Advanced Python Programming Course

Lecture 6.

OOP in Python: Inheritance

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Inheritance

- Inheritance is a common practice (in object programming) of **passing attributes and methods from the superclass (defined and existing) to a newly created class, called the subclass**.
- In other words, inheritance is **a way of building a new class, not from scratch, but by using an already defined set of feature**. The new class inherits (and this is the key) all the already existing equipment, but is able to add some new ones if needed.
- Thanks to that, it's possible to **build more specialized (more concrete) classes** using some sets of predefined general rules and behaviors.

Inheritance

- **Parent class** is the class being inherited from, also called **base** class.
- **Child class** is the class that inherits from another class, also called **derived** class or **subclass**.
- This is useful because we can create a subclasses and get all the functionality from a parent class. Also we can **override** or add a complitely new functionality without affecting a parent class.

Creating

```
class ParentClass:
    # Parent class methods and attributes

class ChildClass(ParentClass):
    # Child class methods and attributes
```

SOLID principles

https://medium.com/backticks-tildes/the-s-o-l-i-d-principles-in-pictures-b34ce2f1e898