



Welcome to this **Co**Grammar QnA

Data Structures and Algorithms

The session will start shortly...

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



Software Engineering 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** throughout this 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: [Questions](#)

Software Engineering Session Housekeeping cont.

- For all **non-academic questions**, please submit a query: www.hyperiondev.com/support
- Report a **safeguarding** incident: www.hyperiondev.com/safeguardreporting
- We would love your **feedback** on lectures: [Feedback on Lectures](#)

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

Skills Bootcamp Progression Overview

✓ Criterion 2 - Mid-Course Progress

Progress through the successful completion of tasks **within the first half** of the program.

To meet this criterion, students should, by no later than **12 January 2025**:

- **Guided Learning Hours (GLH)**: Complete at least **60 GLH**.
- **Task Completion** : Successfully complete the **first 13 of the assigned tasks**.

✓ Criterion 3 – End-Course Progress

Showcasing students' **progress nearing the completion of the course**.

To meet this criterion, students should:

- **Guided Learning Hours (GLH)**: Complete the **total minimum required GLH**, by the **support end date**.
- **Task Completion** : **Complete all mandatory tasks**, including any necessary resubmissions, by the end of the bootcamp, **09 March 2025**.

Skills Bootcamp Progression Overview

✓ Criterion 4 - Employability

Demonstrating **progress to find employment.**

To meet this criterion, students should:

- **Record an Interview Invite:** Students are required to record proof of invitation to an interview by **30 March 2025**.
 - **South Holland Students** are required to proof and interview by **17 March 2025**.
- **Record a Final Job Outcome :** Within 12 weeks post-graduation, students are required to record a job outcome.



**SKILLS
FOR LIFE**

SKILLS BOOTCAMPS



Department
for Education

CoGrammar QnA - Algorithms and Data Structures

Learning Objectives & Outcomes

- Apply algorithmic thinking to solve real-world problems by writing structured pseudocode.
- Identify and select appropriate data structures for specific use cases based on their properties and efficiencies.
- Collaborate with peers to brainstorm and troubleshoot algorithmic and data structure challenges.
- Evaluate logical approaches for problem-solving by reviewing pseudocode, flowcharts, and data structure usage.

Agenda

CoGrammar



Relevance

- Introduction & Context
- Hands-on Activities & Q&A
 - Explore Scratch:
 - Data Structures
 - **Break (10 mins)**
 - Algorithmic Thinking and Pseudocode
 - Warm-Up Exercises
 - Automated Parking Spot Allocation
 - Automated Teller Machine (ATM)

Resources

- **Additional Resources**

- [Scratch Practice](#)
- [Make a Flappy game](#)
- Online Flowchart Tools:
 - i. [draw.io](#)
 - ii. [Lucidchart](#)
- Data Structure Visualization Websites:
 - i. [VisuAlgo](#)
 - ii. [Printables - CS Unplugged](#)

Questions and Answers



Thank you for attending



Department
for Education

CoGrammar

