

BACK END WEB DEVELOPMENT

CLASS 05 - CLASSES & OBJECTS

AGENDA

- **WHAT IS AN OBJECT?**
- **WHAT IS A CLASS?**
- **INSTANCE VARIABLES**
- **CLASS, INSTANCE & PRIVATE METHODS**
- **RISE OF THE ROBOTS**

RISE OF THE ROBOTS

CODE ALONG

time: 60 minutes

STATE (OBJECT)

```
class Robot

  attr_accessor :name, :type, :origin #creates setter & getter methods (i.e., read/write a

  def initialize(name, type, origin) #params listed within () are required to create new in
    @name = name #instance variable makes variable available through class
    @type = type
    @origin = origin
  end

end

my_robot = Robot.new("Jane", "Android", "Brooklyn")
my_robot.name
```

BEHAVIOR(METHOD)

```
#instance method
def fly
  add_wings_and_take_off
end

def laser_master
  if type == "Super Android"
    add_laser_training
  else
    puts "I'm an #{type}. I don't have laser skills. Those come with the newer robots"
  end
end

#class method
def self.make_robots(number_of_robots)
  robots = number_of_robots.to_i
  robots.times do
    Robot.random_robot_maker
  end
end

private

#usually used within instance && class methods.
def add_wings_and_take_off
  puts "I'm badass! I'm #{name}, an awesome #{type} with flying skills"
end
```

LET'S DO IT!

ROBOT_EMPTY.RB

time: 60 minutes

LAB TIME!

EX_Apartment_OBJECTS

time: 90 minutes