Welcome to the CoGrammar Integrating React Frontend with **Express Backend** The session will start shortly...

Questions? Drop them in the chat. We'll have dedicated moderators answering questions.



Safeguarding & Welfare

We are committed to all our students and staff feeling safe and happy; we want to make sure there is always someone you can turn to if you are worried about anything.

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Ian Wyles Designated Safeguarding Lead



Simone Botes



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Ronald Munodawafa



Rafig Manan

Full Stack Web Development Session Housekeeping

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly. (Fundamental British Values: Mutual Respect and Tolerance)
- No question is daft or silly ask them!
- There are Q&A sessions midway and at the end of the session, should you wish to ask
 any follow-up questions. Moderators are going to be answering questions as the
 session progresses as well.
- If you have any questions outside of this lecture, or that are not answered during this lecture, please do submit these for upcoming Academic Sessions. You can submit these questions here: <u>Questions</u>



Full Stack Web Development Session Housekeeping

- For all non-academic questions, please submit a query:
 www.hyperiondev.com/support
- Report a safeguarding incident: <u>www.hyperiondev.com/safeguardreporting</u>
- We would love your feedback on lectures: Feedback on Lectures
- If you are hearing impaired, please kindly use your computer's function through Google chrome to enable captions.



Polls

Please have a look at the poll notification and select an option.

What is the primary role of Express.js in the MERN stack?

- A) To manage the database.
- B) To handle server-side logic and API endpoints.
- C) To style the frontend.
- D) To build the React components.



Polls

Please have a look at the poll notification and select an option.

Why is CORS middleware necessary when connecting a React frontend to an Express backend?

- A) To improve database performance.
- B) To allow cross-origin requests between frontend and backend.
- C) To style the React components.
- D) To deploy the application.





Lesson Overview

Build a StudentManagement System using the MERN Stack (FileSystem, Express.js, React.js, Node.js). The system allows users to perform CRUD operations (Create, Read, Update, Delete) on a collection of students.

The backend is built with **Express.js** and **FileSystem**, while the frontend is developed using React.js. This project demonstrates seamless integration of a React frontend with an Express backend.



Key Features

Backend (Express.js + FileSystem):

- RESTful API for CRUD operations on students.
- > FileSystem "database" (students.json) to store student details (id, name, age, grade).
- Middleware for error handling, validation, and CORS.

Frontend (React.js):

- User-friendly interface to interact with the backend API.
- Pages: Home (list Students), Add Student, Edit Student.
- API integration using fetch or axios.



Key Features

Integration:

- Connect React frontend with Express backend using RESTful APIs.
- Use CORS and proxy setup for seamless communication





Let's take a break





Questions and Answers





Thank you for attending







