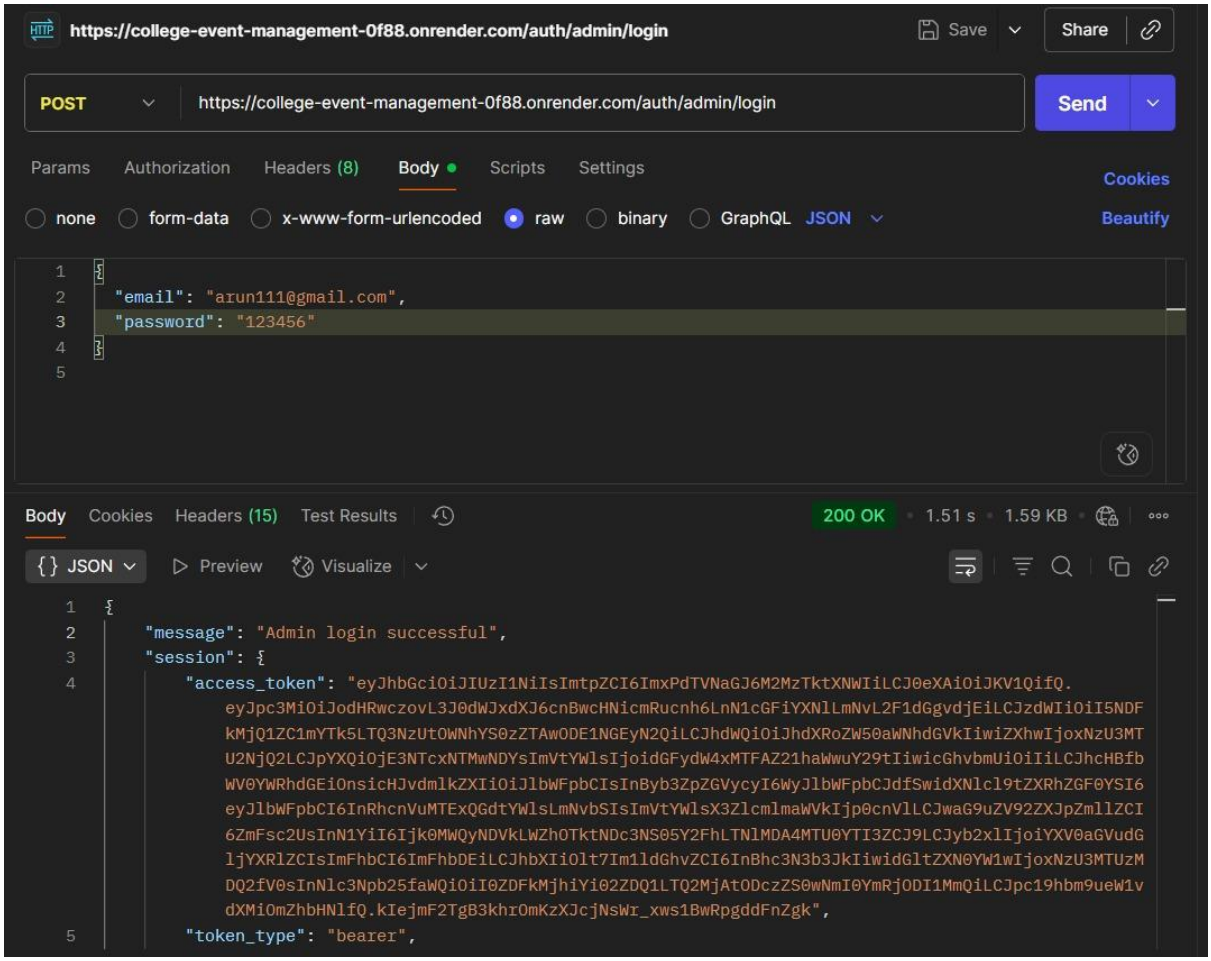

CAMPUS CONNECT
Dashboard
Events
Students
Reports
Welcome, Admin
Logout
CAMPUS CONNECT
Staff Registration
Admin Name
Admin Name
Email
Email
Password
Password
Role
Admin
Staff
SuperAdmin
Register
Already have an account? Log in


CAMPUS CONNECT
Dashboard
Events
Students
Reports
Welcome, Admin
Login
CAMPUS CONNECT
Admin Login
Email
Enter your email
Password
Enter your password
Login
Don't have an account? Register


CAMPUS CONNECT
Dashboard
Events
Students
Reports
Welcome, Admin
Login
Add New Event
Event Name
Enter event title
Event Type
Select type
Event Date
dd-mm-yyyy
College
College 1
Submit
Existing Events
Upcoming First
Dance Program
Date: 9/5/2025
Type: Cultural Fest
College: College 1
Acharya Hackathon 2025
Date: 9/10/2025
Type: Workshop
College: College 1
Acharya Drama Show
Date: 9/12/2025
Type: Cultural Fest
College: College 1
Marathon
Date: 9/19/2025
Type: Sports
College: College 1
Tech Fest
Date: 9/25/2025
Type: Workshop
College: College 1
Dance Program
Date: 9/27/2025
Type: Cultural Fest
College: College 1
< Prev
1
2
Next >


CAMPUS CONNECT
Dashboard
Events
Students
Reports
Welcome, Admin
Login
Admin Dashboard
Total Events
8
Total Students Registered
3
Upcoming Events
September 2025
MON TUE WED THU FRI SAT SUN
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 1 2 3 4 5


https://college-event-management-0f88.onrender.com/admin/events
Save
Share
POST
https://college-event-management-0f88.onrender.com/admin/events
Send
Params
Authorization
Headers (10)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"college_id": 1,
"event_name": "Tech Fest",
"event_type": "Workshop",
"event_date": "2025-09-25"
}
Body
Cookies
Headers (15)
Test Results
200 OK
2.31 s
577 B
JSON
Preview
Visualize
{
"message": "Event added successfully",
"event": {
"event_id": 4,
"college_id": 1,
"event_name": "Tech Fest",
"event_type": "Workshop",
"event_date": "2025-09-25"
}
}


https://college-event-management-0f88.onrender.com/auth/admin/login
Save
Share
POST
https://college-event-management-0f88.onrender.com/auth/admin/login
Send
Params
Authorization
Headers (8)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"email": "arun111@gmail.com",
"password": "123456"
}
Body
Cookies
Headers (15)
Test Results
200 OK
1.51 s
1.59 KB
{ } JSON
Preview
Visualize
{
"message": "Admin login successful",
"session": {
"access_token": "eyJhbGciOiJIUzI1NiIsImtpZCI6ImxPdTVNaGJ6M2MzTktXNWIiLCJ0eXAiOiJKV1QifQ.
eyJpc3MiOiJodHRwczovL3J0dWJxdXJ6cnBwcHNicmRucnh6LnN1cGFiYXNlLmNvL2F1dGgvdjEiLCJzdWIiOiI5NDF
kMjQ1ZC1mYTk5LTQ3NzUtOWNhYS0zZTAwODE1NGEyN2QiLCJhdWQiOiJhdXRoZW50aWNhdGVkIiwiZXhwIjoxNzU3MT
U2NjQ2LCJpYXQiOjE3NTcxNTMwNDYsImVtYWlsIjoidGFydW4xMTFAZ21haWwuY29tIiwicGhvbmUiOiIiLCJhcHBfb
WV0YWRhdGEiOnsicHJvdmlkZXIiOiJlbWFpbCIsInByb3ZpZGVycyI6WyJlbWFpbCJdfSwidXNlcl9tZXRhZGF0YSI6
eyJlbWFpbCI6InRhcnVuMTExQGdtYWlsLmNvbSIsImVtYWlsX3ZlcmlmaWVkIjp0cnVlLCJwaG9uZV92ZXJpZmllZCI
6ZmFsc2UsInN1YiI6Ijk0MWQyNDVkLWZhOTktNDc3NS05Y2FhLTNlMDA4MTU0YTI3ZCJ9LCJyb2xlIjoiYXV0aGVudG
ljYXRlZCIsImFhbCI6ImFhbDEiLCJhbXIiOlt7Im1ldGhvZCI6InBhc3N3b3JkIiwidGltZXN0YW1wIjoxNzU3MTUzM
DQ2fV0sInNlc3Npb25faWQiOiI0ZDFkMjhiYi02ZDQ1LTQ2MjAtODczZS0wNmI0YmRjODI1MmQiLCJpc19hbm9ueW1v
dXMiOmZhbHNlfQ.kIejmF2TgB3khrOmKzXJcjNsWr_xws1BwRpgddFnZgk",
"token_type": "bearer",

https://college-event-management-0f88.onrender.com/auth/admin/register

Save | Share

POST https://college-event-management-0f88.onrender.com/auth/admin/register

Send

Params | Authorization | Headers (8) | Body | Scripts | Settings | Cookies

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

```
{
  "admin_name": "arun_A_S",
  "email": "arun111@gmail.com",
  "password": "123456",
  "role": "admin"
}
```

Body | Cookies | Headers (15) | Test Results | 200 OK | 2.08 s | 662 B

JSON | Preview | Visualize


```
{
    "message": "Admin registered successfully",
    "user": {
        "id": "941d245d-fa99-4775-9caa-3e008154a27d",
        "email": "tarun111@gmail.com"
    },
    "profile": [
        {
            "id": 8,
            "auth_id": "941d245d-fa99-4775-9caa-3e008154a27d",
            "admin_name": "Tarun_A_S",
            "role": "admin",
            "phone": null,
            "created_at": "2025-09-06T10:02:40.832073+00:00"
```


http://localhost:3000/students/feedback/5

Save | Share

PUT http://localhost:3000/students/feedback/5

Send

Params | Authorization | Headers (8) | Body | Scripts | Settings | Cookies

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

```
{
  "feedback": 5
}
```

Response | History

Click Send to get a response

http://localhost:3000/students/register

Save | Share

POST http://localhost:3000/students/register Send

Params | Authorization | Headers (10) | Body | Scripts | Settings | Cookies

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

```
{
  "event_id": 2,
  "student_id":1
}
```

Response | History

https://college-event-management-0f88.onrender.com/admin/events

Save | Share

GET https://college-event-management-0f88.onrender.com/admin/events Send

Params | Authorization | Headers (8) | Body | Scripts | Settings | Cookies

Headers | 7 hidden

Key	Value	Description	Bulk Edit	Presets
Authorization	Bearer eyJhbGciOiJIUzI1NiIsImtpZCI6Im...			
Key	Value	Description		

Body | Cookies | Headers (15) | Test Results | 200 OK | 1.65 s | 637 B

{ } JSON | Preview | Visualize


```
[
    {
        "event_id": 1,
        "event_name": "Acharya Hackathon 2025",
        "event_type": "Workshop",
        "event_date": "2025-09-10",
        "colleges": {
            "college_name": "Acharya Institute of Technology"
        }
    },
    {
        "event_id": 2,
        "event_name": "Acharya Habba 2025",
        "event_type": "Fest",
        "event_date": "2025-11-10",
        "colleges": {
            "college_name": "Acharya Institute of Technology"
        }
```