

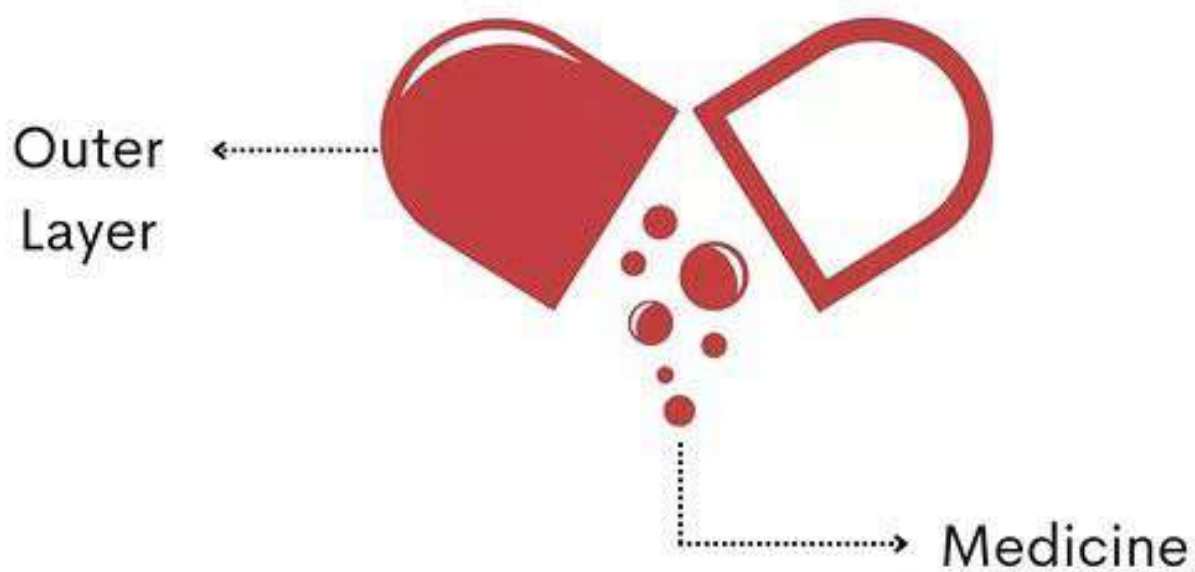
Encapsulation In Real-Life



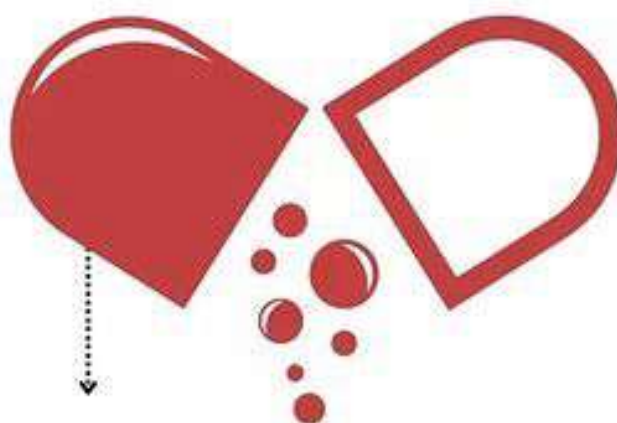
Take an example of
medical capsules



Where the actual medicine is
encapsulated by the outer layer

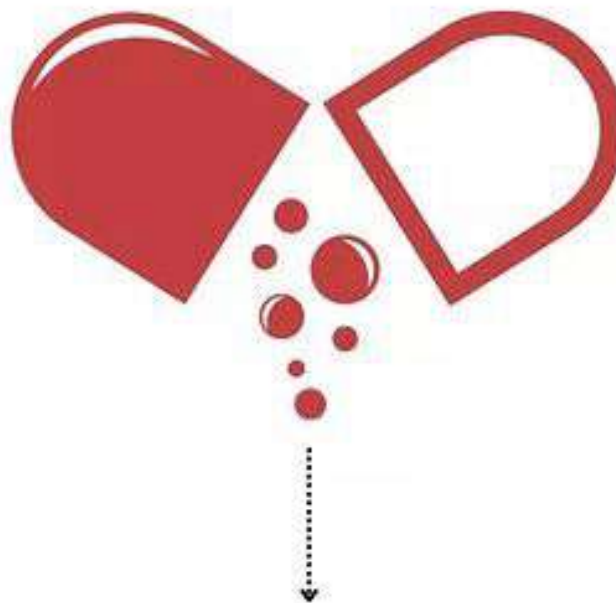


Imagine the outer
layer as a class



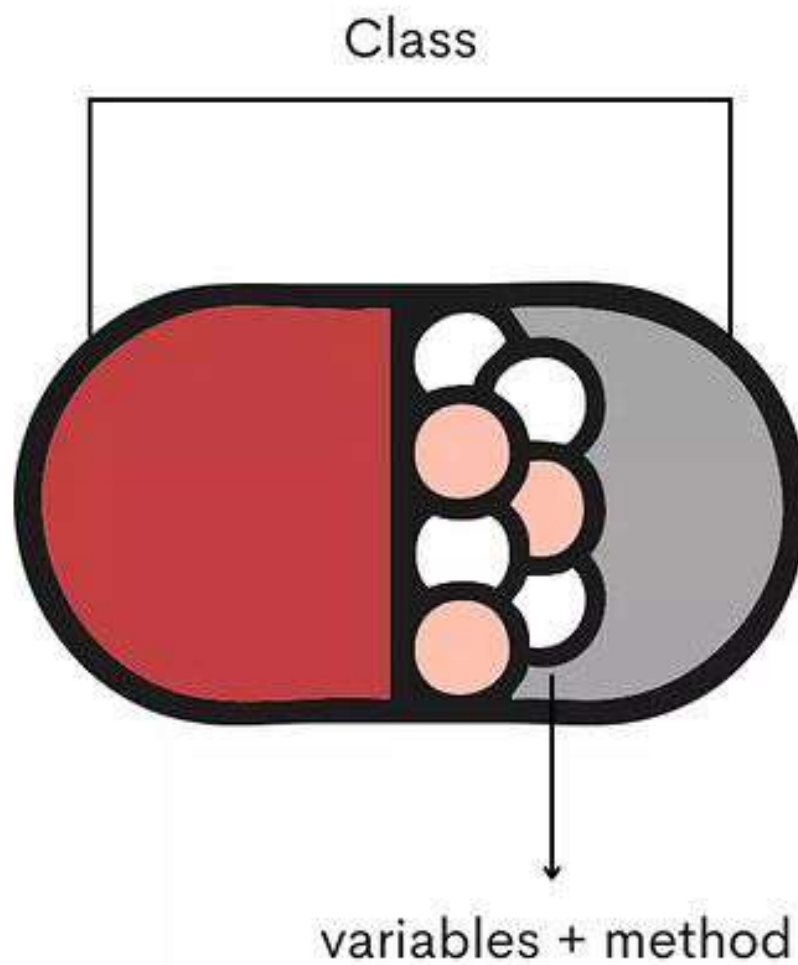
Outer Layer is
like a class

And the inner medicine is like
the data (variables + methods)



variables + method
inside class

Both of these are
like encapsulation



Encapsulation provides a mechanism
to keep related fields and
methods together

```
class Page {  
    private String pageName;  
  
    public String getPageName() {  
        return pageName;  
    }  
  
    public void setPageName(String name) {  
        this.pageName = name;  
    }  
}  
  
class Main {  
    public static void main(String[] args) {  
  
        // create an object of Page  
        Page vairagiCodes = new Page();  
  
        //set pageName  
        vairagiCodes.setPageName("vairagi.codes");  
  
        // access pageName using getter  
        System.out.println("it's " + vairagiCodes.getPageName());  
    }  
}
```

it also provides a mechanism
for data hiding

```
● ● ●  
// out put of pervious code  
it's vairagi.codes
```

```
● ● ●  
// error: pageName has private access in Page  
vairagiCodes.pagName
```

It prevents outer classes from accessing
and changing fields and methods of a class

Advantages of Encapsulation



Encapsulation

Encapsulation protects an object from unwanted access by clients

It reduces human errors

Organize Codebase