# Not just **DRY**: Write Reusable Code

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(Intricate thinking – Solutions)

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- I am a problem analyzer and solutions "profferer".
- Python Enthusiast

#### What is **DRY**?

- DRY is an acronym for Don't Repeat Yourself
- It is a Principle\* of Software Development (i.e. it is not a convention or a paradigm)
- It states that,
  - "Every piece of knowledge must have a single, unambiguous, authoritative representation within a system"\*\*

### Reusable Code - OOP Concepts

- Object Oriented programming is an approach to programming focused on representations of real life objects and data with code.\*\*
- The major aim is to focus on the data and objects the program is meant to represent and manipulate. Thus, a single representation of the object is codified into a class
- OOP introduces abstraction\* limiting the scope of the problem and encapsulation\* hiding the granular implementation. These two form the building blocks of reusable code.

#### Abstraction

- Representation of the Object: define abilities (methods) of objects and the descriptors (properties) of the object
- Ignoring those properties/methods of an object that is outside the scope of the problem to be solved
- It is a representation of the limitedness of the scope of an object posed by a problem
- Answers "What do I need to represent my object"

## Encapsulation

- Hiding complexity, provide interface, bundle data with objects
- Answers how hides how and present unified interface for interacting and manipulation of objects

## Putting it all together

- Understand the problem to be solved
- Identify Objects to be created
- Create Object Abstractions
- Implement Object methods
- Selectively expose Object methods
- Write Code with Simplicity > Consistency > Completeness
   This will encourage simple extension of current codebase to reach completion.

## Thanks for listening

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