OBJECT ORIENTED PROGRAMMING (OOP)

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Object Oriented Programming (OOP) is programming paradigm and is based on classes, objects, attributes and methods.

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Object Oriented Programming is an approach for modeling concret real-world objects.

OOP allows programmers to create their own real-world data types

OBJECT ORIENTED PROGRAMMING (OOP)

A class is a kind of a data type, just like a string, integer or list.

A class is a factory for creating objects.

Person class

Object (instance):

Attributes:

- name, age, address, salary

Methods:

- walking, talking, breathing, running

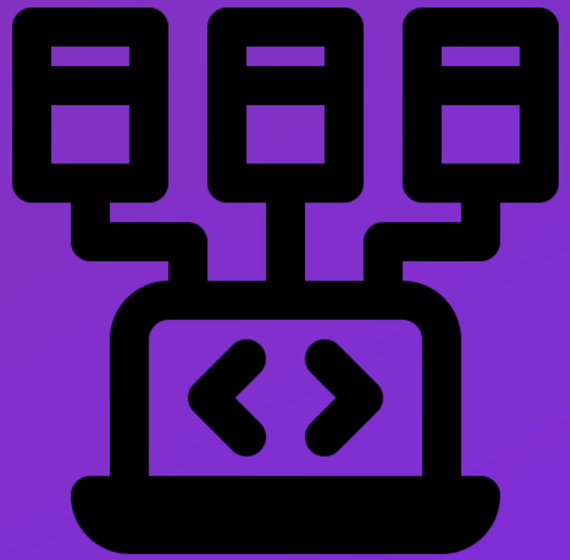
OOP doesn’t allow us to do anything we couldn't do without OOP.

OOP allows us to structure our code in a human way of thinking.

Abstraction vs Encapsulation.

Abstraction is a key concept in OOP, and its goal is to handle complexity by hiding unnecessary details from the user.

Encapsulation is a mechanism of binding attributes and methods together as a single unit.
Encapsulation is also known as **data hiding**.



THE CLASS DESTRUCTOR (FINALIZER)

A destructor is a special function (__del__()) that is automatically called when the lifetime of an object ends.

The purpose of the destructor is to free the resources that the object may have acquired during its lifetime.

THE CLASS DESTRUCTOR (FINALIZER)

In Python, destructors aka finalizers are less used, because Python has a garbage collector that handles memory management.

MAGIC METHODS

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They are special or magic because you don't have to call them directly. The invocation is automatically done by the Python interpreter behind the scenes.

CONGRATULATIONS!!