BACK END WEB DEVELOPMENT

CLASS 06 - SHARING BEHAVIOR

AGENDA

- QUICK REVIEW - ANATOMY OF A CLASS

- QUIZ - THERMOSTAT!!!

- HOMEWORK REVIEW

- INTRO TO INHERITANCE

- LAB WORK - SECRET NUMBER

ANATOMY OF A CLASS

STATE & BEHAVIOR

CLASS ANATOMY : STATE

- HOW TO DEFINE IT
- SET ATTRIBUTES
- ADD READ & WRITE CAPABILITIES
- CREATE THE CONSTRUCTOR (USING INITIALIZE)
- VOCABULARY
  - INSTANCE VARIABLE
  - INSTANCE METHOD
  - CLASS METHOD
  - PRIVATE METHOD

CLASS ANATOMY : BEHAVIOR

- INSTANCE METHOD
- CLASS METHOD
- PRIVATE METHOD
- INSTANCE VARIABLE VS LOCAL VARIABLE

QUIZ!

THERMOSTAT!

HOMEWORK REVIEW!

APARTMENT EXERCISE

INHERITANCE

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This is a complex topic, but we'll cover only the basics that you'll need to know for Rails.

VOCABULARY: INHERITANCE

Inheritance means that a *child class* (aka *subclass*)
can *inherit* the same methods and variables
as its *parent class* (aka *superclass*).

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```ruby
class Vehicle
  def move_forward
    puts "zoom!"
  end
end
```

```ruby
class Motorcycle < Vehicle
end
```

```ruby
cycle = Motorcycle.new
cycle.move_forward
```

USING INHERITANCE

Remember that all classes *implicitly inherit* Object.

```ruby
class Person < Object # Not necessary to type, because it's implied
end
```

```ruby
o = Object.new
o.to_s
=> "#<Object:0x007fec2b3bf758>"
```

```ruby
linda = Person.new
linda.to_s
=> "#<Person:0x007fec2b900028>"
```

GLIMPSE INTO RAILS

These are usually the only places you'll see inheritance with Rails, and this code is usually automatically generated for you.
You don't even have to type it!

```
class User < ActiveRecord::Base
end

class UsersController < ActionController::Base
end

class UserTest < ActiveSupport::TestCase
end
```

CODE ALONG!

CODE_DEMO_INHERITANCE.RB

LAB TIME!

SECRET NUMBER