

**Lecture**

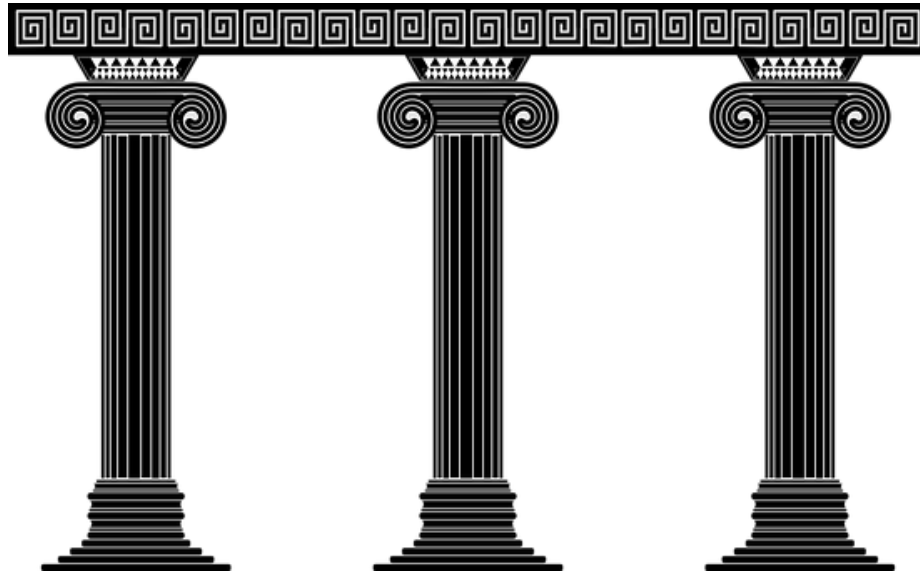
# **Abstraction**





Abstraction

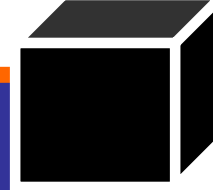
# Abstraction





## Abstraction

# Abstraction



The **interface** should be **independent** of the **implementation**.



## Abstraction

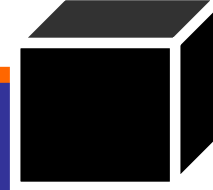
# Component

- **Interface**
  - User's view
- **Implementation**
  - Developer's view



## Abstraction

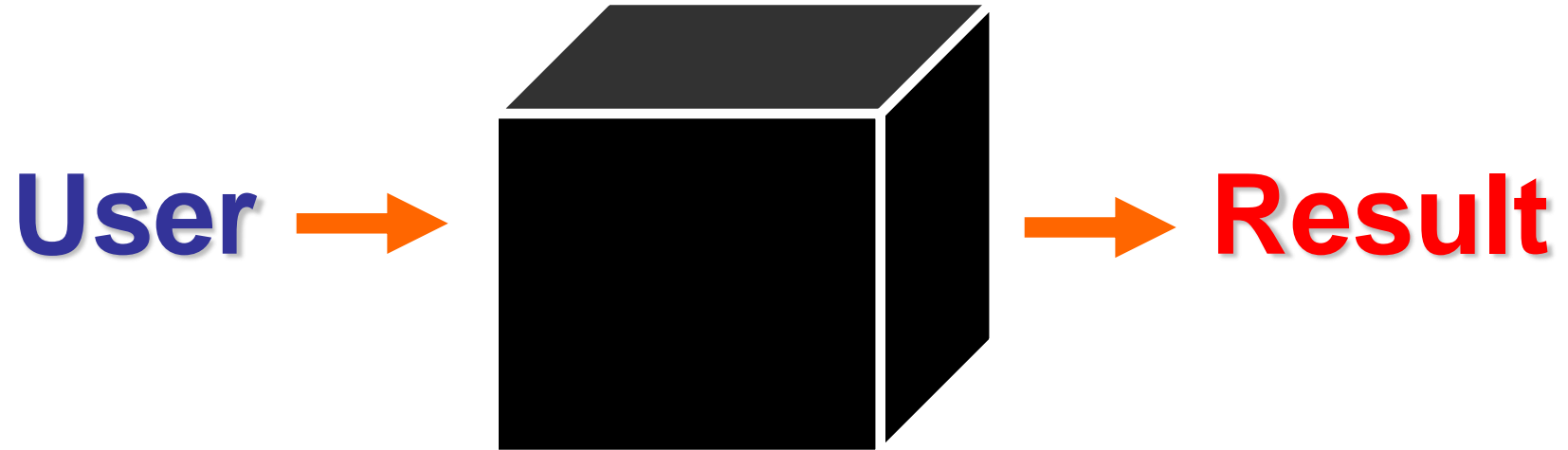
# Abstraction



The **interface** should be **independent** of the **implementation**.

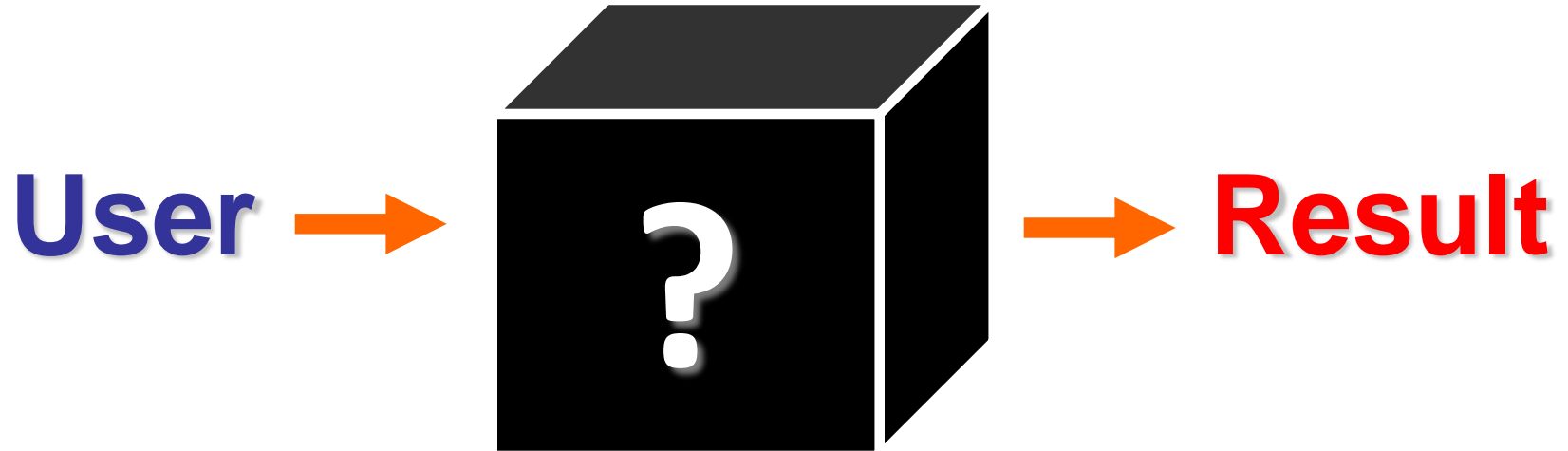


## Abstraction



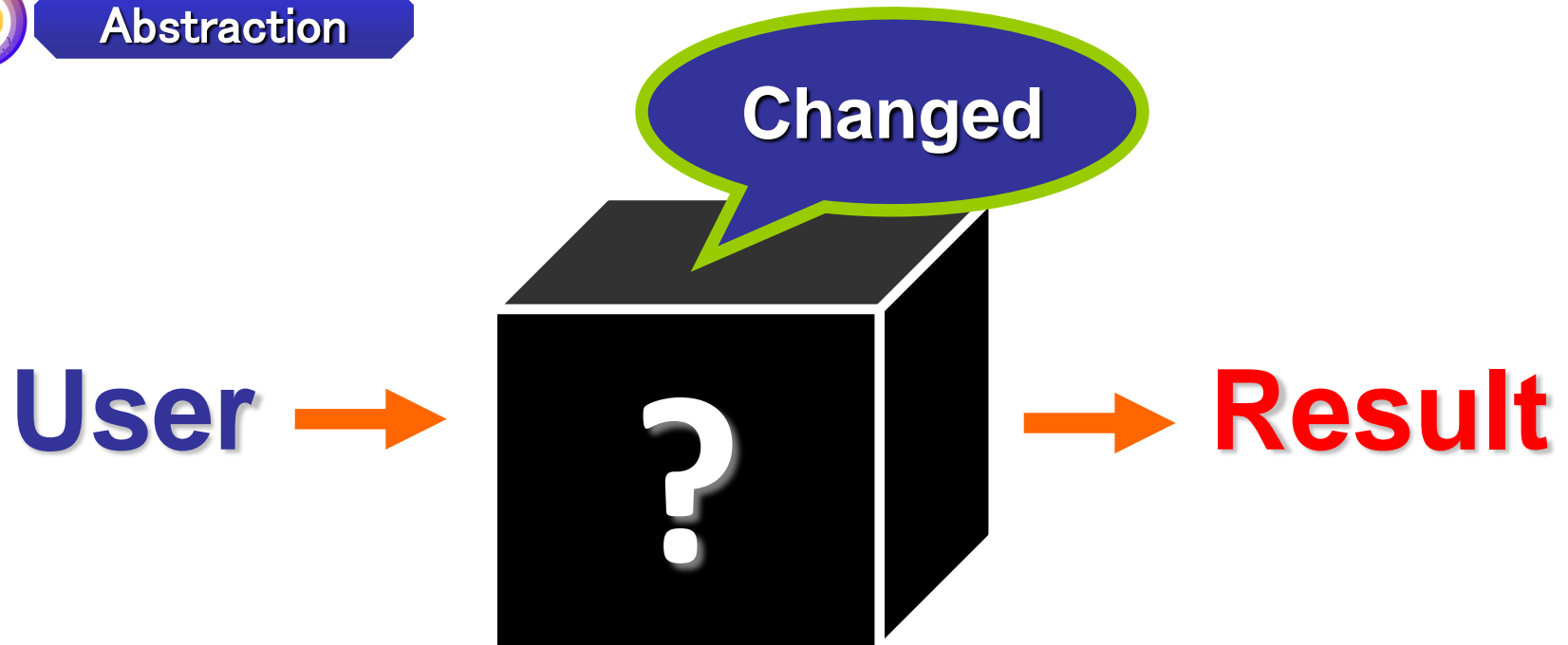


## Abstraction





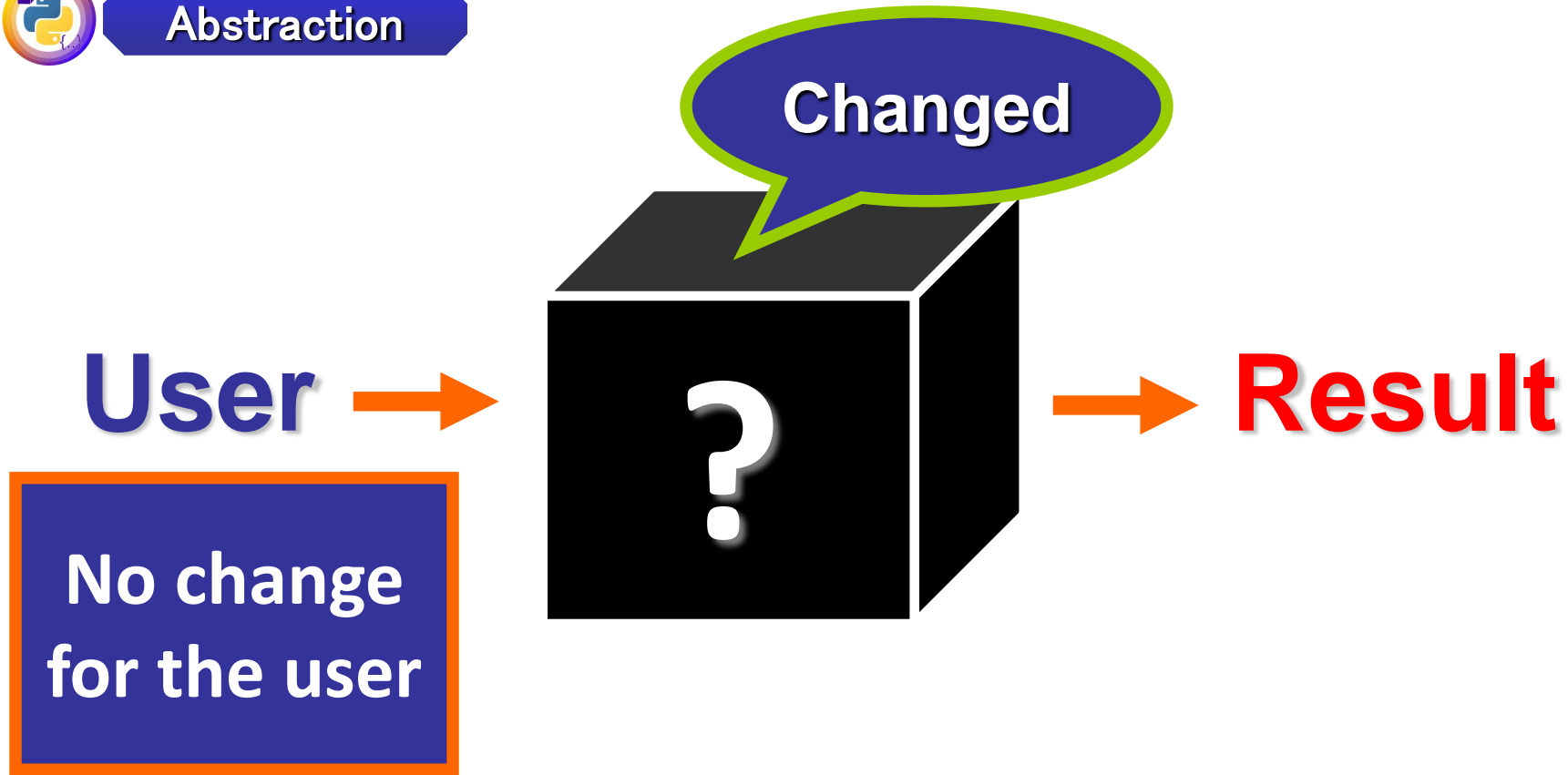
## Abstraction







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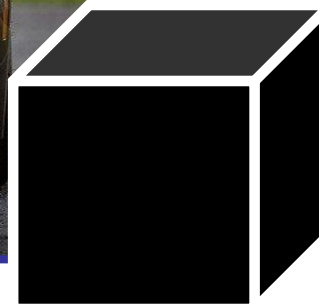


## Abstraction



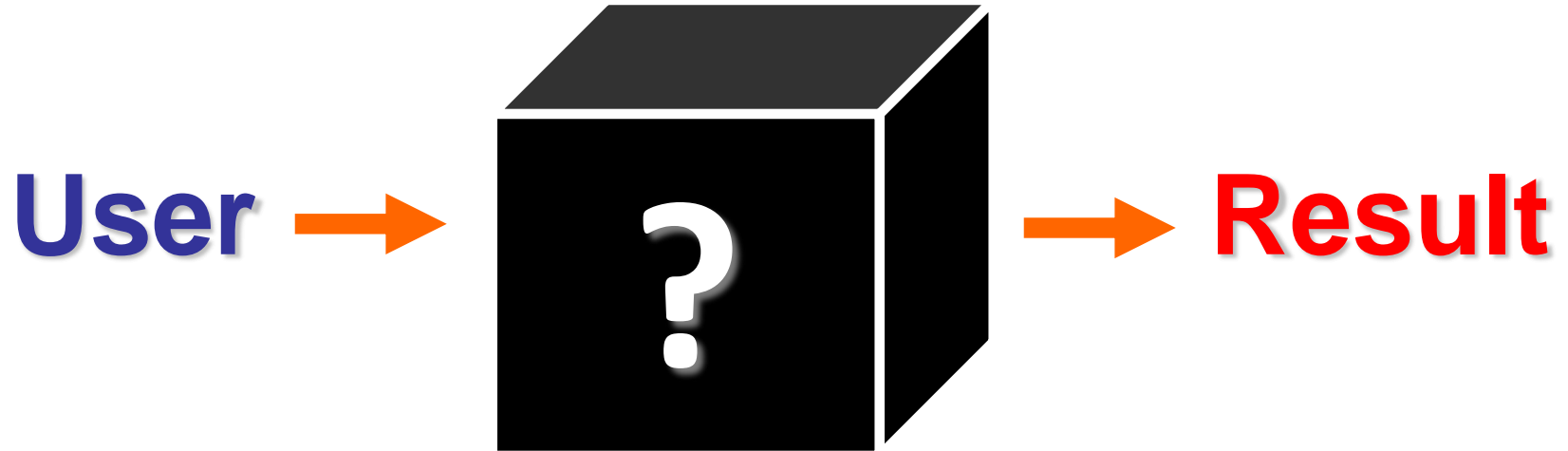


## Abstraction



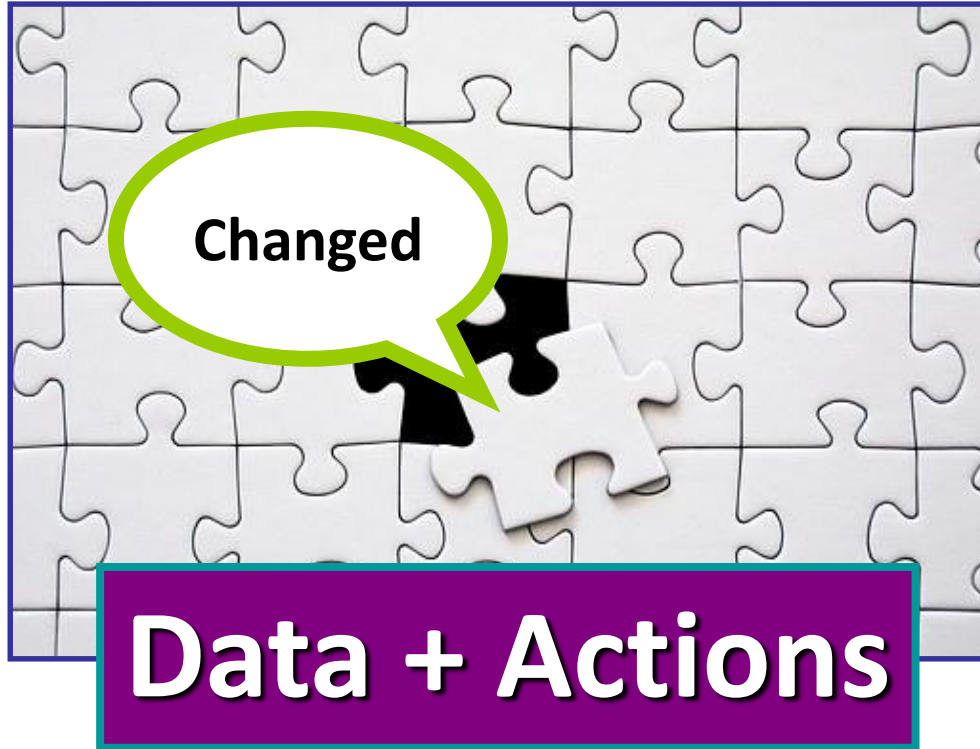


## Abstraction





## Abstraction



**Data + Actions**



## Abstraction



# Data + Actions



## Abstraction



# Data + Actions





## Abstraction



# Data + Actions





## Abstraction

# Abstraction



**Abstracting** out common parts of the code to avoid repetition.



## Abstraction



Poodle

Class



Schnauzer

Class



## Abstraction



Poodle



Schnauzer

**Class**

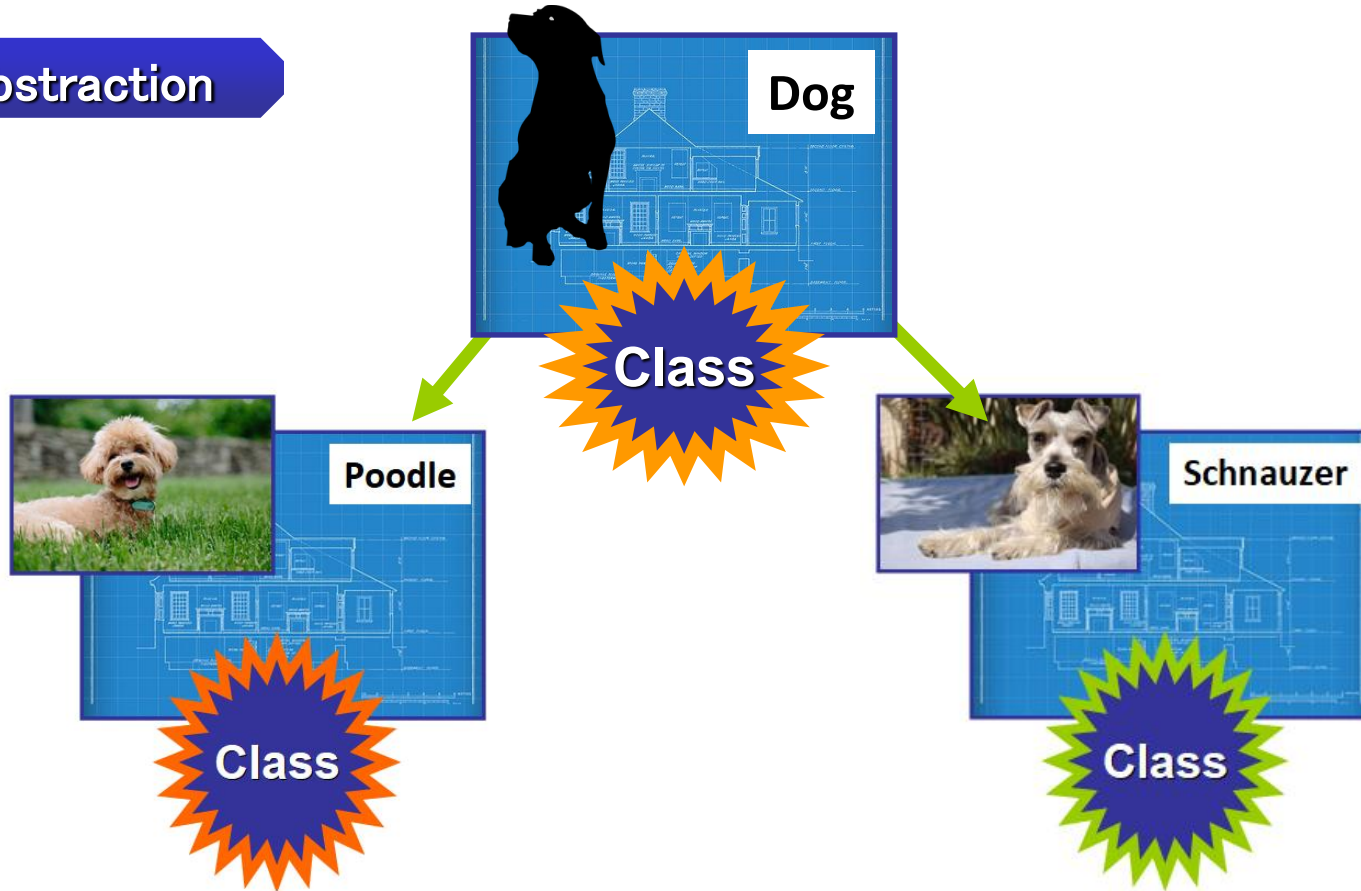


**Repeated Code**

**Class**

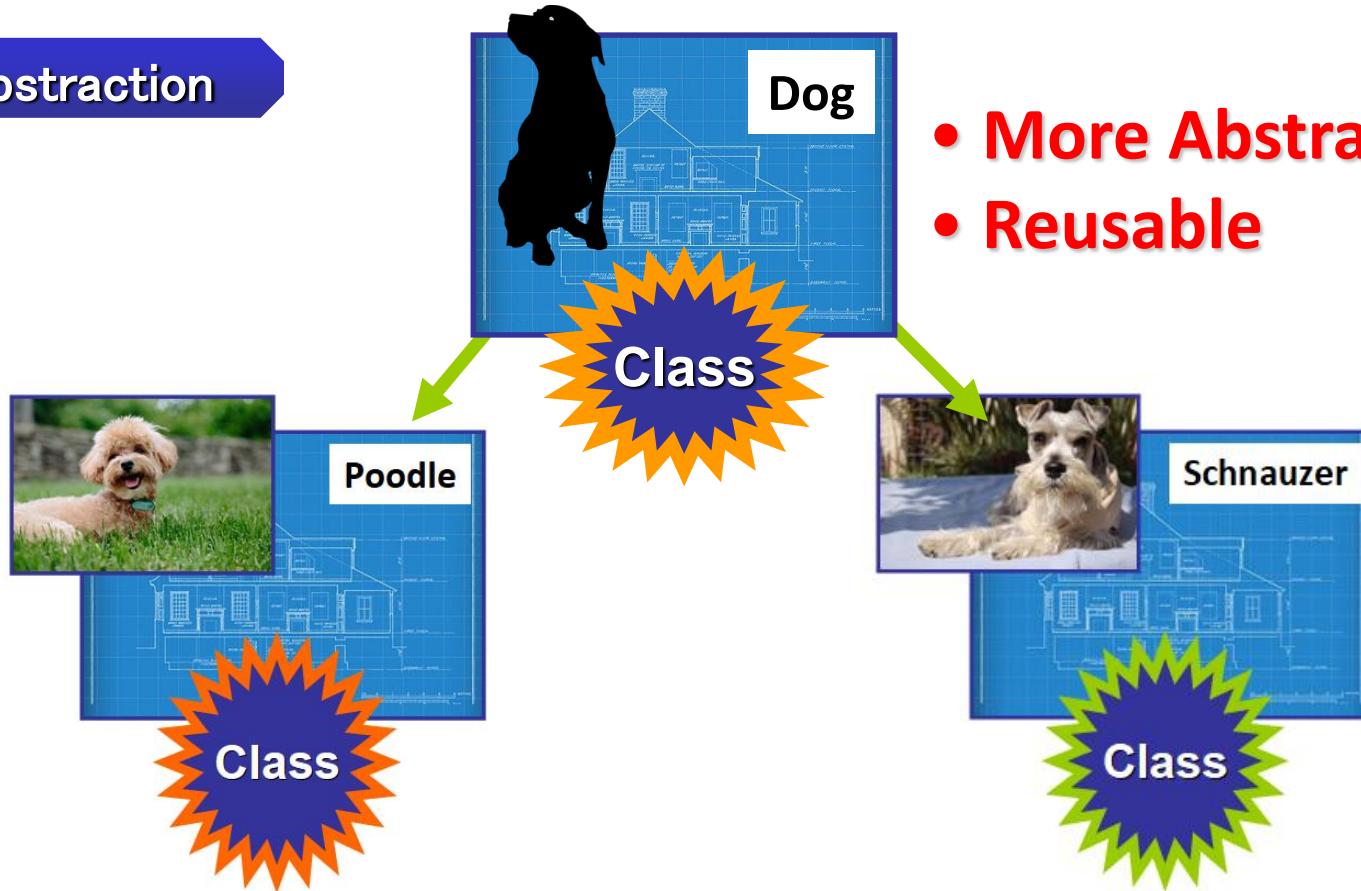


## Abstraction





## Abstraction





## Public vs. Non-Public

