Looping Assessment

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Challenge Overview

• This assessment covers loops in Alice, including while loops and for loops. *It should take about 20 minutes to complete this challenge.*

• Before starting this challenge complete: “Bunny Eat Broccoli: Repetition- Simple Loops and Conditional Loops”

• This challenge also uses lists, consider completing: “Making Objects in Unison: Using Lists”

Starter World

• Open the *loopChallenge.a2w* world.

• You will see that there are already objects and methods written.

• If you press play you can see that the world does not work properly.

Goal

• Your goal is to add to the world.myFirstMethod to make the story complete. There are comments in the world to help you.

• The sharks should all jump up in unison. Then the scuba diver should notice the sharks, and the sharks should notice the human. The sharks begin to approach while circling, while the scuba diver swims to the dock for safety.
Methods

• There are some helpful methods already written for you. These include:
  – World.sharksCircle
  – World.sharkJump
  – scubaDiver.swim
  – scubaDiver.getOnDock

• You also have a list containing all the sharks (world.sharks)

• You should review the given methods before you start so you know what they do, but do not edit them.

• Your job is to use these methods to help complete world.myFirstMethod

Editing World.myFirstMethod

• First
  – You should add in a loop to use with the list of sharks to make all of the sharks jump together.
  – Hint: think about a loop that allows you to do multiple actions together

• Finally
  – Inside the while loop the scubaDiver should swim while the sharks simultaneously swim in circles
  – Hint: use one of the scubaDiver methods and one of the world methods
  – Hint: use a Do together block

• Next
  – Skip the given code where the shark and scubaDiver engage in hostile dialogue.
  – Add in a while loop
  – The condition should be while the scubaDiver is more than 4 meters away from the dock.
Play World!

• You can check your finished world with the completed assessment online.

• If your method creates the correct sequence of events when you play the world then YOU HAVE COMPLETED THE CHALLENGE!!

• CONGRATULATIONS!!