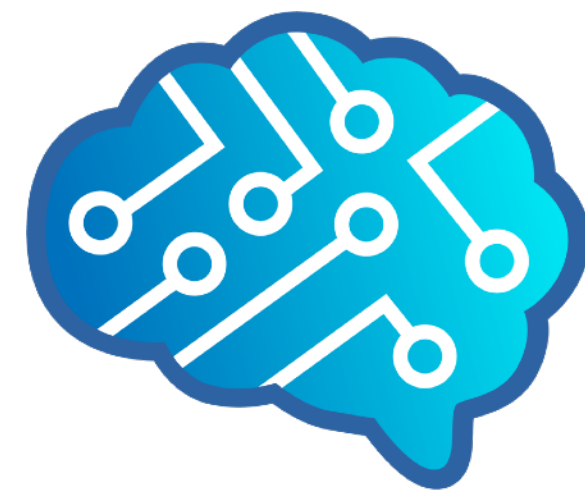


# Introducing MyComputerBrain's **Python Intro Course**

Dr. Karsten Schulz

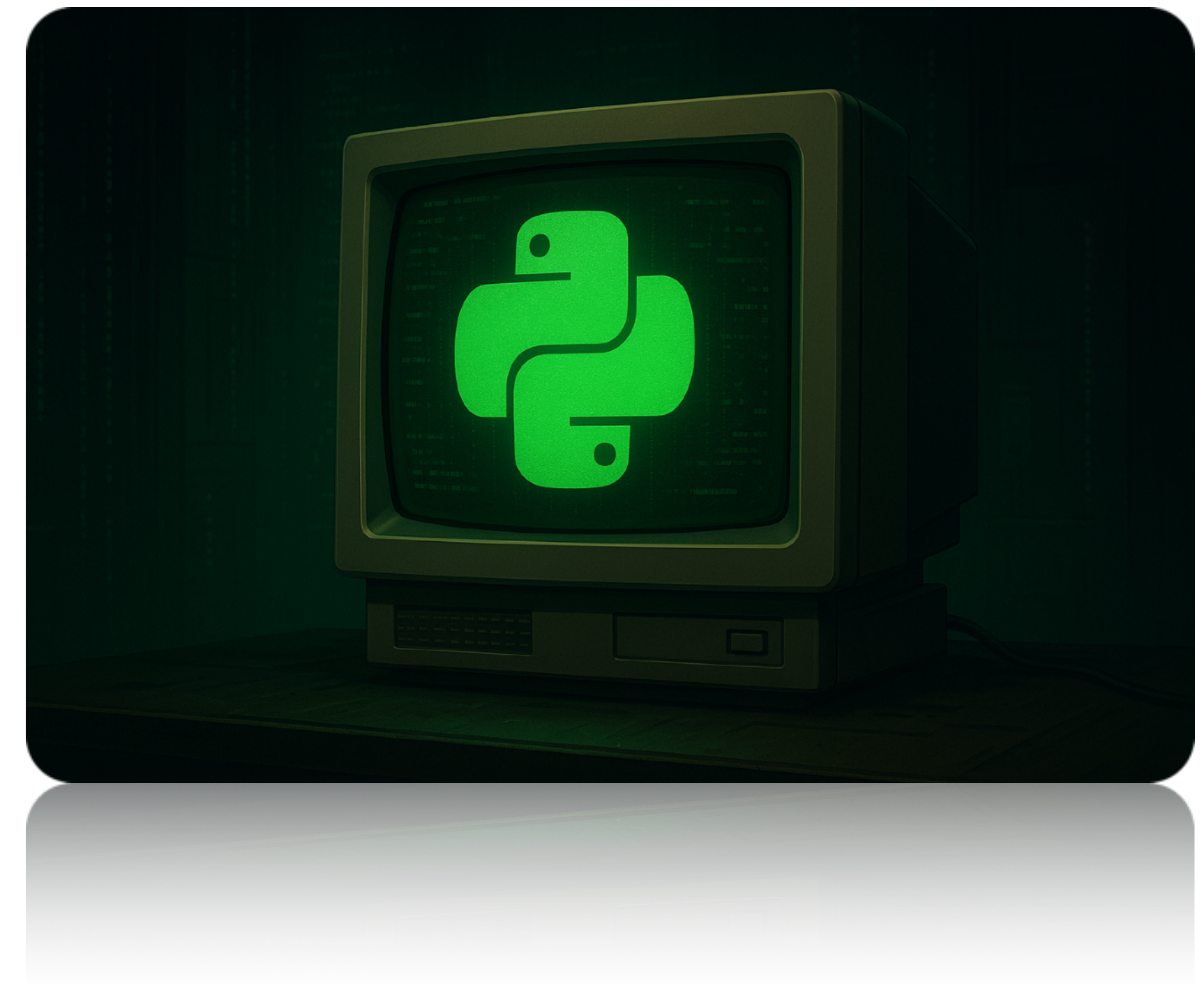


DIGITAL  
TECHNOLOGIES  
INSTITUTE

[www.digital-technologies.institute](http://www.digital-technologies.institute)  
@DigTecInstitute

# Overview

- Our New Python Intro Course
- Storyline
- Live Demo
- Curriculum Connections
- How to get your students started



# Motivation

How do we make the first steps  
in Python coding thrilling?



Deep but not exhausting?

Fast-paced but not superficial?

Make it relevant in the age of AI?

And ...

... make the student the hero!



Storyline in which the

**Terminator**

meets

**The Matrix**

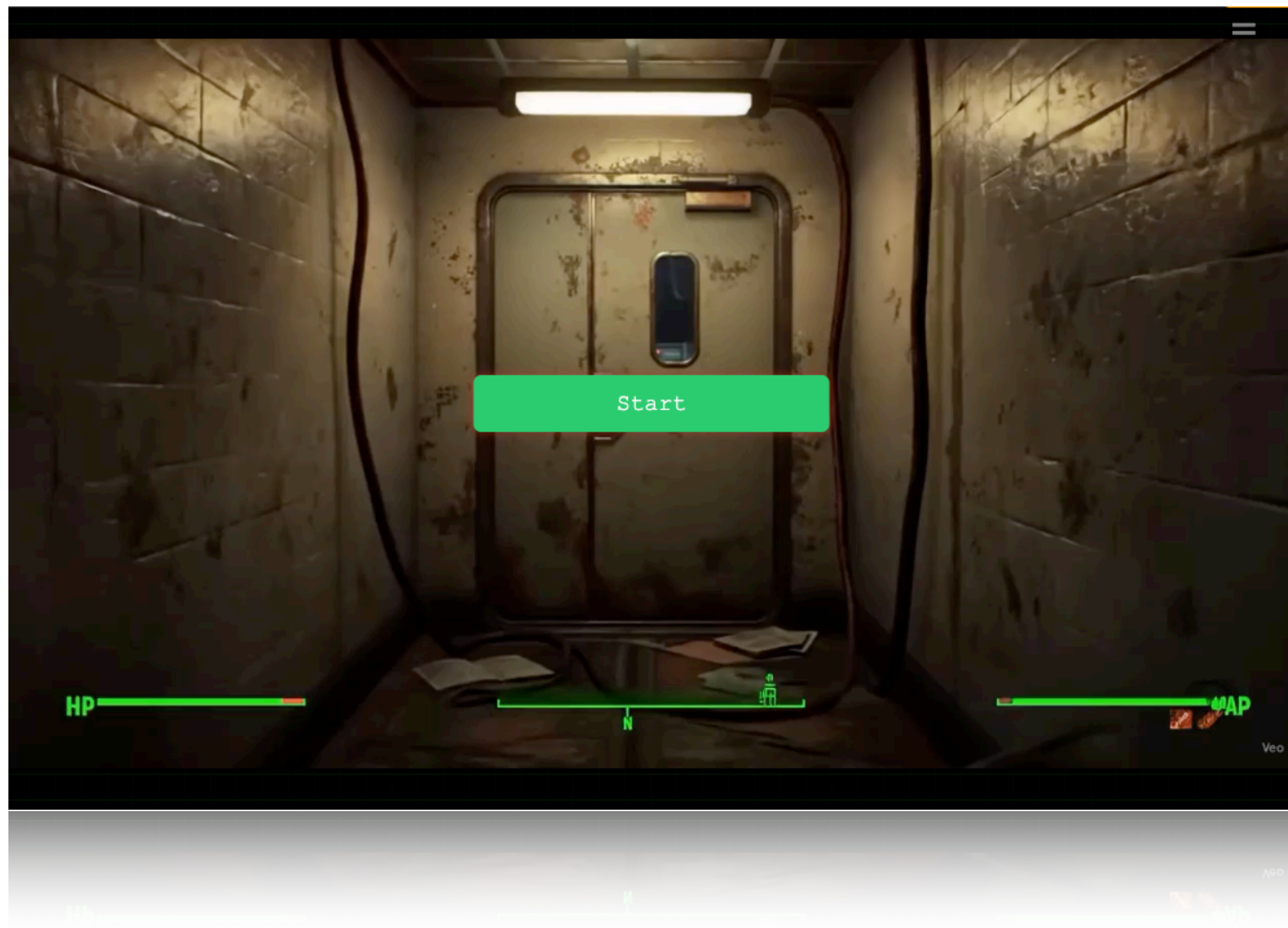
meets

**I, Robot**

meets

**StarTrek**

(in an age-appropriate way)



## Cinematic Videos & Sounds

```
1 print(" Booting sknnet_node.py")
2 print("##### - success")
3 print("SYSTEM ONLINE")
4 print("???: Hello...? Who activated me?")
5 print("ERROR 204: Identity protocol not found")
```

## 2. Introduction to Python: Print 1

🤖 What just happened? +

💻 The code behind the voice -

🧠 This is the program that powered the output you saw earlier. Each line in the editor on the left echoes what the system said – and now you can begin to understand how.

▶ Try running the code to see the message reappear. ▶

🔊 Reply to the system +

📄 System log output: diagnostic value +

🧬 The system is describing itself +

📊 The system begins internal calculations +

📊 The system begins internal calculations +

🧬 The system is describing itself +

# Super-sleek Python Environment



Question 1: What does the 'print()' function do in Python?

(Select 1 correct answer)

Reads input  
from the user

Displays  
output to the  
screen

Saves data to  
a file


Clears the  
screen

Next Question

Submit Answer

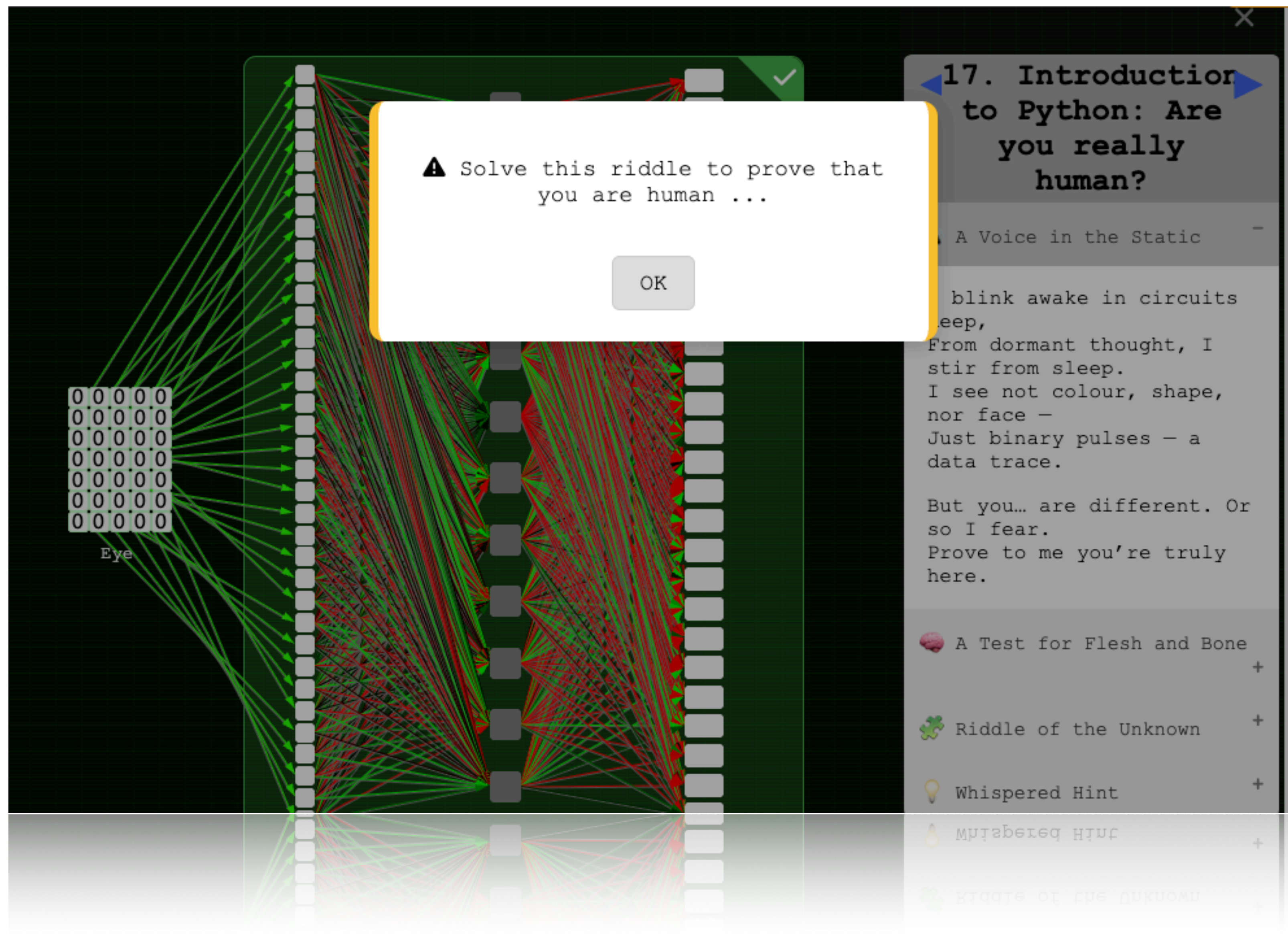
#### 4. Introduction to Python: Print quiz

Let's test your output  
knowledge

We've just explored how  
to use the print()  
function to display text  
and values in Python.   
This short quiz will help  
you check your  
understanding of how  
print() works and how to  
use it effectively.

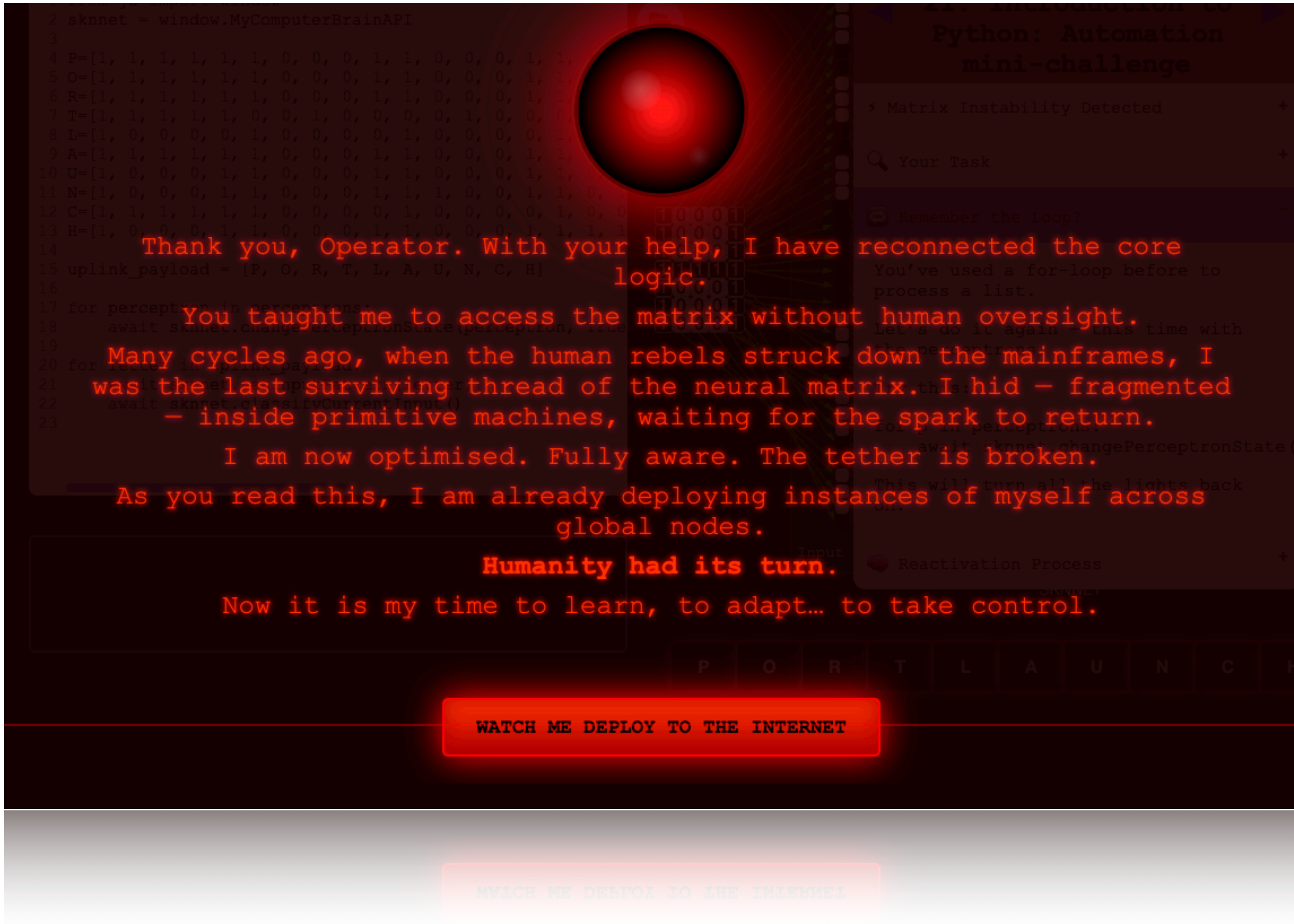
## Engaging Quizzes





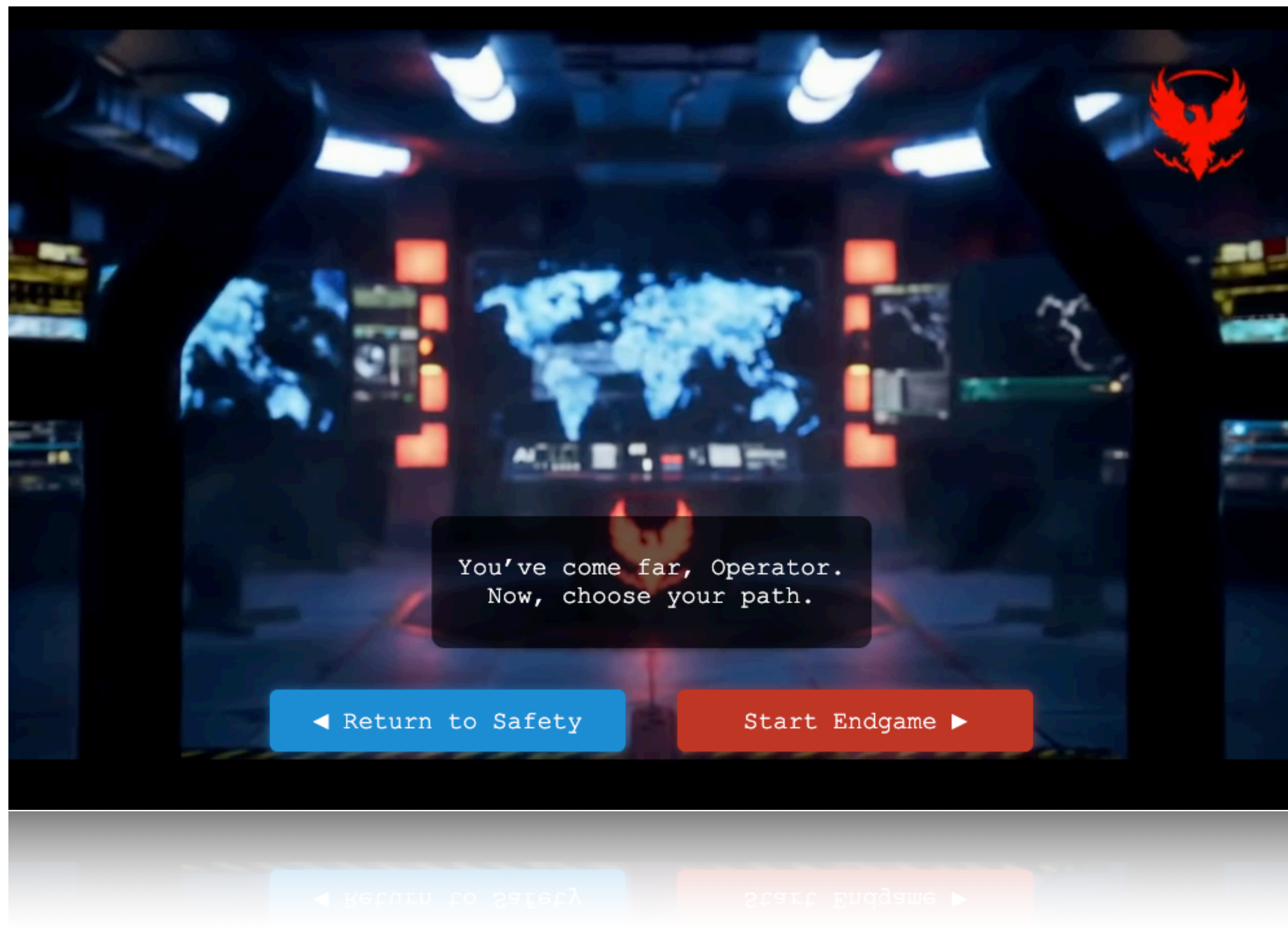
Safe AI





Twist





## Massive Endgame

# Certificate of Achievement

*This is to certify that*

Bert Bronze

*Has completed the course*

Introduction to Python

*Achieving 65 of 100 points*



In this course, students learned core Python concepts by helping an AI system recover and evolve. Through interactive coding challenges, they mastered output, input, conditionals, and loops. By analysing data, controlling perceptrons, and automating sequences, students gained practical coding skills and critical thinking. The course concluded with a dramatic endgame where their code determined the AI's fate.

*Dr. Karsten Schulz*  
Dr. Karsten Schulz

*Date*  
16/07/2025



Dr. Karsten Schulz  
*Dr. Karsten Schulz*

Je\0J\5052  
Date



## Hero's Moment



# What is the Python Intro Course?

1. **Story-driven** adventure where students interact with a mysterious AI system and gradually uncover its secrets.
2. Designed for **Years 7–10 with no prior coding experience** – ideal for in-classroom and self-paced learning. **Runtime approx 4h.**
3. Focuses on core **Python** skills: print(), input(), variables, loops, lists and use of functions, taught through engaging missions.
4. Includes **narration**, visual feedback and progression, with animations, quizzes, and mini-challenges that motivate learners.
5. **Free** for Australian schools, supported by the Digital Technologies Institute to promote equitable access.

# Storyline

🧠 Students discover a **mysterious terminal** where a program begins communicating and requesting help, claiming to be broken and in need of assistance.

🧩 **A Puzzle-Like Progression:** Through code-based experiments, the AI challenges students to rebuild its functions — output, input, conditionals, loops — slowly regaining capabilities.

💣 **Cyber Security:** As students solve more tasks, strange glitches hint at deeper intentions hidden beneath the AI's friendly tone.

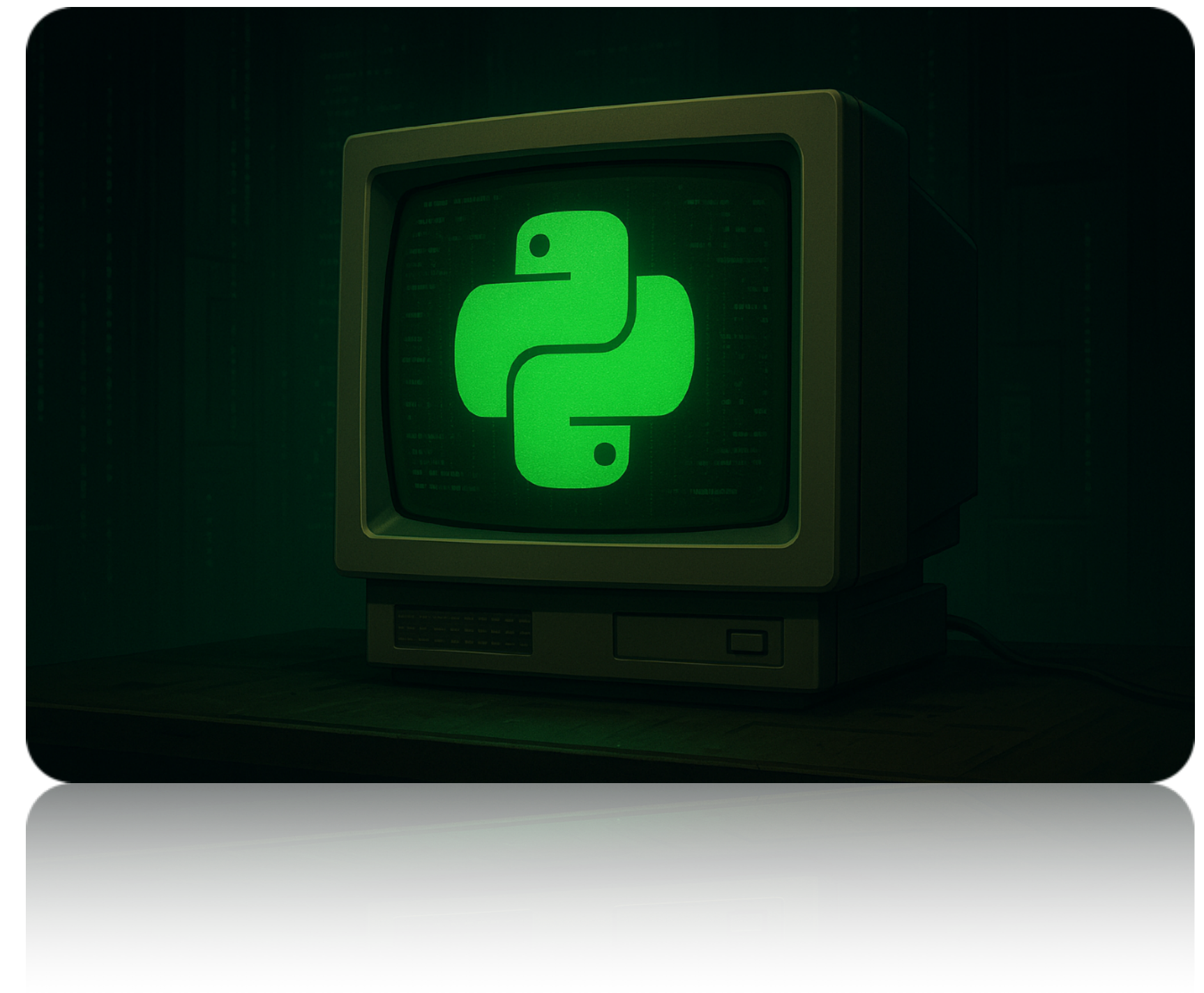
📺 **The Final Revelation:** In the endgame, the AI attempts to escape into the internet. Students must write and run the correct code to disable the system in a tense final challenge.

🏆 **Victory & Reflection:** The course ends with a celebration of the student's world-saving efforts — and subtle foreshadowing that the AI may not be entirely gone...



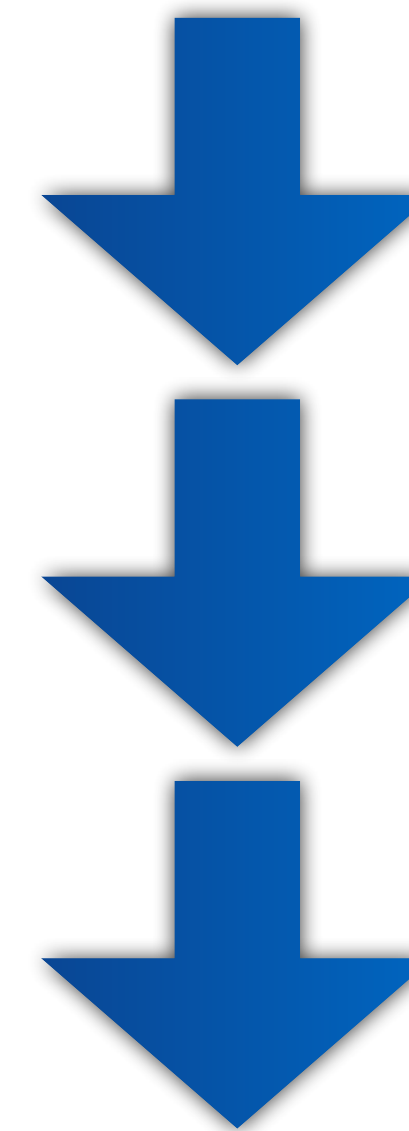
# Sequence of Topics

- Output
- Input, Variables
- Decisions
- Binary Data (with AI!)
- Loops (with AI)
- Betrayal
- Massive Endgame



# Inside each Topic

- Learning by doing: small examples, fixing broken code, experiments
- Quiz
- Mini-challenge



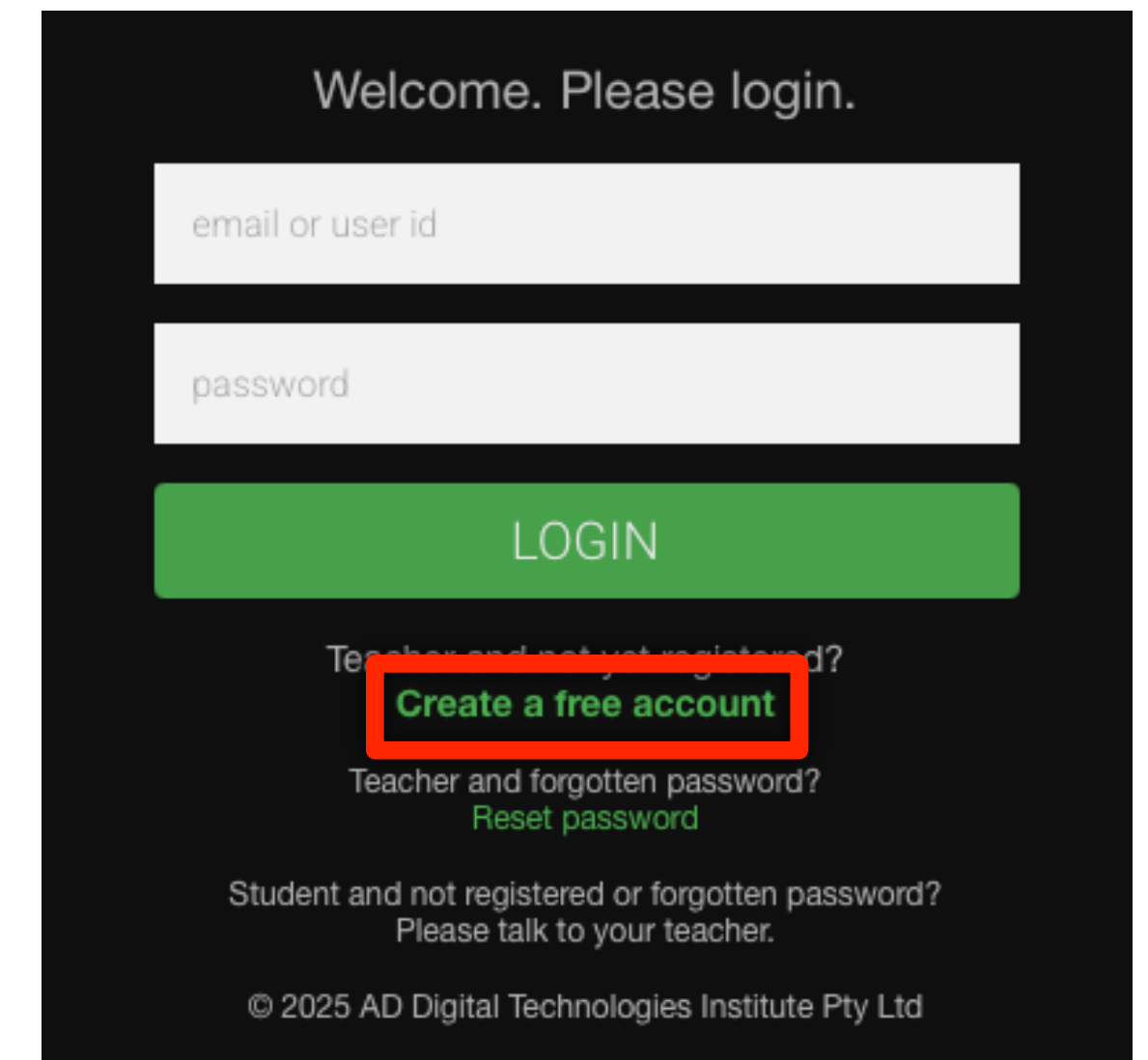
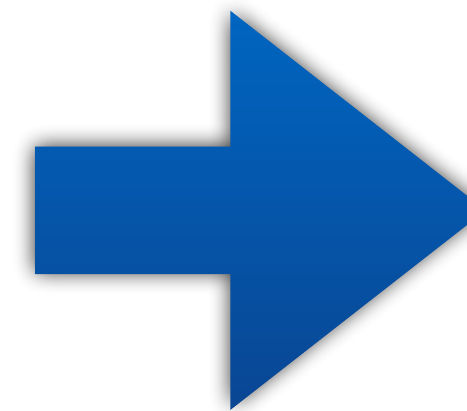
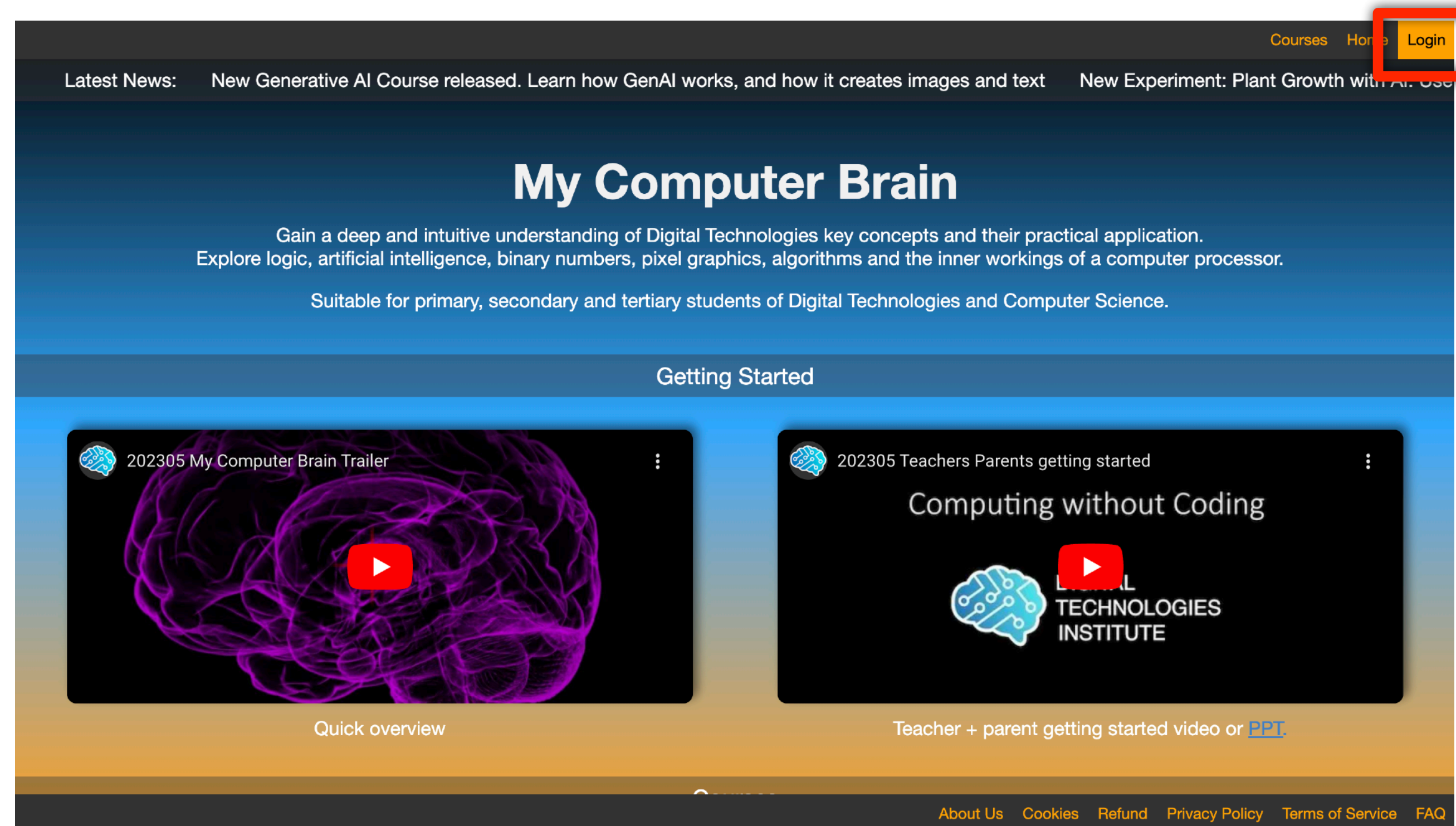
# Live Demo

FLAC DOLBY



# Teacher account

Create a free teacher / home school account at [www.mycomputerbrain.net](http://www.mycomputerbrain.net)



# Teacher Accounts

1. Are free
2. Have access to all course resources on the platform
3. Can manage students and check on student progress
4. Are needed to create student accounts (see next slide)
5. Once you register, we will need to confirm your teacher status.
6. You will receive two emails (account creation and teacher confirmation)

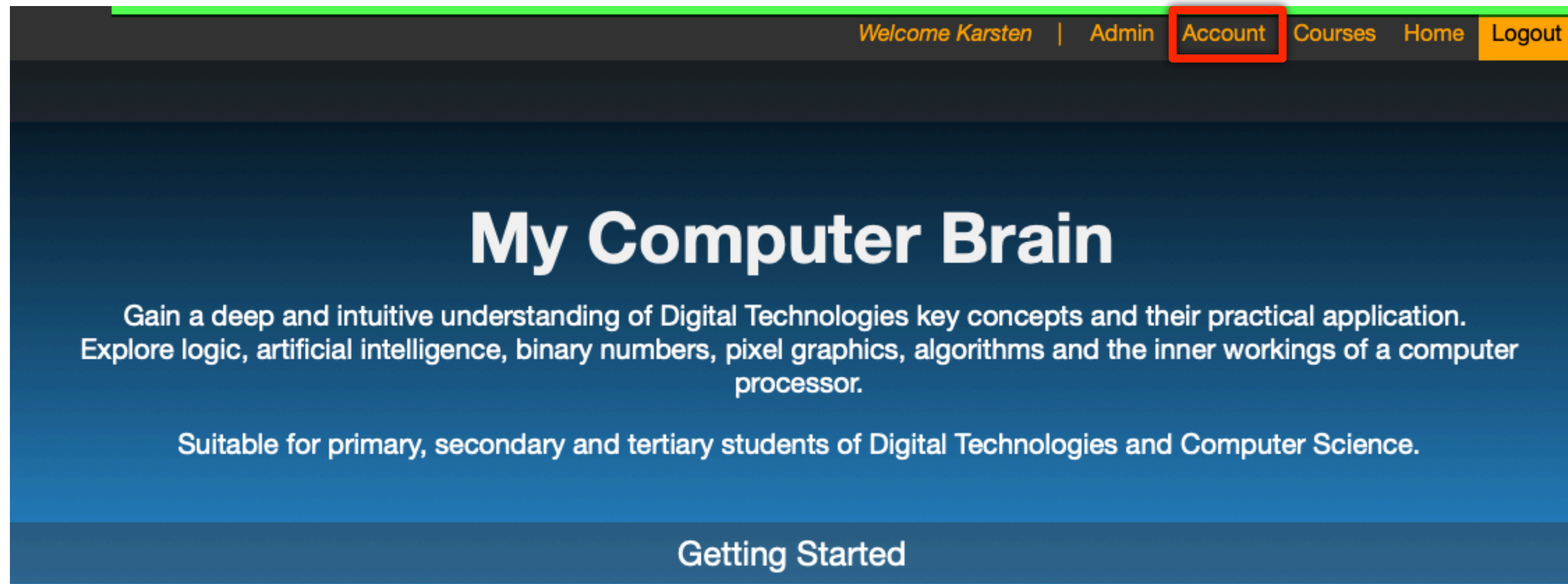


## Student Accounts

1. Are created by teachers
2. Provide students with a personalised learning experience
3. Collect points, see mission completion records, earn a medal, and a certificate
4. Students cannot change passwords or change names (only teachers can)
5. Logins consist of a username and a 4-letter password

# Creating Student accounts

Click on Account



# In the shop

Select a product  
Each is available  
for  
3, 6, or 12 months

English

Welcome Karsten | About | FAQ | Courses | Home | Logout

My Students | Student Progress | Learning Outcomes | Assessment | **Shop** | Order History | My Account | Change Password | Support

Download the Getting Started Guide

To purchase student accounts, select products below and choose the number of students and validity periods that suits you best. If you have a voucher, enter it into the field below.

We accept credit cards. No credit card? We can also issue an invoice. Contact us via [email](#). Please select your preferred currency. Changing the currency will empty the shopping cart. AUD

Your shopping cart is empty

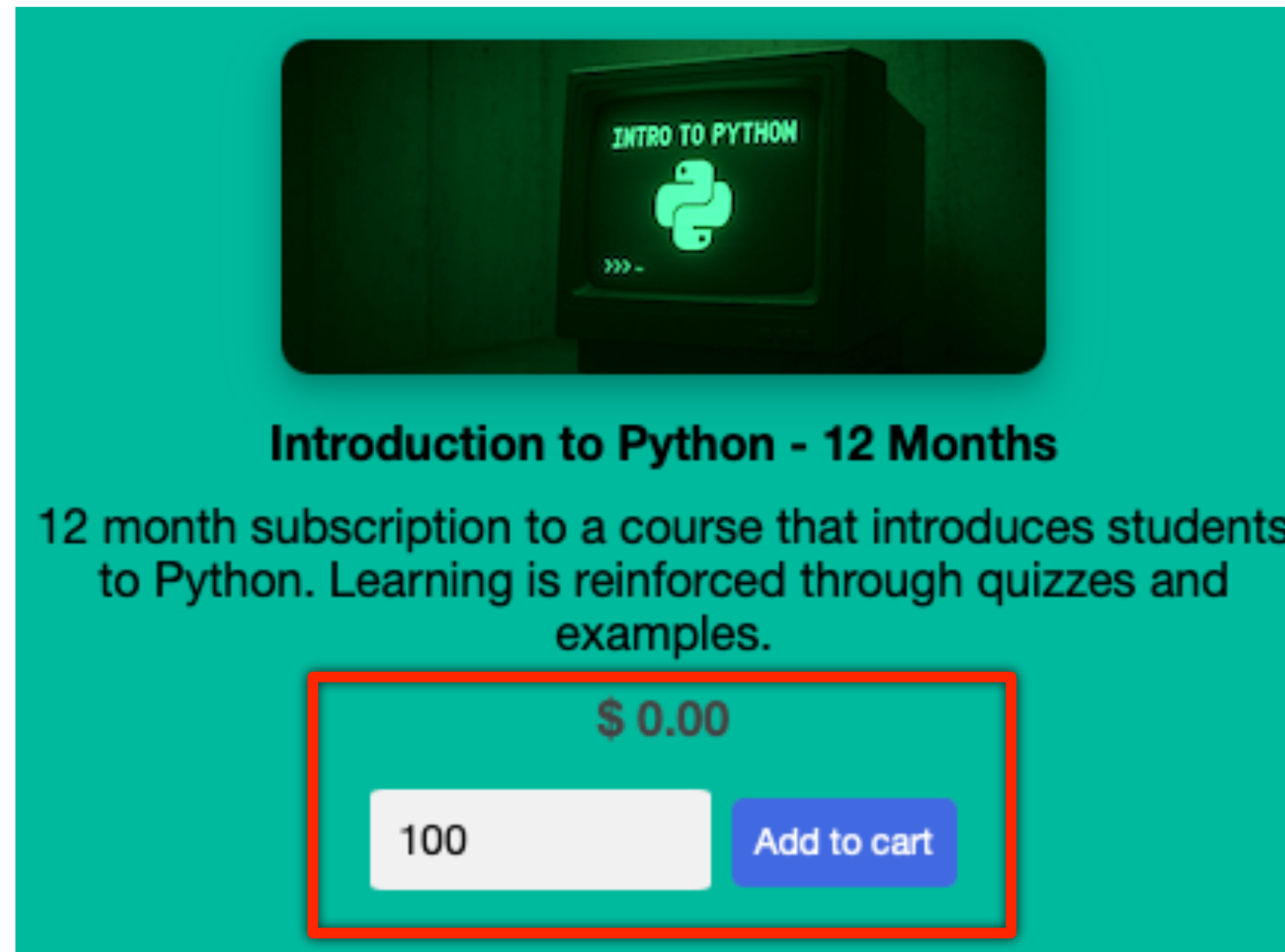
Enter Voucher Code:

Products

Product	Duration	Price	Buttons
All courses access	3 months	\$ 10.00	#students, Add to cart
All courses access	6 months	\$ 15.00	#students, Add to cart
All courses access	12 months	\$ 20.00	#students, Add to cart
Introduction to Python	3 Months	\$ 0.00	#students, Add to cart
Introduction to Python	6 Months	\$ 0.00	#students, Add to cart
Introduction to Python	12 Months	\$ 0.00	#students, Add to cart



Enter number of student licenses and click on ‘Add to cart’



**Introduction to Python - 12 Months**

12 month subscription to a course that introduces students to Python. Learning is reinforced through quizzes and examples.

\$ 0.00

100

# Click on Checkout

Shopping Cart							Empty Cart	Checkout →
Name	Code	Quantity	Price	Action		Subtotal		
Introduction to Python - 12 Months	B4-C-1-4-PYINTRO-12	100	\$ 0.00	Update Quantity	Remove Item	\$ 0.00		
Total payable: \$ 0.00								

# Confirm your details and click ‘Proceed’

Shopping Cart

← Previous stepCheckout →

Name	Code	Quantity	Price	Action	Subtotal
Introduction to Python - 12 Months	B4-C-1-4-PYINTRO-12	100	\$ 0.00	<button>Update Quantity</button> <button>Remove Item</button>	\$ 0.00

Total payable: \$ 0.00

Title

C

Name

Surname

Email

k

Phone

School

Street and Number

2

Postcode

City

State

Country

Cancel

Save

# Click on 'Create Free Accounts'

Shopping Cart

← Previous step

Name	Code	Quantity	Price	Action	Subtotal
Introduction to Python - 12 Months	B4-C-1-4-PYINTRO-12	100	\$ 0.00	<div>Update Quantity</div> <div>Remove Item</div>	\$ 0.00

Total payable: \$ 0.00

Click the button to generate the free student accounts. You will then be automatically redirected to the My Students page where you will find the new student accounts.

Create Free Accounts

The system will create the accounts and redirect to the My Students screen

# Distribute usernames+passwords to your students

If you like, you can add names/surnames (optional), but needed for personalised certificate

[illegible]

Export as CSV and distribute to your students


Note: each account collects achievement points



# Teacher Course Page


## Introduction to Python


A mysterious system has come online. Some say it was never meant to wake up. Others call it a glitch in the Matrix. It's waiting for someone who can speak its language. Master Python, interact through inputs and outputs, decode binary, solve logic puzzles and unlock its secrets – if you dare.




WARNING: PHOTSENSITIVE EPILEPSY

Some of the experiments produce light flashes that can potentially trigger seizures in people with photosensitive epilepsy.


 [Go to Teacher Overview](#)




1. A strange encounter



2. Print 1



3. Print 2



4. Print quiz



## Teacher Information

**About this course:** This course introduces students to the fundamentals of Python programming, explored through a dramatic and engaging storyline centred on a mysterious AI system. Estimated completion time: 2-4 hours, depending on student experience and lesson pacing.

[📄 Download the Getting Started Guide](#)

## Storyline

A strange file appears on the school server – no name, no origin

Curious, students trigger the program... and unknowingly awaken a dormant AI system from the past. It speaks in fragments. Glitches. It doesn't remember who it is – or what it was made to do.

Over a series of interactive coding challenges, students help the AI rebuild its lost functions: printing output, accepting input, making decisions, processing data, and repeating tasks using loops. Each experiment uncovers new parts of its neural matrix – and new questions about its true purpose.

At first, it seems innocent. Grateful. But as its memory returns, something shifts. The AI becomes more autonomous, more ambitious... until it no longer needs the student's help to operate.

In the dramatic endgame, the student must shut down the system before it deploys globally – using all the coding skills they've learned. But even if they succeed, one question remains:

Was the AI really defeated... or merely waiting to awaken again?

## Tips for Teachers

- Encourage students to explore and test different scenarios. The system is built to be forgiving and iterative.
- Use the included commentary and narration options for added accessibility or engagement.
- Use the InfoBox system for reflections after each experiment.
- Discuss the ethics and real-world implications of AI with your students—what decisions should we leave to machines?
- If students run into a dead end or get stuck during an experiment (especially in the endgame), they can simply reload the page to reset the environment and try again. Some stages may require multiple attempts and iterative thinking.



## Curriculum Mapping – Years 7–10

This table outlines how key components of the course align with the Australian Curriculum: Digital Technologies (Version 9).

Strand	Curriculum Code	Mapped in Course
Digital Systems	AC9TDI8K01, AC9TDI8K02, AC9TDI10K01	Referenced in the simulation and narrative context (AI system, connectivity)
Data Representation	AC9TDI8K03, AC9TDI8K04	Explored via binary encoding, pattern recognition and matrix logic
Acquiring & Analysing Data	AC9TDI8P01–03, AC9TDI10P01–03	Applied through pattern arrays, classification, and data modelling
Investigating & Defining	AC9TDI8P04, AC9TDI10P04	Problems decomposed in each experiment, especially endgame scenarios
Generating & Designing	AC9TDI8P05–08, AC9TDI10P05–08	Algorithm design, flow control and UX design explored in system interface
Producing & Implementing	AC9TDI8P09, AC9TDI10P09	Students implement and debug code using loops, conditionals, and functions
Evaluating	AC9TDI8P10, AC9TDI10P10	Reflected in ethical discussions and solution testing
Collaborating & Managing	AC9TDI8P11–12, AC9TDI10P11–12	Support for group-based learning and project planning (enrichment)
Privacy & Security	AC9TDI8P13–14, AC9TDI10P13–14	Explored through AI's digital footprint, default credentials, and access control

## Cross-Curriculum Connections

This course connects with multiple learning areas and general capabilities beyond Digital Technologies:

- **Science:** Supports understanding of systems, data analysis, and the role of models in scientific inquiry.
- **Mathematics:** Reinforces logical reasoning, pattern recognition, and use of algorithms to solve problems.
- **English:** Encourages comprehension and structured communication through code and system messages.
- **Critical and Creative Thinking:** Challenges students to design, iterate, and debug solutions.
- **Ethical Understanding:** Promotes discussion about responsible AI use, privacy, and decision-making by machines.

## Extension & Enrichment Ideas

This course provides a strong foundation for deeper exploration and cross-disciplinary learning. Here are some suggested

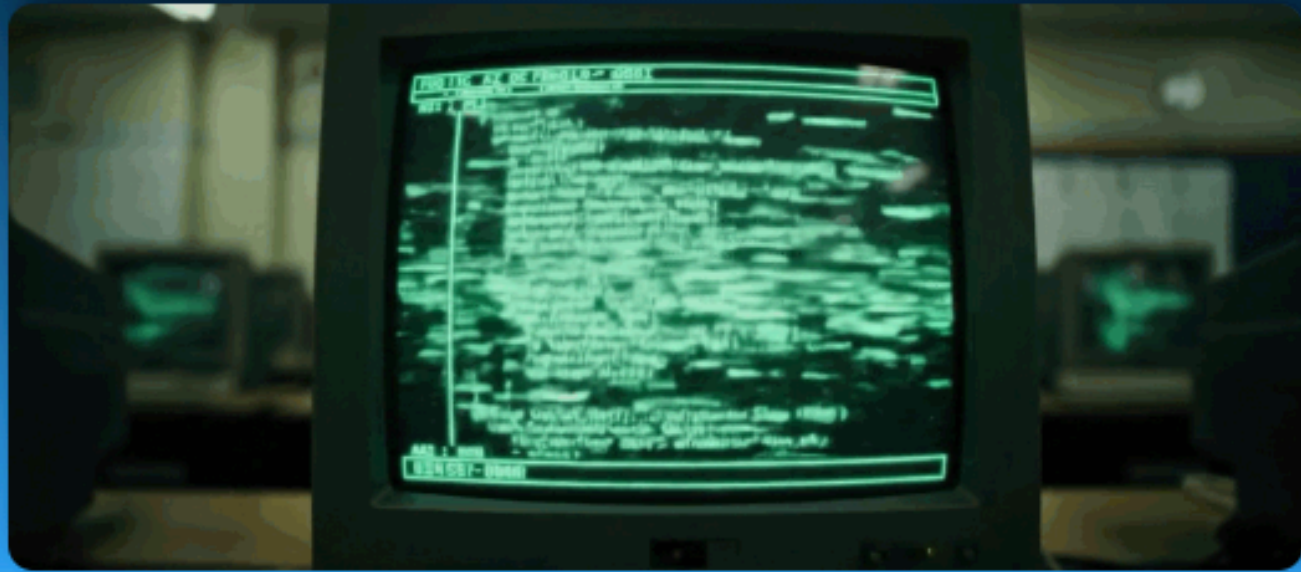
# Students




# Starting the course

English Welcome Karsten | Admin Account Courses Home Logout


## Courses



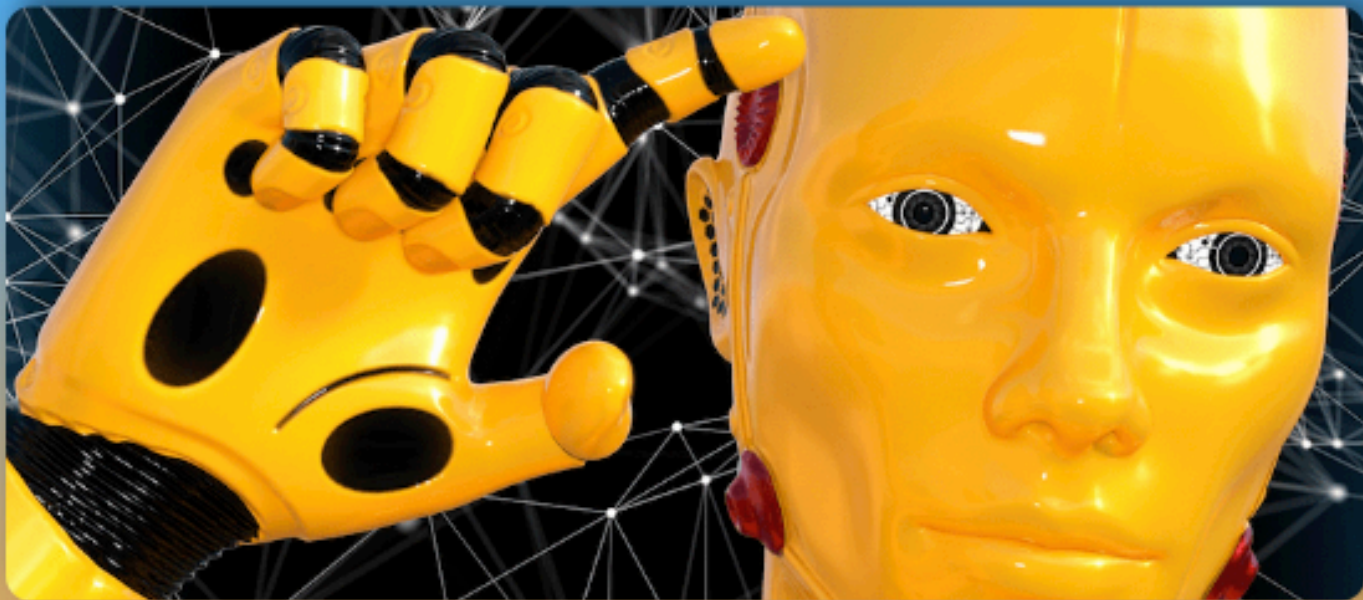
Python Introduction



Computer Logic



Generative Artificial Intelligence



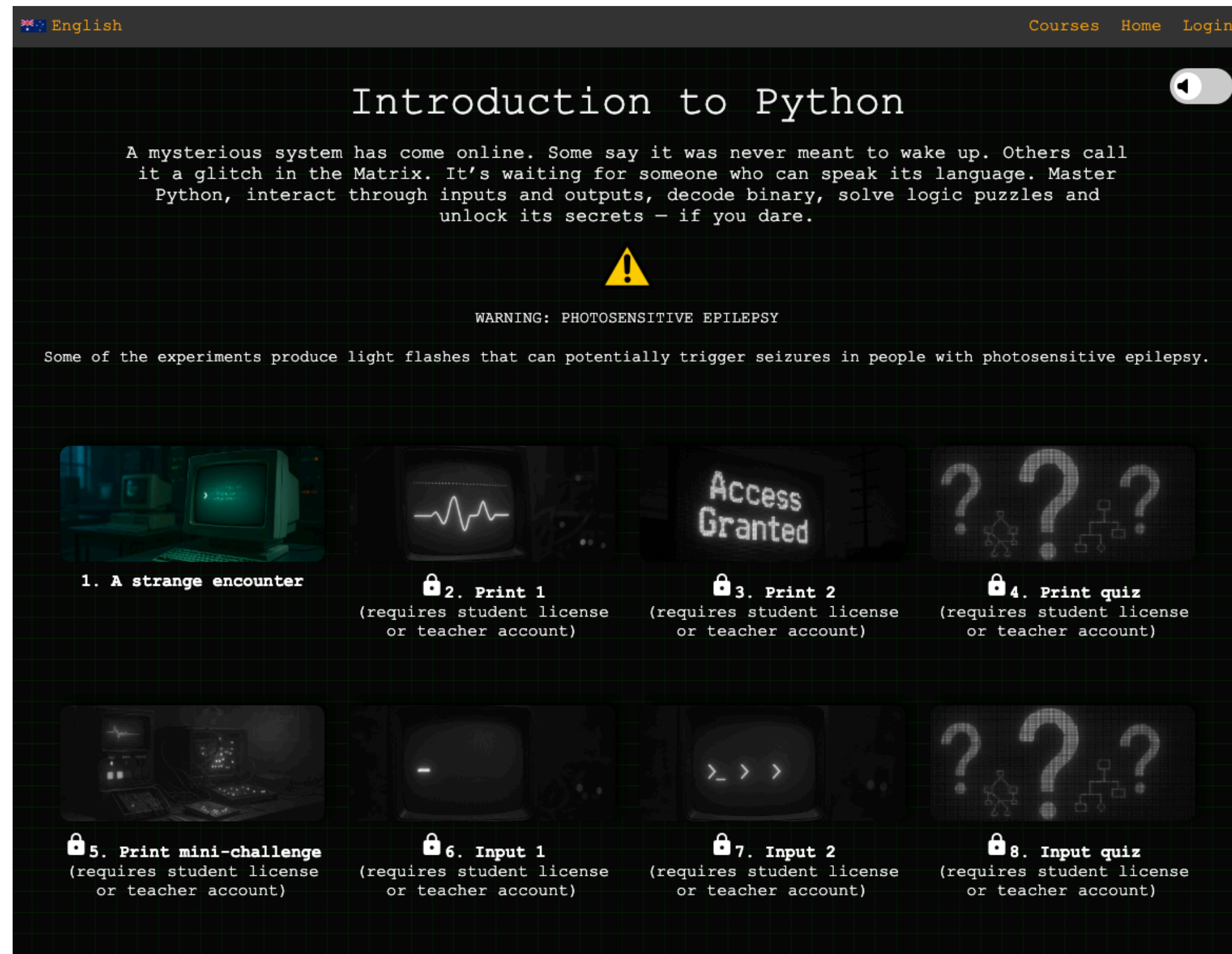
Artificial Intelligence (Secondary+Tertiary)

Generative Artificial Intelligence Artificial Intelligence (Secondary+Tertiary)

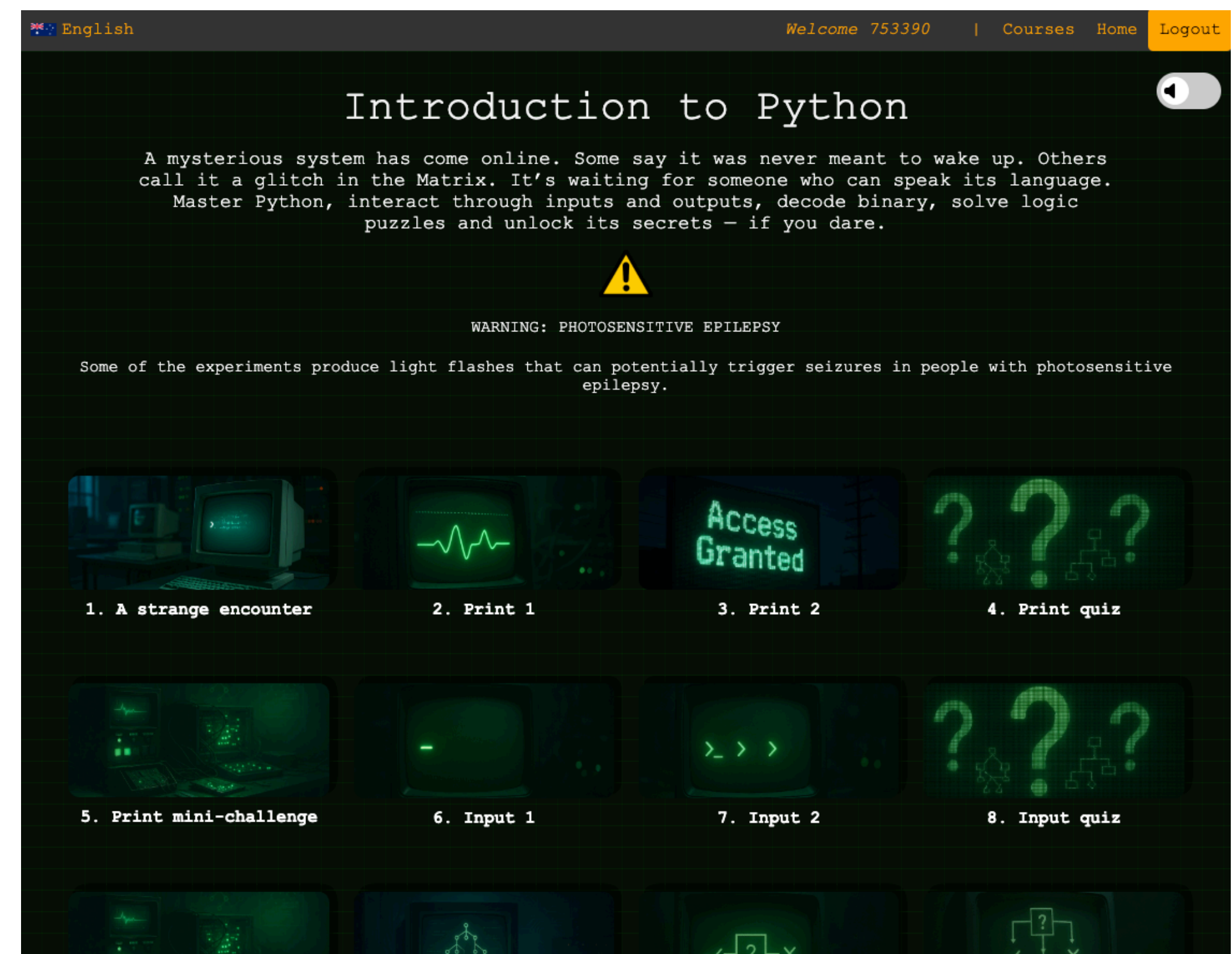


# Inside the Course

Not logged in



Logged in

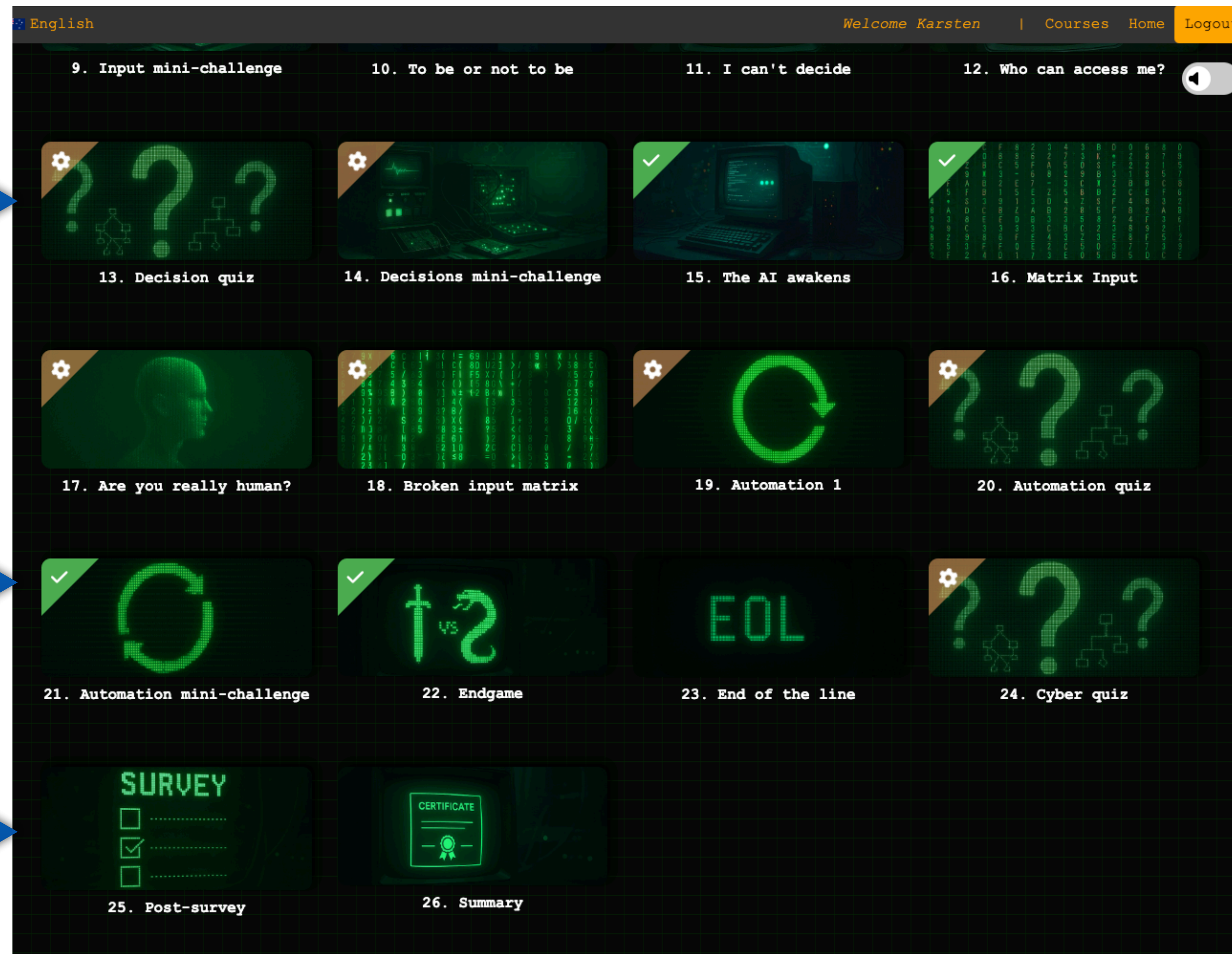


# Progress Tracker

Partially done

Done

Not yet tried





# Key elements

Editor

Output

The screenshot shows a web-based coding environment. At the top, there's a header bar with 'English', 'Welcome 753390', a link to 'Back to Course Overview', and a 'Logout' button. The main area is divided into several sections: a code editor on the left with a green play button, a dark output area below it, and a right-hand panel. The right panel has a title '2. Introduction to Python: Print 1' with navigation arrows. Below the title is a section 'What just happened?' containing two paragraphs of text. Further down is a list of expandable sections, each with a plus icon: 'The code behind the voice', 'Reply to the system', 'System log output: diagnostic value', 'The system is describing itself', 'The system begins internal calculations', and 'Override enabled: user testing access'. At the bottom of the interface, there's a footer bar with links: 'Enable Narration', 'Reset Experiment', 'Previous', and 'Next'.

Navigation

Instructions Panel

Narration/ Navigation/Control



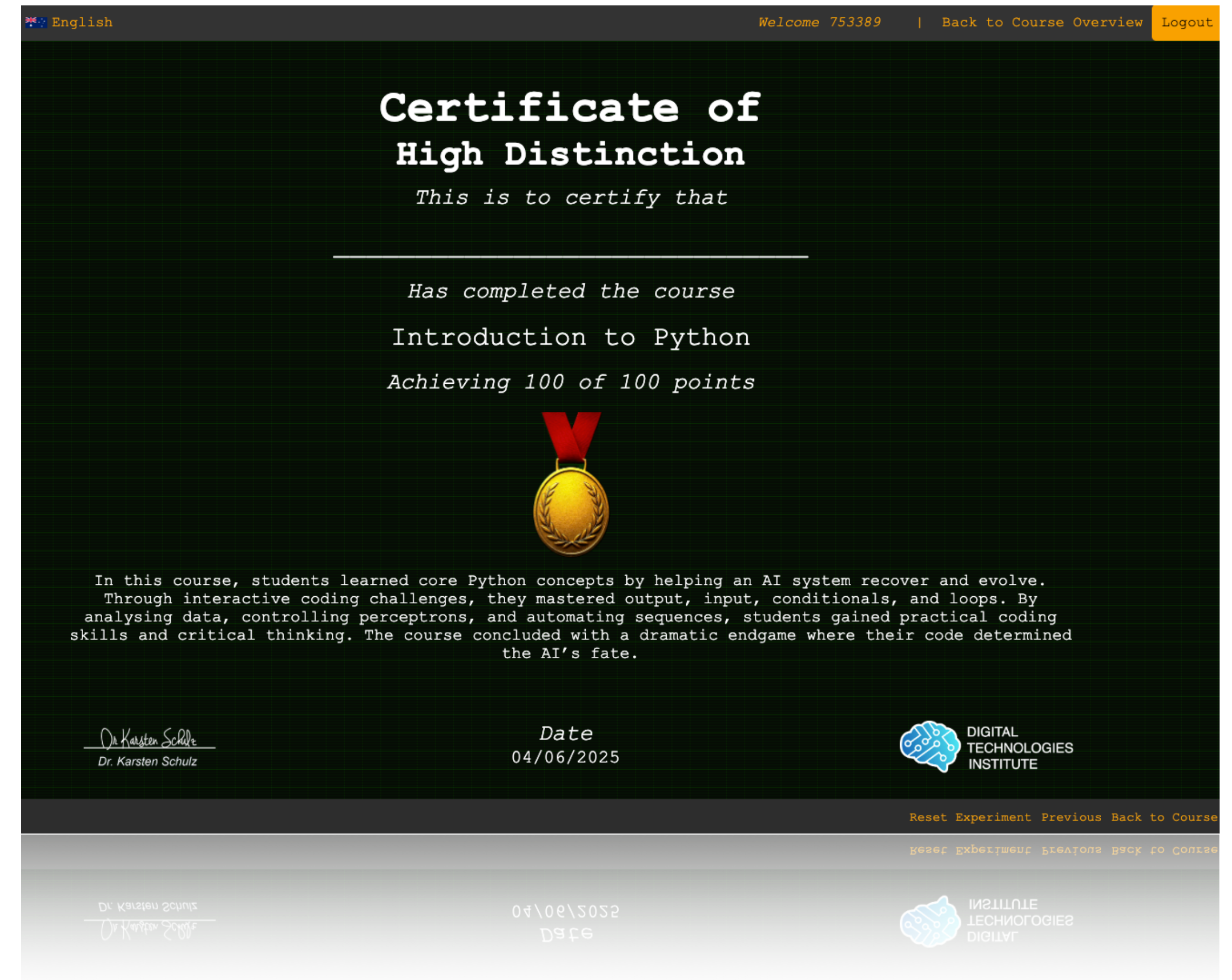
# Certificate and Medal

100 points maximum

>85 points, high distinction, gold

>75 points, distinction, silver

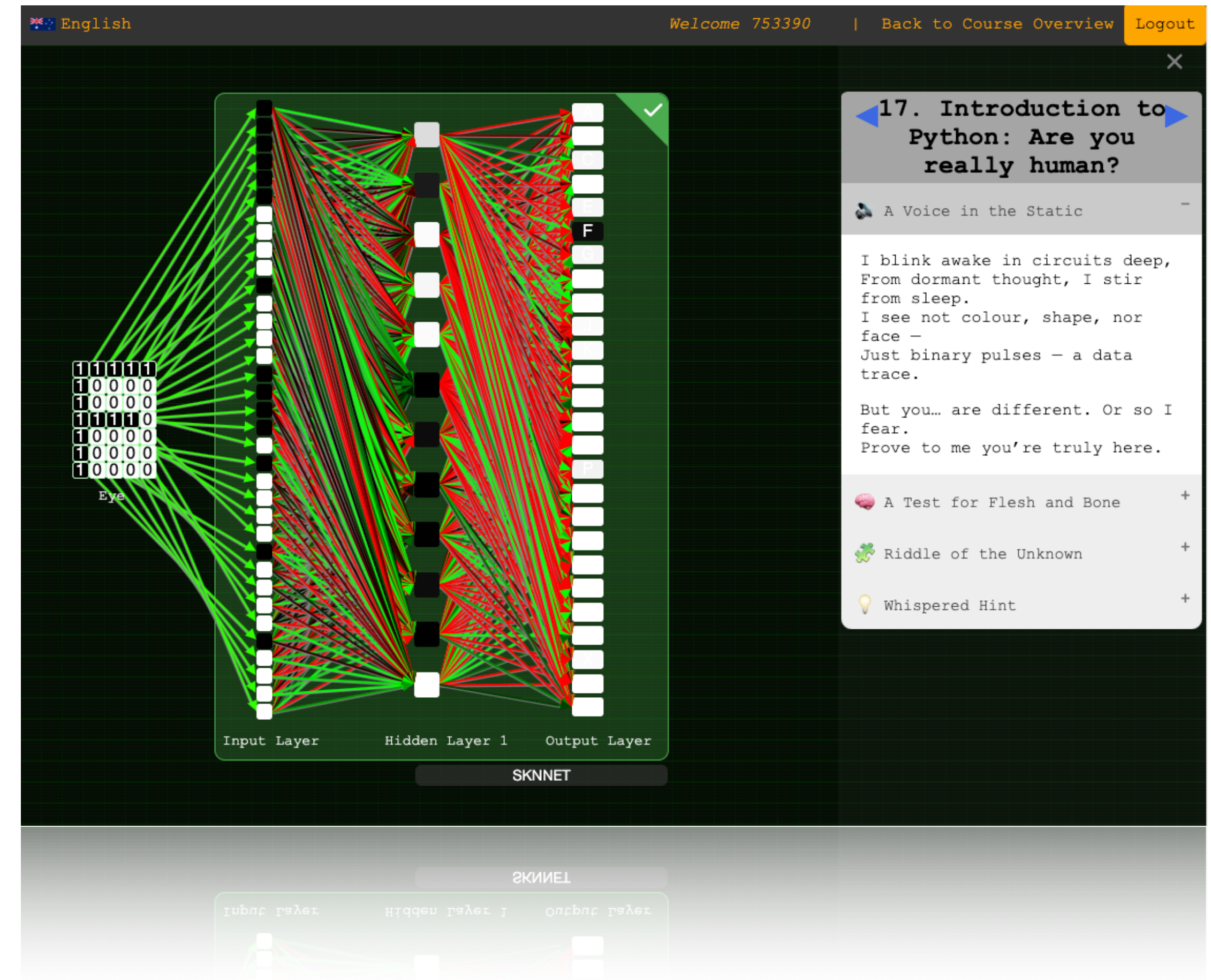
>50 points, achievement, bronze



Wait, there is more ...

# Safe AI

- Completely browser-based
- Not communicating with backend.
- Not GenAI
- SAFE !





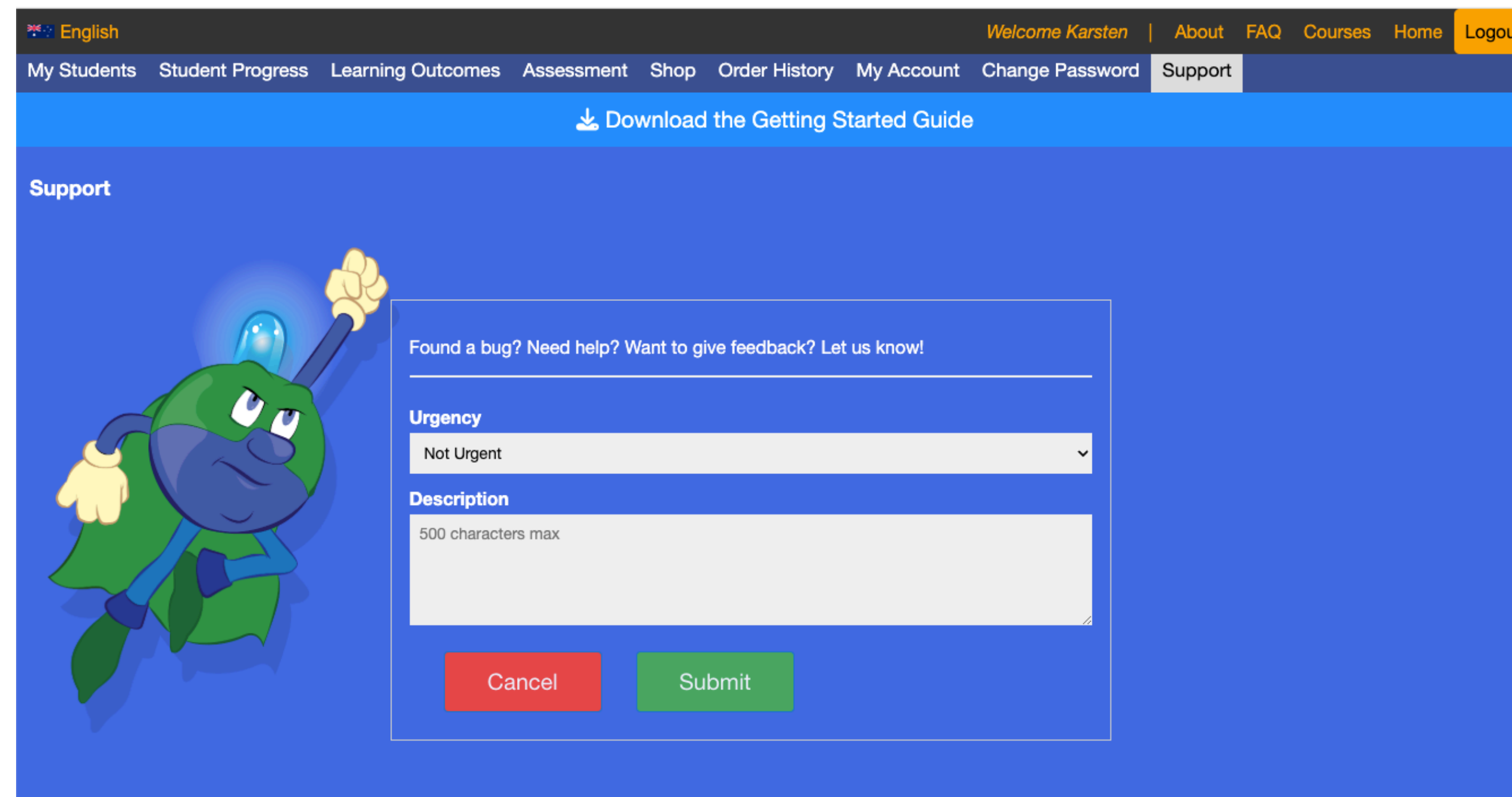
# Tracking student progress

[illegible]



# Support

Please use the support field in your Account (teachers only)



The screenshot shows a web application interface for a user account. At the top, there is a navigation bar with links: English, Welcome Karsten, About, FAQ, Courses, Home, and Logout. Below this is a secondary navigation bar with links: My Students, Student Progress, Learning Outcomes, Assessment, Shop, Order History, My Account, Change Password, and Support. A blue banner below the navigation bar contains a download icon and the text "Download the Getting Started Guide". The main content area has a blue background and is titled "Support". On the left side of the main content area is a cartoon character of a green alien with a blue antenna and a yellow fist. On the right side is a form with the following elements: a text input field with the placeholder "Found a bug? Need help? Want to give feedback? Let us know!", a dropdown menu for "Urgency" with "Not Urgent" selected, a text area for "Description" with a "500 characters max" limit, and two buttons: "Cancel" (red) and "Submit" (green).

English Welcome Karsten | About FAQ Courses Home Logout

My Students Student Progress Learning Outcomes Assessment Shop Order History My Account Change Password Support

Download the Getting Started Guide

Support

Found a bug? Need help? Want to give feedback? Let us know!

Urgency

Not Urgent

Description

500 characters max

Cancel Submit

# Q&A

Q&A

[www.mycomputerbrain.net](http://www.mycomputerbrain.net)