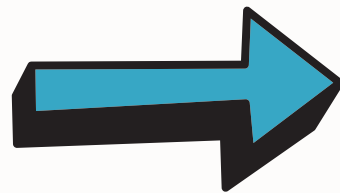


OOP REAL WORLD EXAMPLES

ENCAPSULATION



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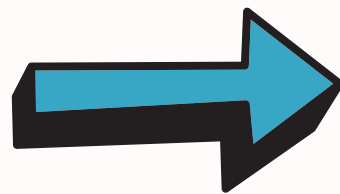


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What is Encapsulation?

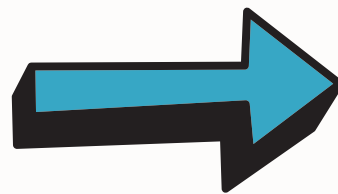
Encapsulation is the process of wrapping data and methods in a single unit.

Encapsulation prevents the code and data from being randomly accessed by other code defined outside the class.



What is
encapsulation?

In general Encapsulation refers to data hiding. You can completely encapsulate a member be it a variable or method in Java by using the private keyword and you can even achieve a lesser degree of encapsulation in Java by using other access modifiers like protected or public



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Encapsulating - think about a capsule here.

```
class  
{  
  
  data members  
  +  
  methods (behavior)  
  
}
```

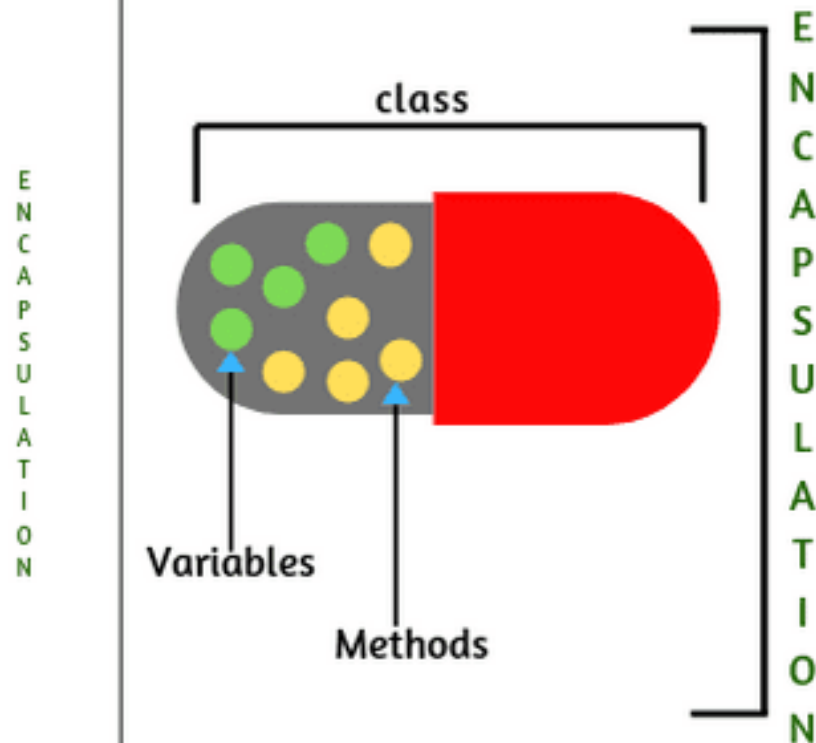
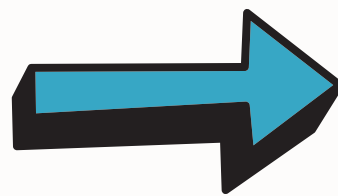


Fig: Encapsulation



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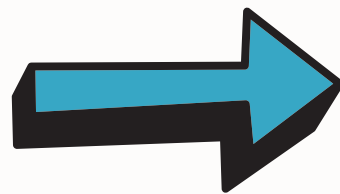
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Role of Access Specifier

- The data members should be labeled as private using the **private access specifiers**.
- The member function which manipulates the data members should be labeled as public using the **public access specifier**.



Here Poké Ball is a class and it contains Pokémon as a data and it is wrapped inside the Poké Ball as a single unit.



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Here automatic cola vending machine is a class. It contains both data i.e. Cola Can and operations integrated under a single unit Cola Vending Machine

