Overview

Create a simple full stack application with a Node.js backend and a React frontend.

Backend (Node.js)

1. Registration API

Endpoint: POST /api/auth/register

Functionality:

- o If the user exists, return a message to sign in.
- o If not, register the new user.

Request Body:

```
"username": "string",
"password": "string",
"email": "string"
```

Response:

```
o Success: {"message": "User registered successfully."}
o User exists: {"message": "User already exists. Please sign in."}
o Error: {"error": "Error message"}
```

2. User List API

Endpoint: GET /api/users

Functionality:

- o If logged in, return user info.
- o If logged in as Admin, return all users with pagination.

Admin User:

• Create an admin with hardcoded credentials when the server starts (Username: admin, Password: admin123).

Database:

Use MongoDB or MySQL.

Frontend (React)

- Create a simple UI for registration and login.
- Display user info on successful login.
- If logged in as admin, show the list of all users with pagination.

Additional Considerations

- Use environment variables for sensitive data.
- Hash passwords before storing them.
- Implement proper validation and error handling.

Deliverables:

- Full stack app (Node.js + React).
- Push code to a public Git repository.
- Include a README with setup instructions.

NOTE:

• NO COPY PASTE OF CODE FROM OLDER REPOS OR EXISTING PROJECTS OR CHATGPT (DIRECTLY REJECTED).