Alice 3 Looping Assessment

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June 2017
Adapted from Erin Taylor’s Alice 2 assessment, “Looping Assessment”

Challenge Overview

• This assessment covers loops in Alice 3, including while and for loops. It should take about 15-20 minutes to complete this challenge.

• Before starting this challenge, complete the tutorial: “Monkey Eat Bananas Repetition – Simple Loops and Conditional Loops for Alice 3”

• This challenge also uses lists. Consider completing the tutorial: “Making Objects Move in Unison: Using Lists”

Starter World

• Open the loopingAssessmentStart.a3p world
• You will see that there are already objects and methods written
• If you press play, you will see that the world does not run properly

Goal

• Your goal is to add to myFirstMethod to make the story complete. There are comments in the world to help you.
• The sharks should all jump in unison. The swimmer should notice the sharks, and the sharks notice the swimmer. The sharks begin to approach while circling, and the swimmer swims to the dock for safety.
Methods

- These are the methods already written for you:
  - `this.sharkJump`
  - `this.sharksCircle`
  - `swimmer.swim`
  - `swimmer.getAbsolutePath`
- You should have a list containing all the sharks (`this.sharkList`)
- You should review the given methods so you know what they do, but do not edit them
- Your job is to use these methods to complete `myFirstMethod`

Editing 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

**Next**

- Skip the given code where the swimmer and shark engage in hostile dialogue
- Add in a while loop
- The condition should be while the swimmer is more than 2 meters away from the dock

**Finally**

- Inside the while loop, the swimmer should swim while the sharks simultaneously swim in circles
- HINT: Use a do together block
Play World!

• You can check your completed world with the solution online.
• If your method creates the correct sequence of events when you play the world, then you have completed the challenge!
• Congratulations!