MATERIALS

+ Lab
+ Lesson
+ Lesson Starter Code

INHERITANCE

Wellington Moreno

Lead iOS Instructor, General Assembly

INDEPENDENT PRACTICE: PLAYGROUNDS

CODE

5 mins

DIRECTIONS
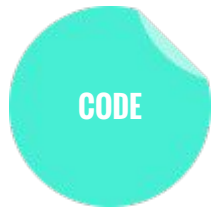
Create the following classes:

+ Vehicle
+ Car
+ Truck
+ Sedan

+ Coupe
+ Ferrari
+ SUV
+ Sports Car

NOTES

Don't use the built-in type casting.

INDEPENDENT PRACTICE: PLAYGROUNDS

CODE

10 mins

DIRECTIONS

Add the following methods to each class

accelerate()

brake()

honk()

NOTES

For each function, print something to the console, like "vroom", or "beep beep".

LEARNING OBJECTIVES

+ **Articulate** the purpose of Inheritance

+ **Design** a hierarchy of Classes

+ **Use** inheritance

A CLASS IS A BLUEPRINT FOR CREATING OBJECTS. INHERITANCE IS THE ABILITY TO CREATE CLASSES THAT **DERIVE PROPERTIES AND BEHAVIOR FROM A PARENT CLASS.**
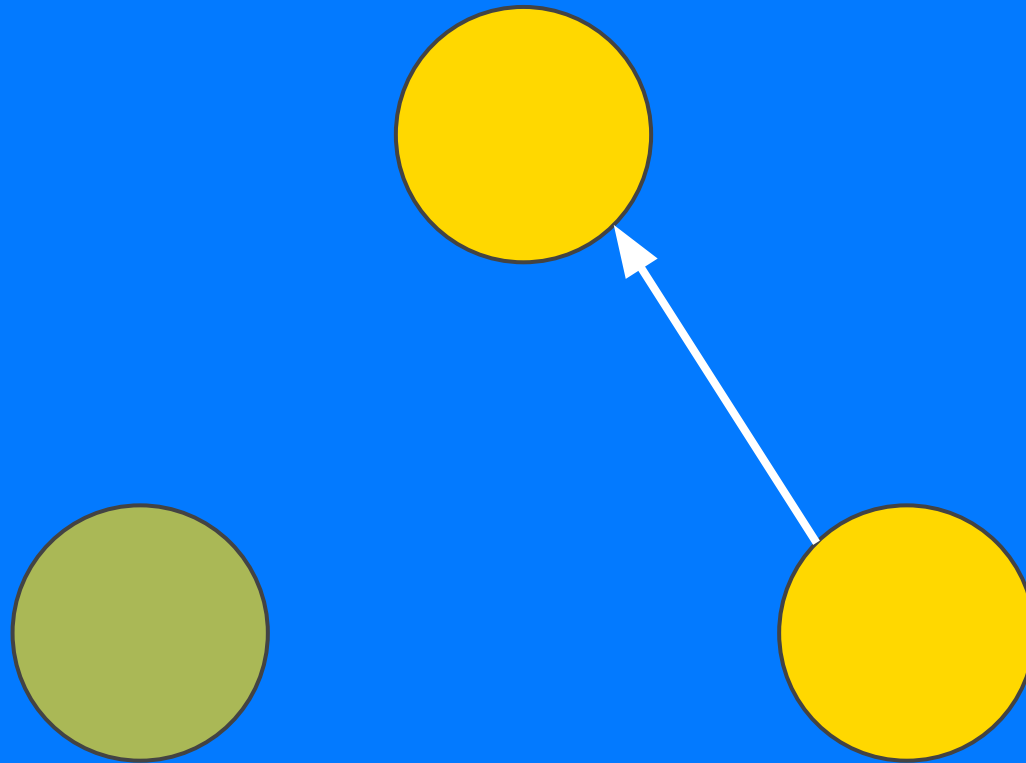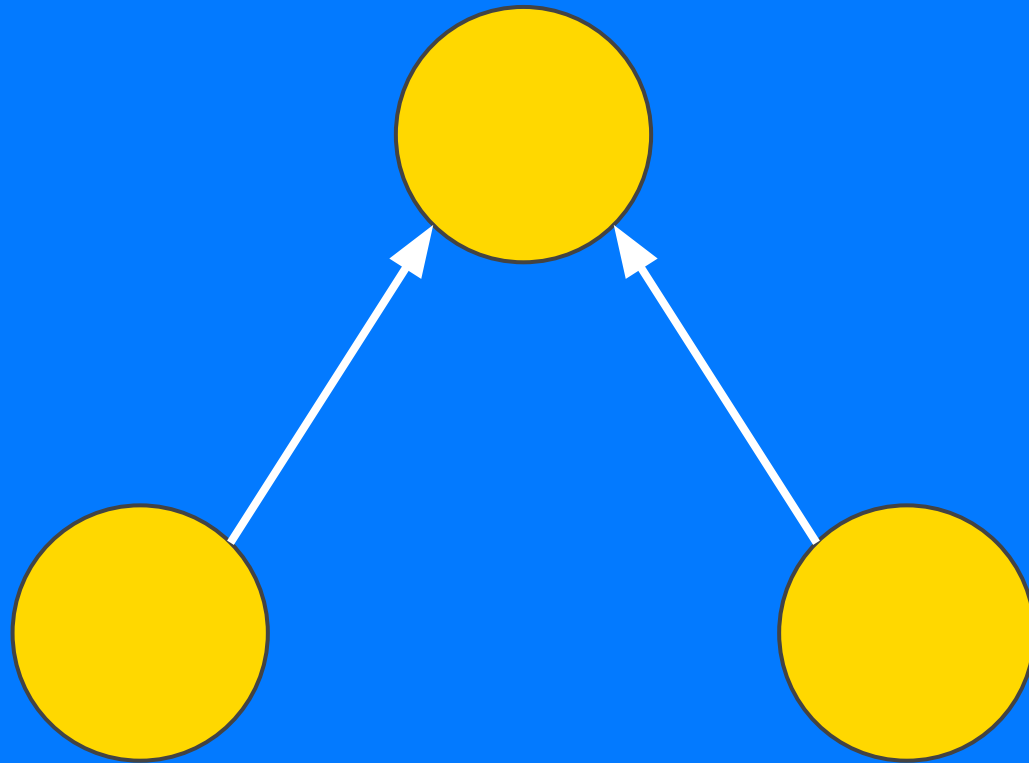
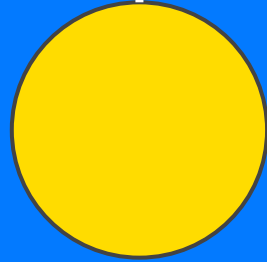# WHO CARES?

REVOLUTIONARY

WRITE IT ONCE

INTUITIVE

INHERITANCE

INHERITANCE
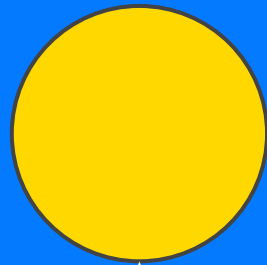
INHERITANCE
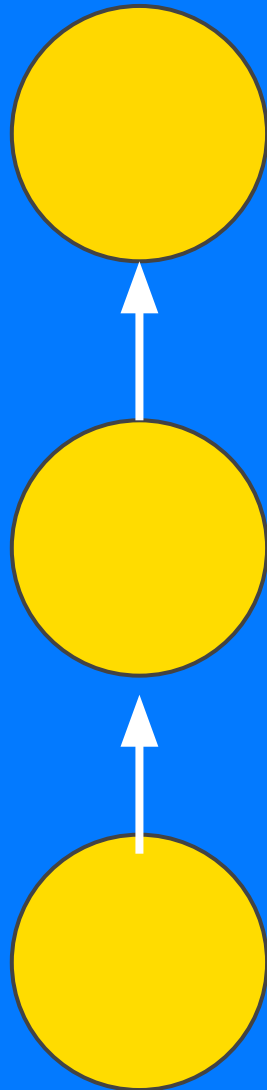
INHERITANCE

INHERITANCE
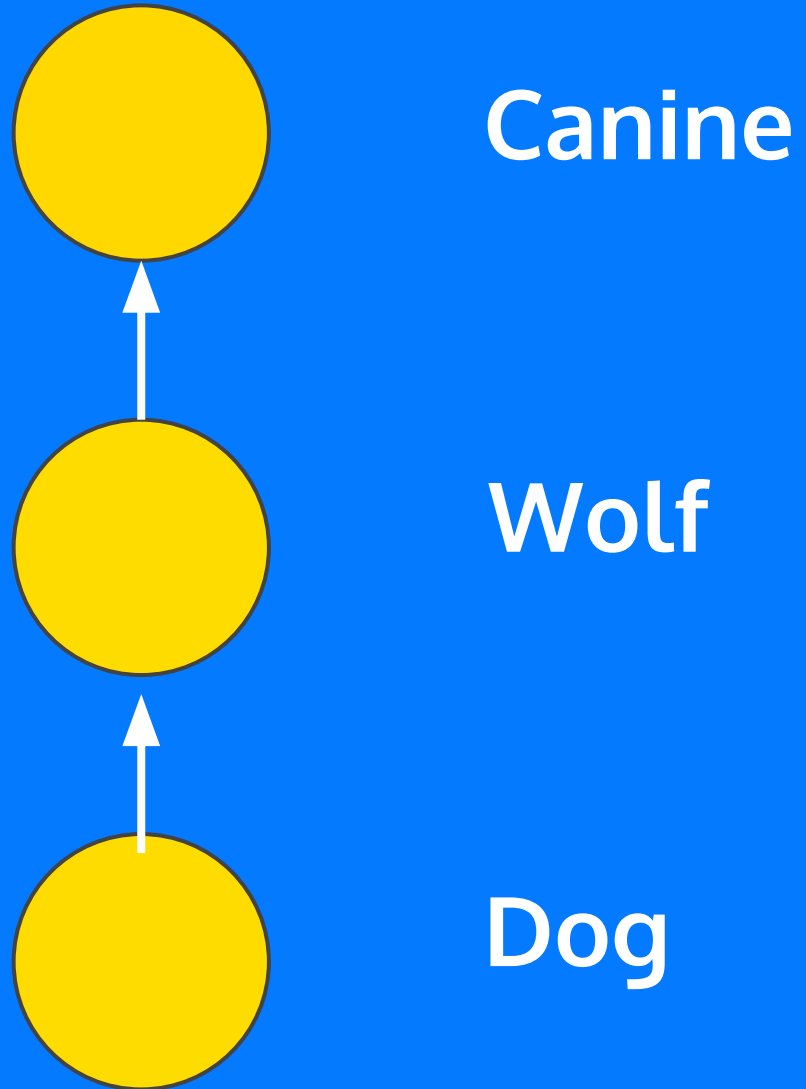
ACTIVITY: STOP-AND-DRAW

EXERCISE

5 mins

DIRECTIONS

Draw out the family tree for your car classes.

DELIVERABLE

Write your thoughts down

WHAT'S THE SYNTAX?

SYNTAX

```
class Child: Parent {

}
```

DEMO

+ How to make one class extend another

+ How to instantiate an object of both

+ How to check their types

INDEPENDENT PRACTICE: PLAYGROUNDS

CODE

10 mins

DIRECTIONS

+ Update your classes to use Inheritance.
+ Make an instance of each class

NOTES

At this point, you don't have to add any functions or variables to your classes.

DEMO

+ Overriding Functions

INDEPENDENT PRACTICE: PLAYGROUNDS

CODE

10 mins

DIRECTIONS

+ Update your classes to use Inheritance.
+ Make an instance of each

NOTES

Create each Dictionary with at least 5 values

ACTIVITY: WRITE-PAIR-SHARE

EXERCISE

5 mins

DIRECTIONS

Write down one concept in life where it would make sense to use inheritance.

DELIVERABLE

Share your analogy

Q & A

CONCLUSION

+ Inheritance allows you to do more while writing less code.

+ You will use Inheritance in every App you make.

ONE PARENT HOUSEHOLDS

DON'T ABUSE THE SYSTEM

USE IT ONLY WHERE IT MAKES SENSE

YOU WILL USE IT IN EVERY APP, BUT USUALLY NOT HOW WE DID TODAY

THANKS!

WELLINGTON MORENO

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