

## Data encapsulation

It is when user keep all related things together and controls how data is accessed, by bundling variables and functions together in one class

For instance there are class 'User';  
it has data (name, email)  
and methods (login and logout)

## Data abstraction

When user only saw what he needs and hide all another data  
it is helpful to reduce complexity

you call only function pay() you don't need to know which variable they need or how it does.

## Data hiding

It is restricting access to sensitive data to keep data implementation  
to not give user accidental or invalid modification

it can be used with modifier like 'private or public' you can use password to 'private'

overall

Data encapsulation about how data is kept and controlled, data abstraction when user sees only what he need and data hiding is when user controls data access