Welcome to the CoGrammar

Relational Databases and Python

The session will start shortly...

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



Cyber Security 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.
- 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>



Cyber Security Session Housekeeping cont.

- For all non-academic questions, please submit a query:
 www.hyperiondev.com/support
- We would love your feedback on lectures: <u>Feedback on Lectures</u>
- Find all the lecture content in you <u>Lecture Backpack</u> on GitHub.
- If you are hearing impaired, please kindly use your computer's function through Google chrome to enable captions.

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.

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



Rafig Manan

safeguarding concern



Scan to report a

or email the Designated Safeguarding Lead: Ian Wyles safeguarding@hyperiondev.com



Ronald Munodawafa





Stay Safe Series:

Mastering Online Safety One week at a Time

While the digital world can be a wonderful place to make education and learning accessible to all, it is unfortunately also a space where harmful threats like online radicalization, extremist propaganda, phishing scams, online blackmail and hackers can flourish.

As a component of this BootCamp the *Stay Safe Series* will guide you through essential measures in order to protect yourself & your community from online dangers, whether they target your privacy, personal information or even attempt to manipulate your beliefs.



Security Tip

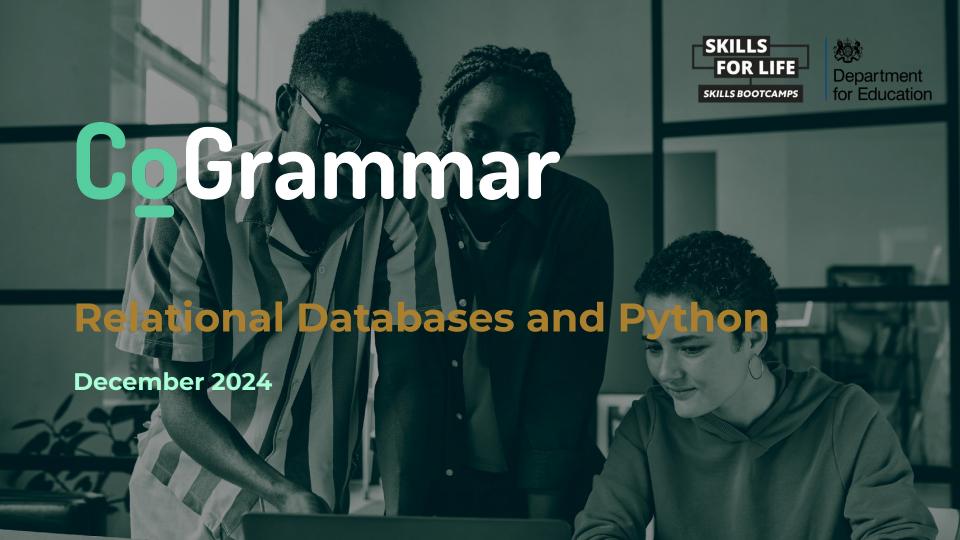
Verify Your Browser Extensions

Before installing browser extensions, verify their legitimacy and permissions.

- Why? Some malicious extensions can steal sensitive data or track your activity.
- How? Check reviews, download only from official stores, and ensure the developer is reputable.
- Pro Tip: Regularly audit your extensions and remove those you no longer use.

Stay safe while browsing! 🌐 🔒





Learning Objectives & Outcomes

- Identify the key components of SQLite and describe their purpose in database management.
- Write Python scripts to create, insert, retrieve, update, and delete data in an SQLite database.
- Analyze a to-do list application's requirements and determine the appropriate database schema and operations to implement it.
- Design and build a functional to-do list application that integrates SQLite to manage tasks effectively.



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

"How confident do you feel about using SQLite with Python now?"

- A. Not confident, I still need more practice.
- B. Somewhat confident, but I need more guidance.
- C. Very confident, I can now work on projects.



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

"What would happen if you forget to close the database connection in Python?"

- A. The database will be automatically closed.
- B. Resources will not be released, possibly causing issues.
- C. SQLite database will delete the data.
- D. I'm not sure.



What is SQLite?

To-Do List Example with SQLite and Python

Objective: Create a script to manage a to-do list. It will allow users to:

- Add tasks.
- View tasks.
- Mark tasks as complete.
- Delete tasks.



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

"Which Python function is used to save changes made to a SQLite database?"

- A. save()
- B. commit()
- C. execute()
- D. I'm not sure.



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

"How do you retrieve all rows from a SQLite table in Python?"

- A. fetchone()
- B. fetchall()
- C. retrieveall()
- D. I don't know.



Questions and Answers





Thank you for attending







