



# Practical Classes

Chris Piech

CS106A, Stanford University

# Learning Goals

1. Be able to create a variable type from scratch

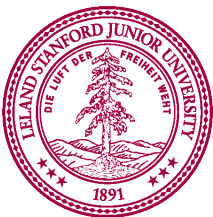


A class defines a new variable type

# You must define three things

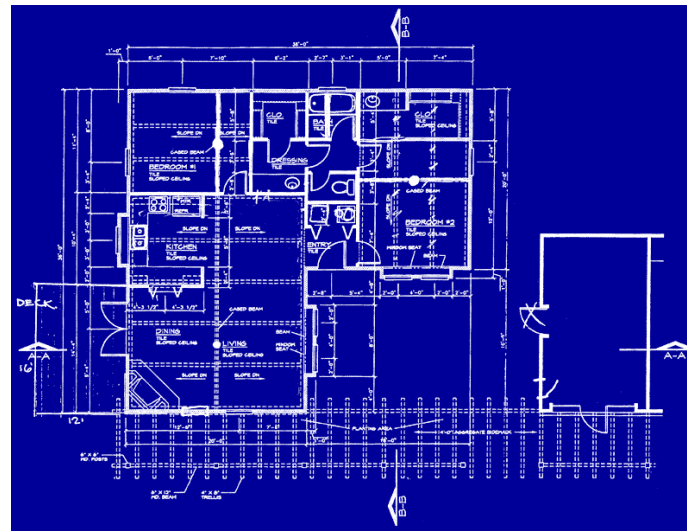
1. What **variables** does each instance store?
2. What **methods** can you call on an instance?
3. What happens when you make a **new** one?

\*details on how to define these three things coming soon



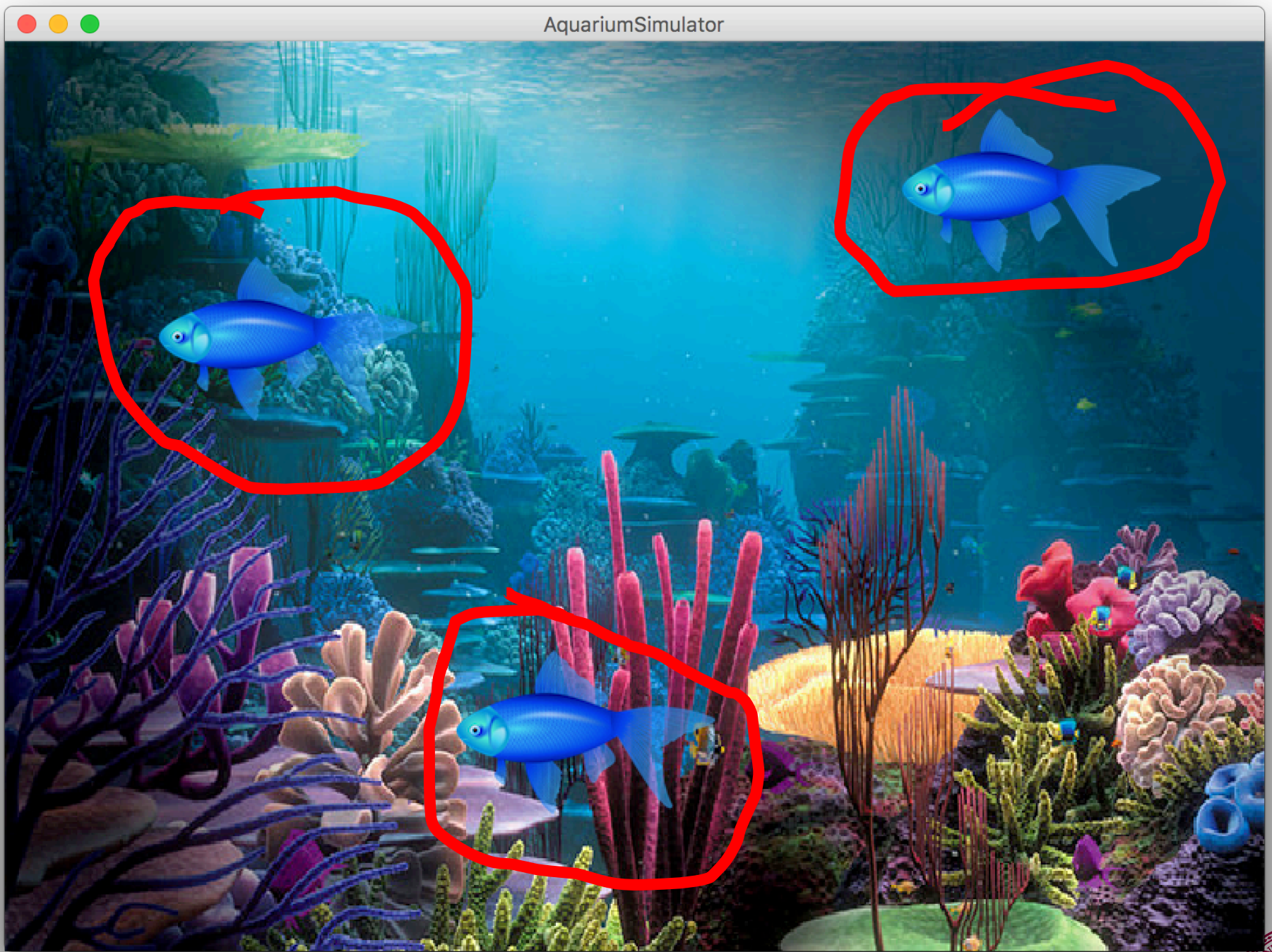
# Classes are like blueprints

**class:** A template for a new type of variable.



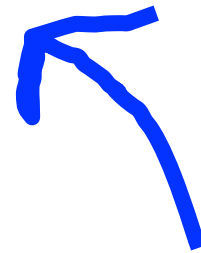
What does a class do?

A class defines a new variable type





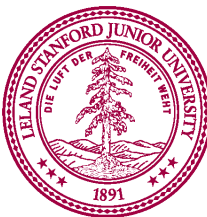
# extends



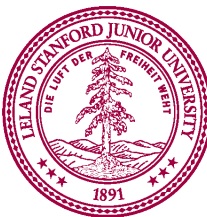
Make a class inherit all the instance variables and methods of another class



```
public class Simulator extends GraphicsProgram {  
    // class definition  
}
```



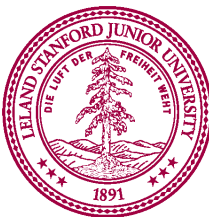
```
public class NameSurferGraph extends GCanvas {  
    // class definition  
}
```



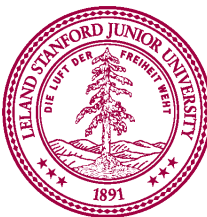
# implements



I promise that this class will define  
a few given methods



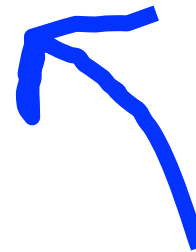
```
public class NameSurferGraph extends GCanvas,  
    implements ComponentListener {  
    // class definition  
}
```



Also a cheeky way to share constants between classes



**implements**



I promise that this class will define  
a few given methods

