





Introduction to Automation with Python

28 January 2025



Tech Talks Session Housekeeping

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly.
- 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 session, or that are not answered during this session, please do submit these for upcoming Tech Talks Sessions. You can submit these questions here:

<https://forms.gle/MomSYvUWiSfKgMaZ9>

Tech Talks Session Housekeeping cont.

- For all **non-academic questions**, please submit a query:
www.hyperiondev.com/support
- We would love your **feedback**. Please fill in the feedback form after the session.
- 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:



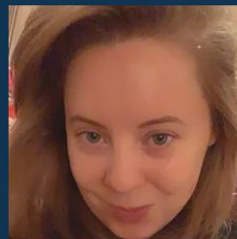
Ian Wyles
Designated Safeguarding
Lead



Simone Botes



Rafiq Manan



Charlotte Witcher



Nurhaan Snyman



Ronald Munodawafa



Tevin Pitts

Scan to report a
safeguarding concern



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

Learning Outcomes

1. Explain the concept of automation and its significance in reducing repetitive tasks.
2. Learn about common Python libraries used for automation.
3. Implement a simple Python script to automate a practical task.

Introduction to Automation

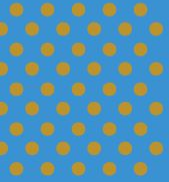

Automation refers to the use of technology to perform tasks with minimal human intervention.



Source: <https://zapier.com/blog/python-automation/>

Importance of Automation



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1. Saves time.
 2. Reduces errors.
 3. Enhances productivity by focusing on high-value tasks.
 4. Widely used in data science (data cleaning), software engineering (build pipelines), and web development (browser automation).
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Python Libraries for Automation

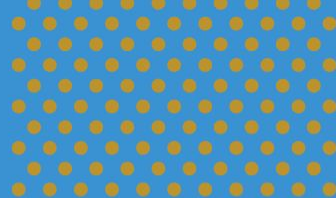
- `os` and `shutil`: File and folder operations.
- `smtplib`: Sending emails.
- `schedule`: Running tasks at intervals.
- `selenium`: Browser automation.
- `pyautogui`: Automating keyboard/mouse tasks.
- `requests`: Fetching data from web services.



Questions and Answers

Questions around Automation with Python





Thank you!

