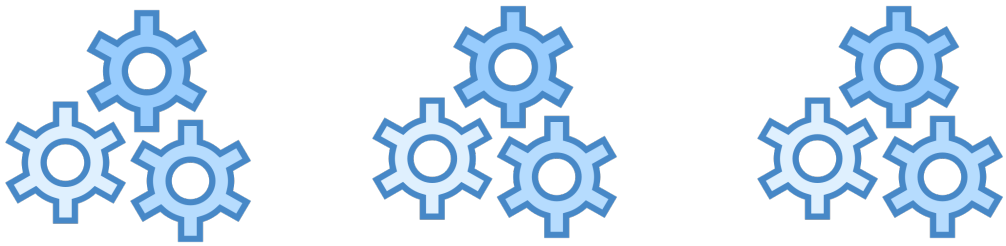
How to Make an App For Beginners

Lesson 7
Worksheet



Welcome!

This exercise continues from the Swift Basics (Part 3) taught in lesson 7.

In this worksheet, you'll continue with the Spaceship example and practice declaring and calling classes and methods using dot notation.

Just in case you don't remember how you got here (or if you need a refresher), Lesson 7 can be found here:

https://codewithchris.com/lesson7

Step 1: We'll be doing these exercises in a Swift Playground.

Open Xcode and create a new playground
(File Menu->New->Playground).
From the list of Playground templates, just select "**Blank**"

Step 1:

Declare a class called “Spaceship”. Inside of it:

- Declare a property of type Int called “fuelLevel” and set it to 50.
- Declare a method called “liftOff”
- Declare a method called “addFuel”
- Declare a method called “thrust”
- Declare a method called “cruise”

Step 2:

Inside the "liftOff" method, write code that will:

- Decrement the fuelLevel property by 50.
- Print to the console "We have lift off!".
- Print the current fuelLevel to the console.
- Use a message like "Current Fuel Level at: X" where X is the actual value of the fuelLevel property.
- Hint: Substitute dynamic values into strings using "\(fuelLevel)" inside the string.

Step 3:

Regarding the "addFuel" method:

- Change the method declaration so that it can accept an Int parameter called "fuel".
- Inside the function, write code that will increment the fuelLevel property by the value of the parameter.
- Print "Fuel added".
- Print out the current fuel level to the console (just like in the "liftOff" method).

Step 4:

Inside the “thrust” function, write code that will:

- Decrement the fuelLevel property by 15.
- Print to the console “Rocket is thrusting”.
- Print out the current fuel level (just like in the “liftOff” method).

Step 5:

Inside the “cruise” function, write code that will:

- Decrement the fuelLevel property by 5.
- Print to the console “Rocket is cruising”.
- Print out the current fuel level to the console (just like in the “liftOff” method).

Step 6:

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Now execute the following commands:

  - Create a new Spaceship object.

  - Call the "addFuel" method of your
    object and pass in 50.

  - Call the "liftOff" method.

  - Call the "thrust" method.

  - Call the "cruise" method.
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You're done! If you completed this exercise, celebrate and let me know on Twitter!
https://twitter.com/CodeWithChris

If you want to compare your project to mine, you can get it here:
https://codewithchris.com/code/Lesson7WorksheetPlayground.zip

Let's move on to Lesson 8:
https://codewithchris.com/lesson8