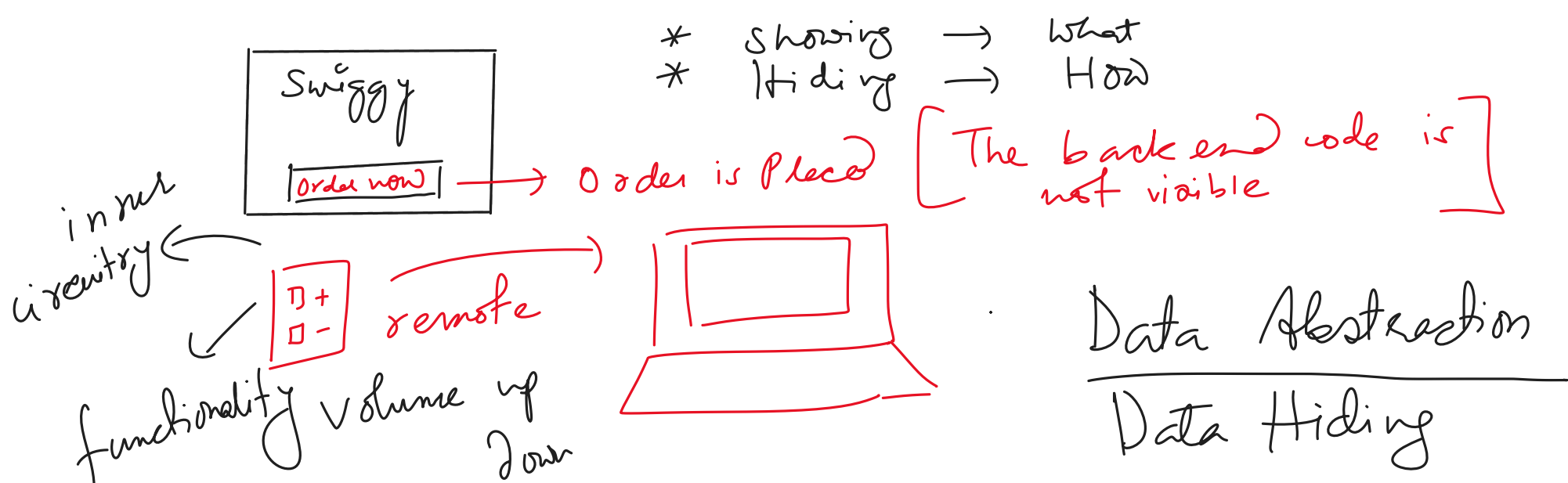OOP : Continued! (Abstraction) or (Data Abstraction)

<u>Definition:→</u> Hiding the unnecessary implementation details & only showing the necessary functionality and operations to the end user is known as data abstraction. It is used for better user-experience, so that the user stays longer on our application and it's easy for them to use the app.

* showing → what
* Hiding → How

Swiggy
[Order now] → Order is Placed [The backend code is not visible]

inner circuitry ←
[🔲+ 🔲-] → remote
functionality volume up down

<u>Data Abstraction</u>
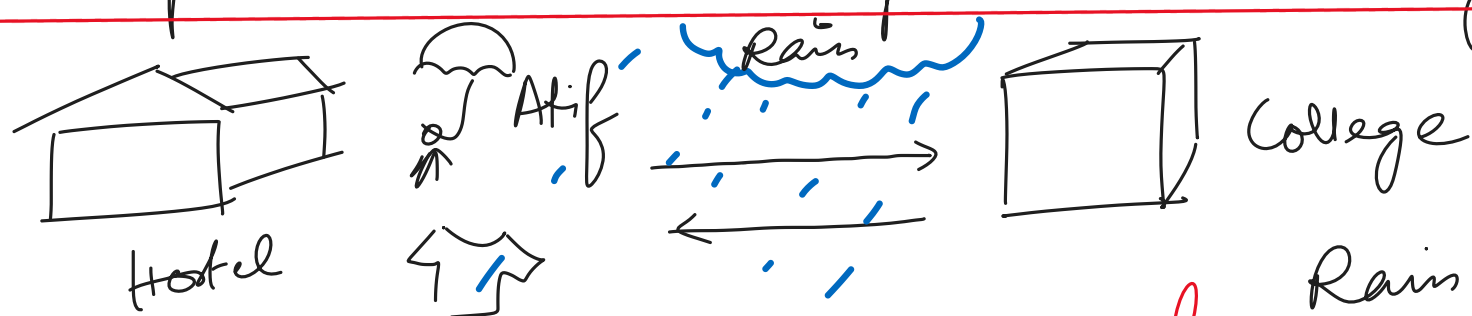<u>Data Hiding</u>

Abstraction can be achieved in many ways:

① By using access specifiers " private "

⑪ (Pure Virtual Functions) (Interface) Java
CPP

⑫ Partial Abstraction [(Concrete + Abstract) methods]

* (Example)

Implement a payment gateway system using partial abstraction in C++ for :

① Card
⑪ UPI
⑫ Cash

Bosch Tech

Reva :
27th September, 25

Exceptions & Exception Handling

Hotel   Atif   Rain   College

Anything that disturbs the normal flow of execution of code is an exception.
The process of handling exceptions is called Exception Handling.

[The destructor in CPP is used instead of the finally block.]

Rain Exception
Umbrella/Raincoat is Handler

try : tasks( )
except : give message( )
finally : mandatory( )