




Welcome to the CoGrammar

Tutorial: External Data

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. 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: [Questions](#)

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: [Feedback on Lectures](#)
- Find all the lecture **content** in you [Lecture Backpack](#) on GitHub.

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



Rafiq Manan



Ronald Munodawafa



Tevin Pitts

Scan to report a
safeguarding concern



or email the Designated
Safeguarding Lead:
Ian Wyles

safeguarding@hyperiondev.com

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.

Digital Decorum:

The Importance of Regular Software Updates

- How to stay updated
 - Implement Automated Update Management
 - Conduct Regular Vulnerability Assessments
 - Establish a Patch Management Policy
 - User Awareness and Training

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External Data

October 2024

Learning Objectives & Outcomes

- Everyone should be able to:
 - Read Data from files using built-in functions
 - Process data using python
 - Write data to new files
 - Demonstrate problem-solving skills

Working with External Data

Imagine you have a book with 1,000 pages. Would you rather read the entire book in one sitting, or read it page by page over time? How might each choice affect what you remember or how you feel during the process?

Polls

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

Which of the following methods would you use to read a file line by line in python?

- A. `readlines()`
- B. `read()`
- C. `write()`
- D. `writelines()`

Polls

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

How would you handle a `FileNotFoundError` in python?

- A. Use try and except blocks
- B. Write a custom error message
- C. Use assert statements
- D. It cannot be handled

Tutorial Challenge

1. Student Registration

- Students can be added by entering their name, ID, age, and courses.
- Data will be saved to a text file in a structured format.

2. Update Student Information

- Users can update a student's information (e.g., adding a course or updating age).
- The system will load data from the file, update the necessary fields, and save it back.

Tutorial Challenge

3. Remove Student

- A student's record can be deleted by their ID.
- The file will be updated to reflect the removal.

4. Display All Students

- Display all registered students with their details.

Polls

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

Which of the following is a suitable approach for writing data into a new text file in python?

- A. `open('filename.txt', 'r')`
- B. `open('filename.txt', 'w')`
- C. `open('filename.txt', 'a')`

Polls

Which method would you now use to handle reading large files efficiently in Python?

- A. `readlines()`
- B. `read()`
- C. Iterating with a for loop over the file object
- D. `writelines()`

Questions and Answers



Thank you for attending



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