

5.2 Smart Mike No.1

Intro






Mike No.1 is actually a smart spaceship which can transform into a ship when gets flooded and transform to a magical carpet when in desert.

Task

1. Design a program to realize the goal of switching backdrops, and broadcasting messages.


Start Learning

Broadcast function is to coordinate the interaction among multiple sprites. This function requires both broadcast blocks and receive blocks.

Block	Explanation	Example
	Broadcast a message to all sprites.	Create a new message 
	Receive a message. This is also the initiative block of the script.	Sprite A broadcast the message of "Success".  Sprite B will perform the corresponding script after receiving "Success" 

★ Practice

- 1) Import 2 sprites, one of which is in charge of broadcasting and the other one receiving.

- 2) Explore to find out the difference between  and









☆ Explore

- 1) Import 3 sprites and enable them to pass messages in turn.
- 2) Think: Can the sprite which broadcasts the message receive its own message?

Achieve

When the backdrop is switched, inform Mike No.1 to change its costume. Create a new sprite with 3 costumes: "Mike in Spaceship 1.png" (from local file), "sail-boat", and "magiccarpet" from the library.

Sprite	Program	Effect
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 <p>Forest</p>	<pre> when clicked forever switch backdrop to Forest broadcast Forest wait 5 secs switch backdrop to desert broadcast desert wait 5 secs switch backdrop to wave broadcast wave wait 5 secs </pre>	 <p>↓</p>  <p>↓</p> 
 <p>Mike in Spaceship 1</p>	<pre> when clicked go to x: -10 y: -30 when I receive Forest switch costume to Mike in Spaceship 1 when I receive desert switch costume to magiccarpet when I receive wave switch costume to sail-boat </pre>	

Tips

In addition to broadcast blocks, you can also use

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when backdrop switches to Forest
  switch costume to Mike in Spaceship 1

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to

Homework

Use broadcast blocks to make the spaceship take off and land on.

What You've Learnt?

Adventure Diary (Self-Assessment)

Gas Station (Other's Assessment)