OOP REAL WORLD EXAMPLES

ENCAPSULATION

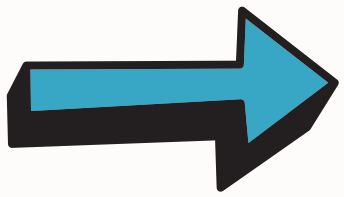
saadaslam.net/linkedin

@saadaslam.dev

Saad Aslam
saadaslams.com

What is Encapsulation?

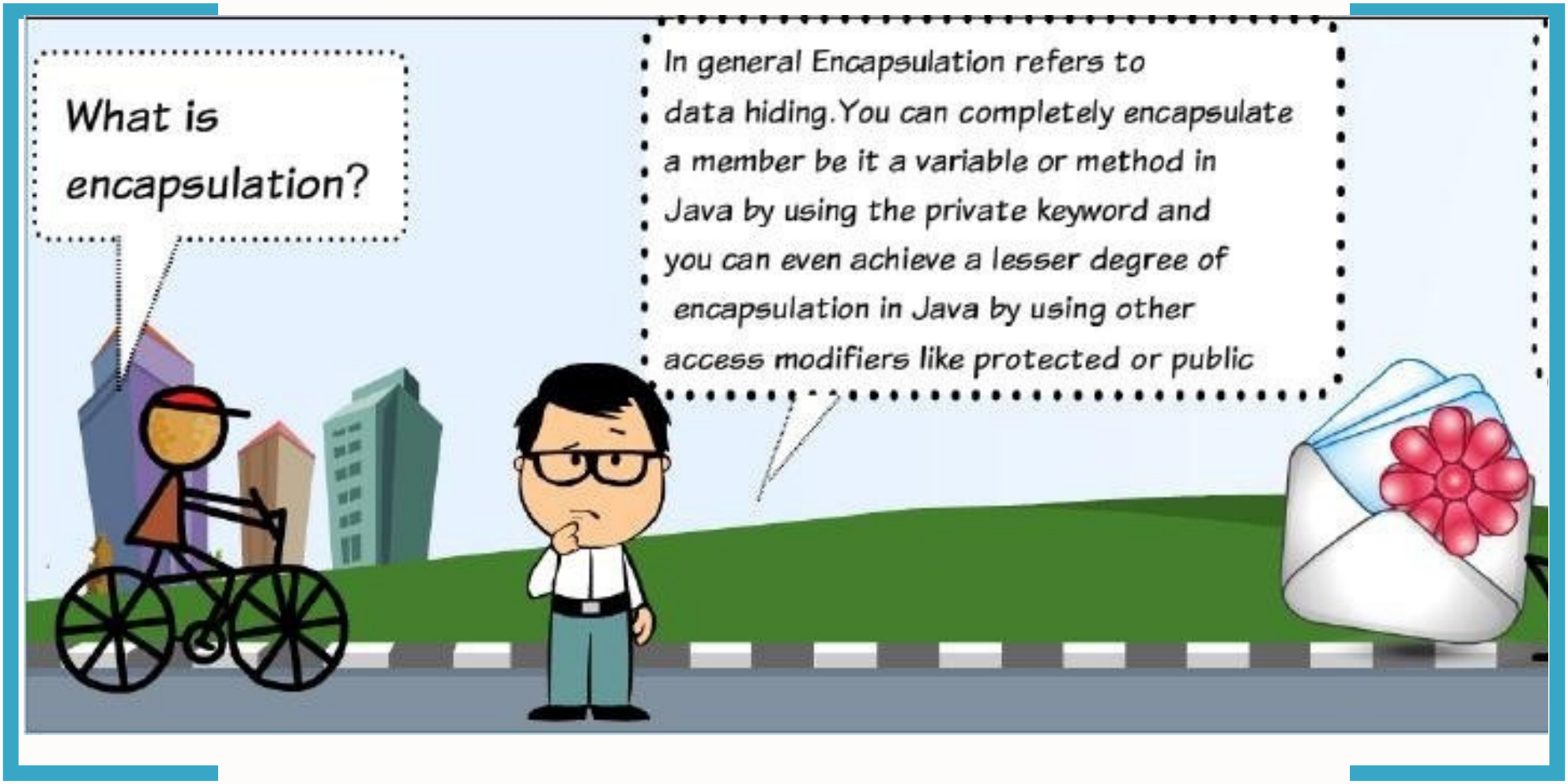
Encapsulation is the process of **wrapping data and methods in a single unit.**
Encapsulation prevents the code and data from being randomly accessed by other code defined outside the class.




saadaslam.net/linkedin


@saadaslam.dev


Saad Aslam
saadaslams.com



saadaslam.net/linkedin
@saadaslam.dev
Saad Aslam
saadaslams.com

Encapsulating - think about a capsule here.

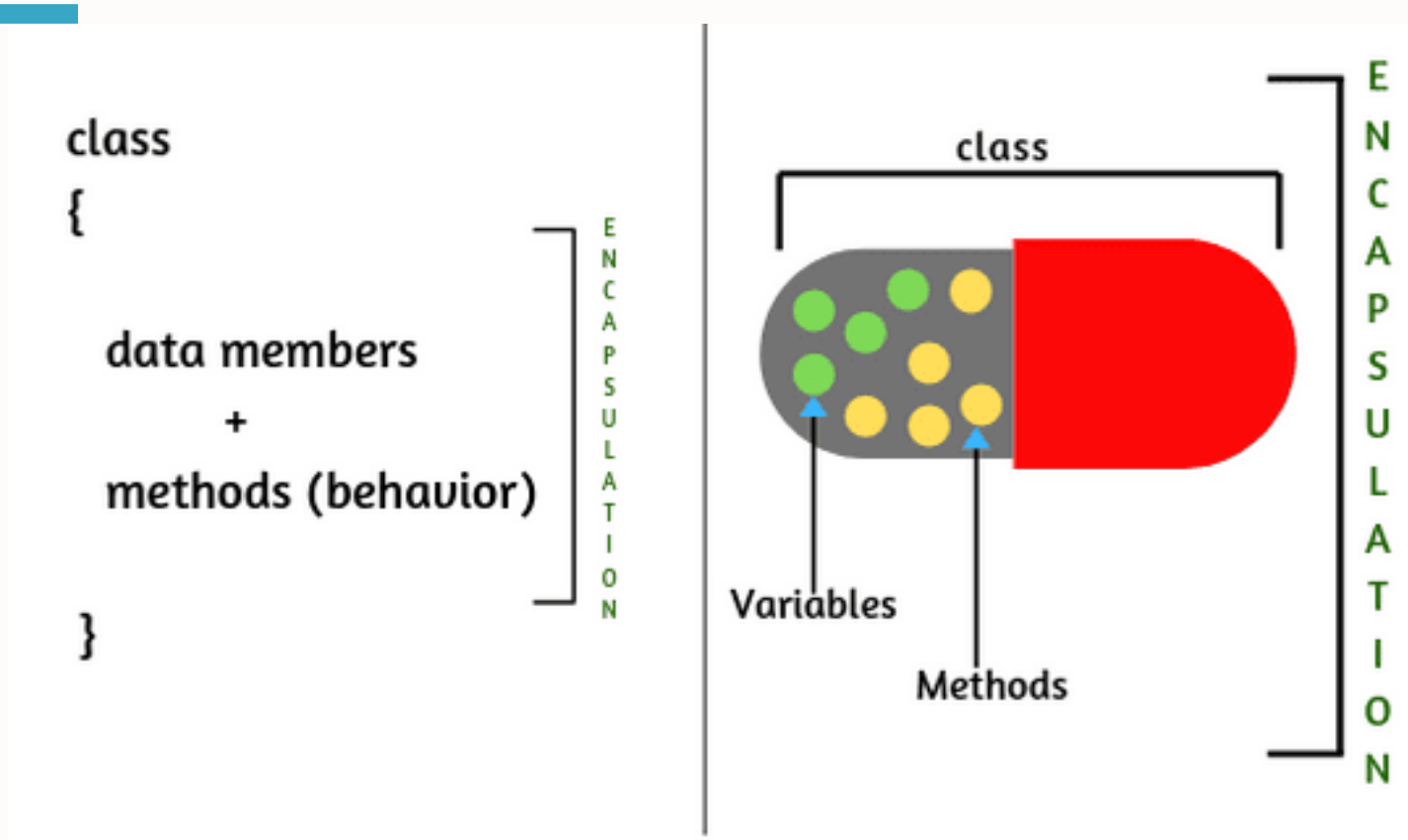
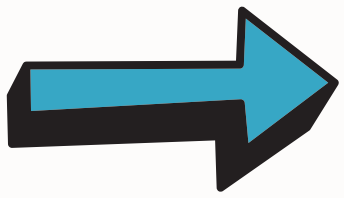


Fig: Encapsulation

saadaslam.net/linkedin
@saadaslam.dev
Saad Aslam
saadaslams.com

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**.



saadaslam.net/linkedin

@saadaslam.dev

Saad Aslam
saadaslams.com

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.

saadaslam.net/linkedin

@saadaslam.dev

Saad Aslam
saadaslams.com

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

saadaslam.net/linkedin

@saadaslam.dev

Saad Aslam
saadaslams.com