Alice Programming Assessment: Random Number Variables

Assessment Overview

This assessment is designed to cover use of random number variables and loops in Alice. *It should take 20-30 minutes to complete this challenge.*

Before attempting this challenge please complete the tutorial: “Changing Color, Advanced Functions”.

Starter World

Open the RandomNumbersAssessment.a2w world

You will see that there are already objects and methods written

Press play and view the current state of the world

The Problem

Dr. Robos is not a very good mad scientist robot, and he needs your help to get his Randomizer to work and destroy the human’s science/space station on Mars.

The goal is to write a method for the spaceStation that makes it turn counterclockwise at random speeds after the Randomizer is activated.

- Right now, it stops spinning as soon as Dr. Robos activates the Randomizer and blows up.
Methods

There are only two methods you need to worry about: `world.myFirstMethod` and `spaceStation.malfunction`.

There are comments in both of these methods that show where code should be written.

spaceStation.malfunction

`spaceStation.malfunction` needs to turn the `spaceStation` one full revolution at a duration that depends on the value of a random number variable. There should be four different durations, so the random variable should have four different possible values. Also add a print statement that prints out your random number variable once it has been set as a random number.

World.myFirstMethod

Once `spaceStation.malfunction` is working properly (remember, you can test single methods by creating events that play them when the world starts), call `spaceStation.malfunction` in `world.myFirstMethod` four times.

After that, the spaceStation will be destroyed, and Dr. Robos will laugh gleefully.

Completion

If the `spaceStation` spins four times at random speeds after the Randomizer is activated, then the assessment is complete!