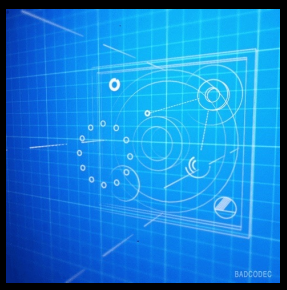
OOPS



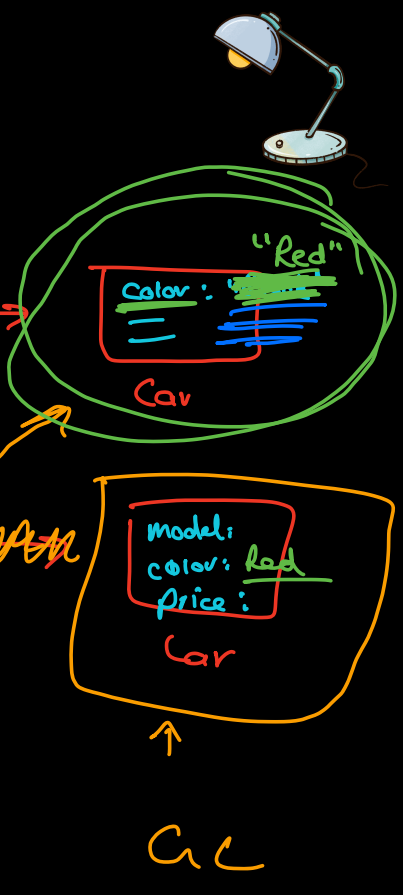
Object Oriented Programming Style

Real World Objects → Code

Blueprint ⟶ Car

DNA ⟶ Human

```
Car c1 = new Car();

Car c2 = new Car();

c2.color = "Red"

c2 = c1;   ?

c2.color = "Red";

print( c1.color); → Red
```



Complex Numbers

$5 + 3i$

Real — Imaginary

$\sqrt{-1} = i$ (iota)

$\sqrt{-9} = 3i$

$10i = 10\sqrt{-1} = \sqrt{-100}$

$\sqrt{-1} \times \sqrt{9}$

$i \times 3 = 3i$

$x = 5 + 3i$

$y = 10 - 2i$

add, subtract, multiply.

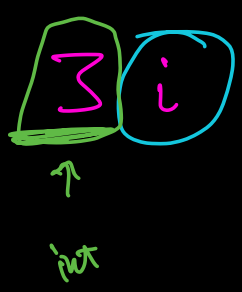
Complex Number

Real

Imaginary

$5 + 3i$

$i = \sqrt{-1}$



add

Break till 10:40 PM

---

add

$x = 5 + 3i$

$y = 10 + -2i$

$z = x + y$

$z = 15 + 1i$

sumReal = x.real + y.real

sumImag = x.imag + y.imag

Slides

slides.com/tarunluthra/oops-basics/

OOPS

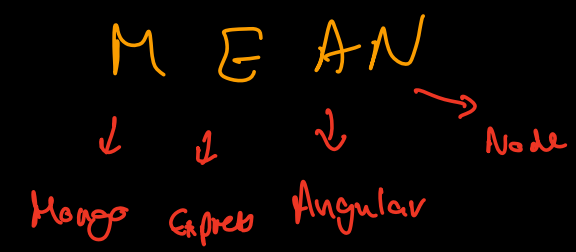
- Classes
- Objects
- Access specifiers

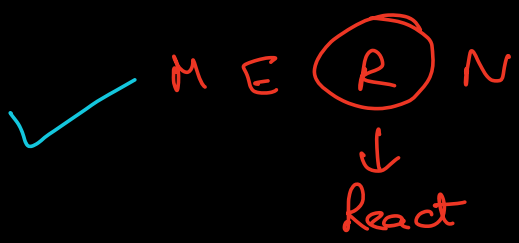
- Abstraction
- Encapsulation
- Modularity
- Polymorphism
- Inheritance

LLD

↑

After advance


M E A N
Node
Mongo
Express
Angular


M E R N
React