

BEWD 13

LESSON 7

3 LEARNING GOALS

OBJECT ORIENTED PROGRAMMING

- CLASS - THE BASICS CONTINUED
- METHODS - INSTANCE, CLASS, PRIVATE METHODS
- VARIABLES - INSTANCE, LOCAL REVIEWED

GIT TIME

GIT TIME

YOU SHOULD KNOW HOW TO

- CREATE A REMOTE BRANCH
- PULL FROM THE UPSTREAM REPO
- PUSH THE CODE TO YOUR FORKED
MASTER BRANCH

CLASS

<state | behavior | identity>

CLASS : LEARNING GOAL REVIEW

- 1 - DEFINE A CLASS
- 2 - SET ATTRIBUTES
- 3 - ADD READ & WRITE CAPABILITIES
- 4 - CONSTRUCTOR CREATION
- 5 - VOCABULARY
 - VARIABLE TYPES
 - METHOD TYPES
- 5 - INHERITANCE

ANATOMY OF A CLASS

STATE

BEHAVIOR

IDENTITY

CODE ALONG

<android.rb>

CODE ALONG


```
#Classes have state and behavior
#State & Object Factory: factory that creates and instantiates robots
#Behavior: Collection of class methods, instance methods, instance variable,
           #local variables, constants etc.,

require 'pry'
require 'pry-byebug'

class Robot

  #creates getter && setter methods for each attribute
  attr_accessor :name, :age, :home_town

  #instance_factory to support creating a new person using Person.new
  def initialize(name, age, home_town)
    @name = name
    @age = age
    @home = home
  end

  def flight_skills
    "I am #{name}. I have flight skills"
  end
end
```

INHERITANCE 101

```
#Classes have state and behavior
#State & Object Factory: factory that creates and instantiates robots
#Behavior: Collection of class methods, instance methods, instance variable,
           #local variables, constants etc.,

require 'pry'
require 'pry-byebug'
require_relative 'robot'

class Android < Robot

  #creates getter && setter methods for each attribute
  attr_accessor :name, :age, :home_town

  #instance_factory to support creating a new person using Person.new
  def initialize(name, age, home_town)
    @name = name
    @age = age
    @home = home
  end

  def writing_skills
    "I am #{name}. I have writing skills"
  end
end
```

CODE REVIEW

<thermostat.rb>

THERMOSTAT!

CREATE A THERMOSTAT USING..

- METHODS
- VARIABLES
- ARRAYS
- CONDITIONALS
- ENUMERATION

CODE REVIEW

<thermostat.rb solution>

CODE LAB

< rise_of_robots.rb >

RISE OF THE ROBOTS!

CREATE A ROBOT FACTORY USING..

- METHODS
- VARIABLES
- ARRAYS
- CONDITIONALS
- ENUMERATION

KEYS TO SUCCESS

- ONE BRICK AT TIME
- DEBUG WITH PRY EVERY TIME
- CODE PROLIFICALLY