

# OOP Principles

I like a hamburger!

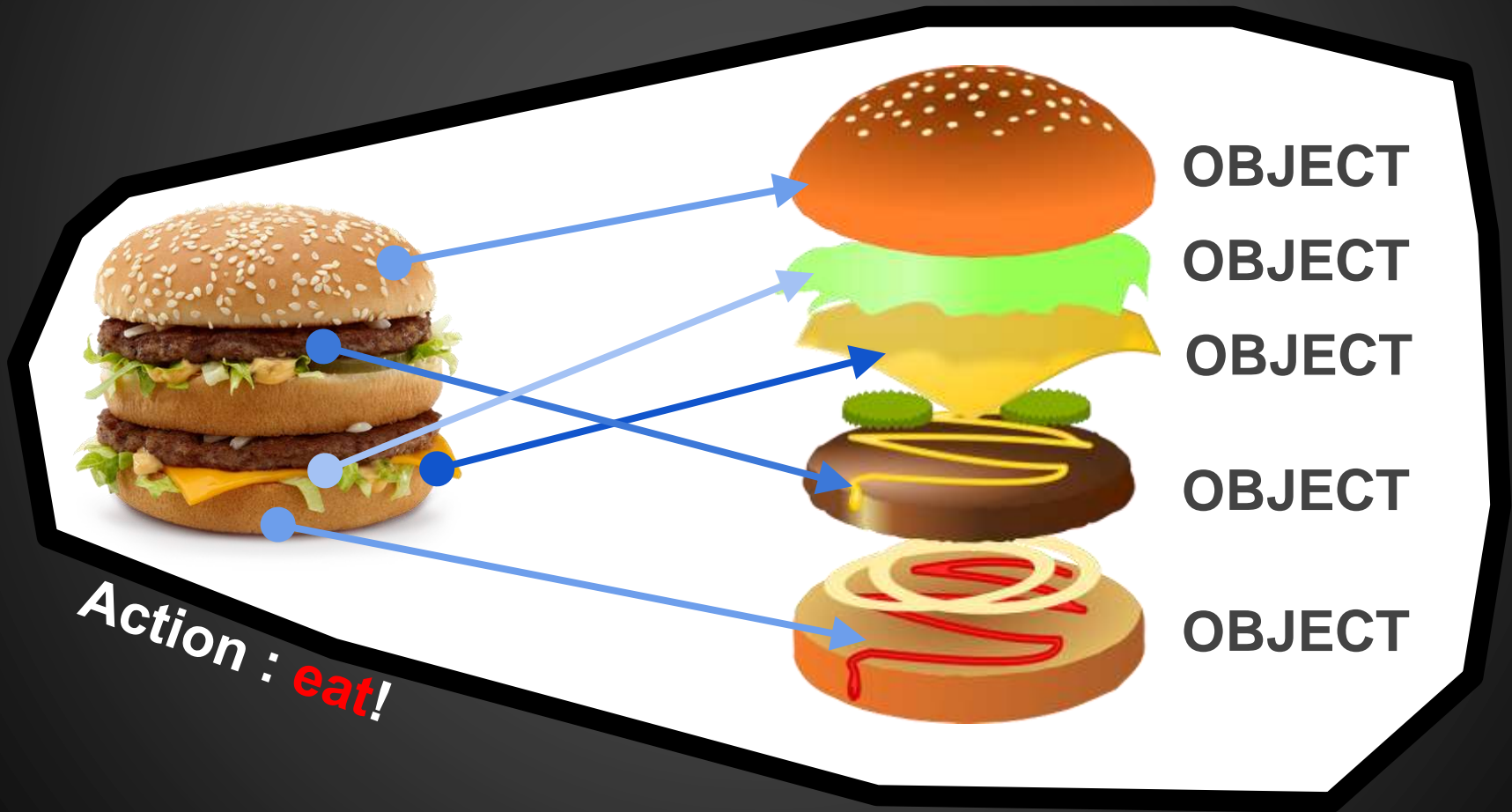
OOP?

Something to eat?



OOP

Object-Oriented Programming



# OOP

# Object-Oriented Programming

OBJECTS



...

...



...

# What is the “Principles”?

- Guidelines for the best way!
- Use to define a word!
- Prevent to mistake!
- etc.

# Principles for OOP

5 Major Design Principles for OOP

S. O. L. I. D

4 Major Principles for OOP

Data Abstraction

Encapsulation

Inheritance

Polymorphism

## 4 Major Principles for OOP

# Data Abstraction



**Hamburgers**



**Beverage**

**FOOD**

4 Major Principles for OOP

# Encapsulation

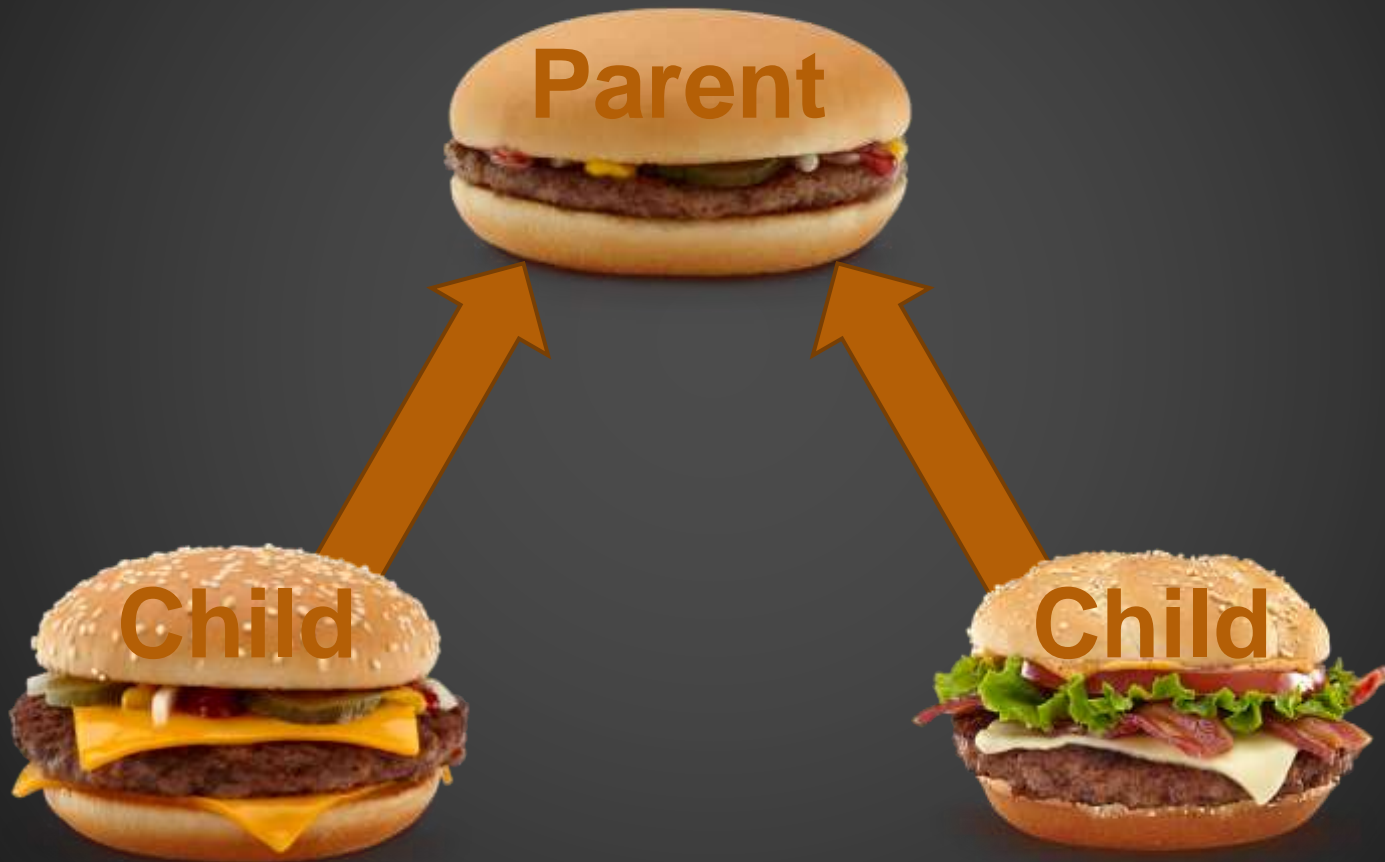


**Just eat!**  
**Call eat action!**



4 Major Principles for OOP

# Inheritance



4 Major Principles for OOP

# Polymorphism

**Just eat!**  
**Call eat action!**

But



[Eat] eat(void)

[Eat] eat(withBeverage)

[Eat] eat(withSnack)

[Eat] .....

## 5 Major Design Principles for OOP

# SRP (Single Responsibility Principle)

SET



But !!

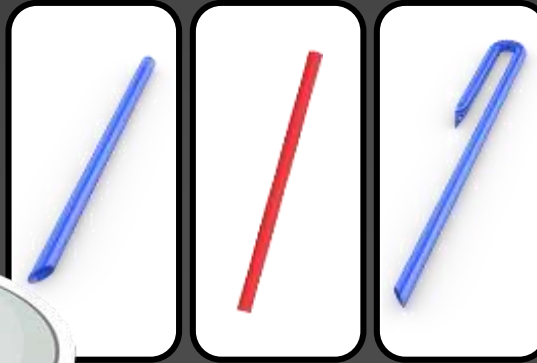
I want to drink a orange juice!

SET



5 Major Design Principles for OOP

# OCP (Open Closed Principle)



Opened  
Closed

5 Major Design Principles for OOP

# LSP (Liskov Substitution Principle)

## Just eat!!!

We can eat all hamburgers  
because contains "Eater Action"!  
And all action is true!



## 5 Major Design Principles for OOP

# ISP (Interface Segregation Principle)

Not bad!



**DRINK + EAT**

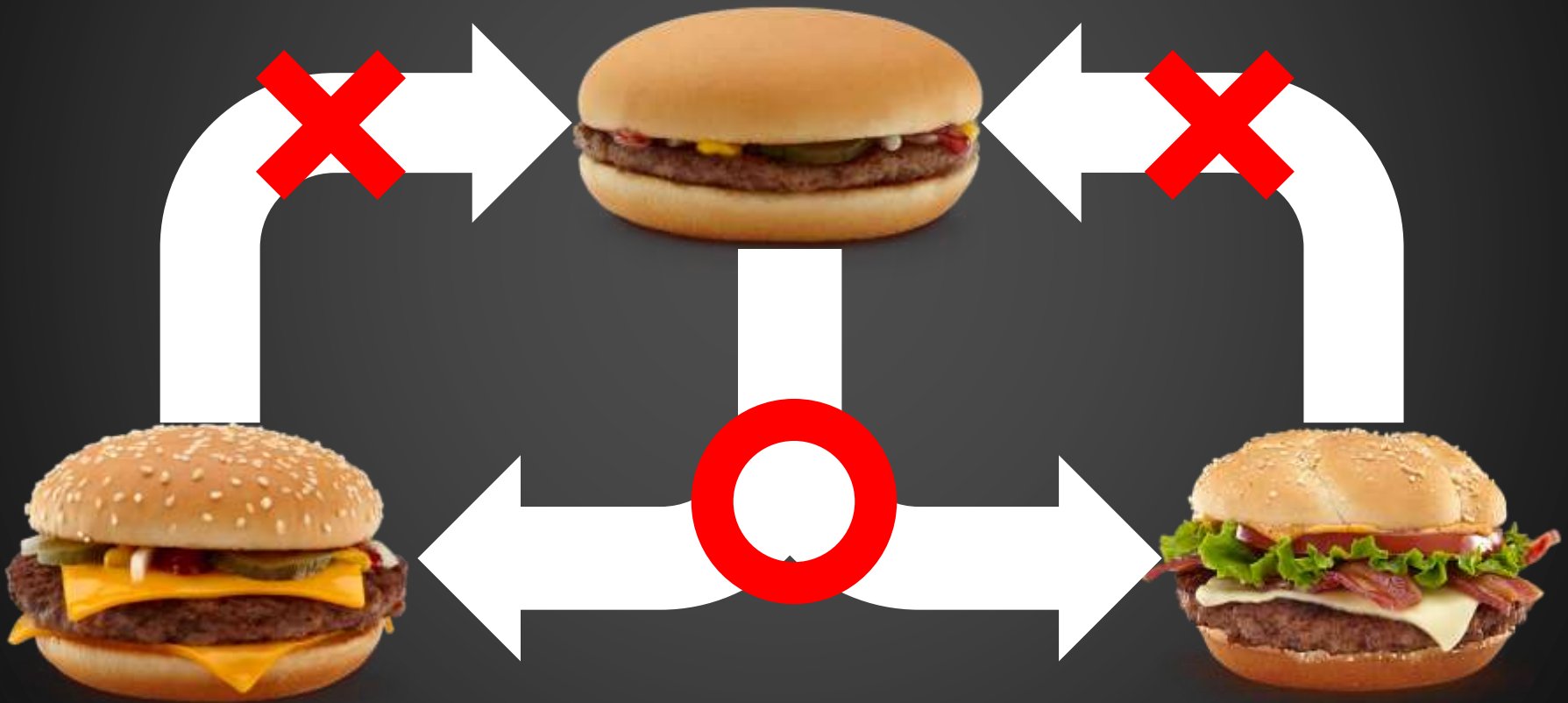
**EAT**



**DRINK**

5 Major Design Principles for OOP

# DIP (Dependency Inversion Principle)



**Q / A**



# Thanks to

- MCDoxxld in America
- BHX in Korea