



FOCUS LEARNING

INSPIRE. ENGAGE. **EMPOWER.**

Python Object Oriented programming

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What have we covered so far?

- ▶ If statements
- ▶ Data types (Strings, int, floats and Boolean)
- ▶ List and dictionaries
- ▶ List comprehension
- ▶ Sets and tuples
- ▶ Set operations (union, intersection and difference)
- ▶ Processing (Basics, colors, text, shapes, user interactions and animations)
- ▶ Functions and default parameters
- ▶ Basics of OOP (Creating a Class, constructors, attributes and methods)
- ▶ Using OOP principals to program a real-world object

What to expect for the remainder of the term

- ▶ There will be 5 more classes after today
- ▶ Special method when creating Classes (such as `__len__` and `__str__`)
- ▶ Working with multiple Classes and organizing them into separate files
- ▶ Inheritance, encapsulation, polymorphism and abstraction
- ▶ Farm animals project (simulate an active farm where animals can move and eat using OOP principals)

Plans for the winter/spring term

- ▶ Further development knowledge of OOP by working on harder but more interesting projects
- ▶ Term 2 will be heavily focused on applying what was covered in term 1 to a variety of different projects.
- ▶ Apply OOP principals to animation, user interactions, sounds and images for video game objects
- ▶ Work on video game projects (the games that students will create are still to be determined)
- ▶ Work on a variety of different projects such as creating an alarm clock, edge detection, motion detection and green screens. We will not work on all these projects due to time constraints.

Final takeaways and Q&A



I HOPE EVERYONE IS ENJOYING THE
COURSE AND IS EXCITED TO
CONTINUE



THIS COURSE CAN BE HARD AT TIMES
BUT IS EXTREMELY REWARDING IF
YOU PUT IN THE EFFORT



DOES ANYBODY HAVE ANY
QUESTIONS?