CoGrammar

Welcome to this session:

Tutorial: Authentication and Authorization system in a full stack application

The session will start shortly...

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



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- 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>



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



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If you are feeling upset or unsafe, are worried about a friend, student or family member, or you feel like something isn't right, speak to our safeguarding team:



Ian Wyles Designated Safeguarding Lead



Simone Botes



Nurhaan Snyman



Ronald Munodawafa



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Learning Outcomes

- ❖ Implement user authentication in a full-stack application.
- Develop a full-stack authentication system with protected routes.
- Deploy a secure authentication system on Vercel/Render.



POLL QUESTIONS

Which of the following is a security best practice when handling authentication tokens?

- Storing tokens in localStorage for easy access
- Using HTTP-only cookies for token storage
- Sending tokens in the URL for quick retrieval
- Hardcoding tokens in frontend code for convenience



Authentication and Authorization

- Authentication Verifies user identity (Login/Signup).
- Authorization Grants access based on roles/permissions.
- **♦** Stack:
 - Frontend: React(JWT)
 - Backend: Node.js/Express (JWT)
 - Database: MongoDB (User roles & permissions)



Deployment

- Frontend: Deploy Next.js app with environment variables.
 - **✓ Backend:** Deploy API (Vercel Serverless Functions or External API).
 - **Database:** Use managed services like Supabase/Firebase.
 - **Security:** HTTPS, token storage (HTTP-only cookies/localStorage).
- Outcome: Scalable, secure authentication & authorization system!



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Q & A SECTION

Please use this time to ask any questions relating to the topic, should you have any.

Thank you for attending





