



Scratch Programming

Topic 1.2

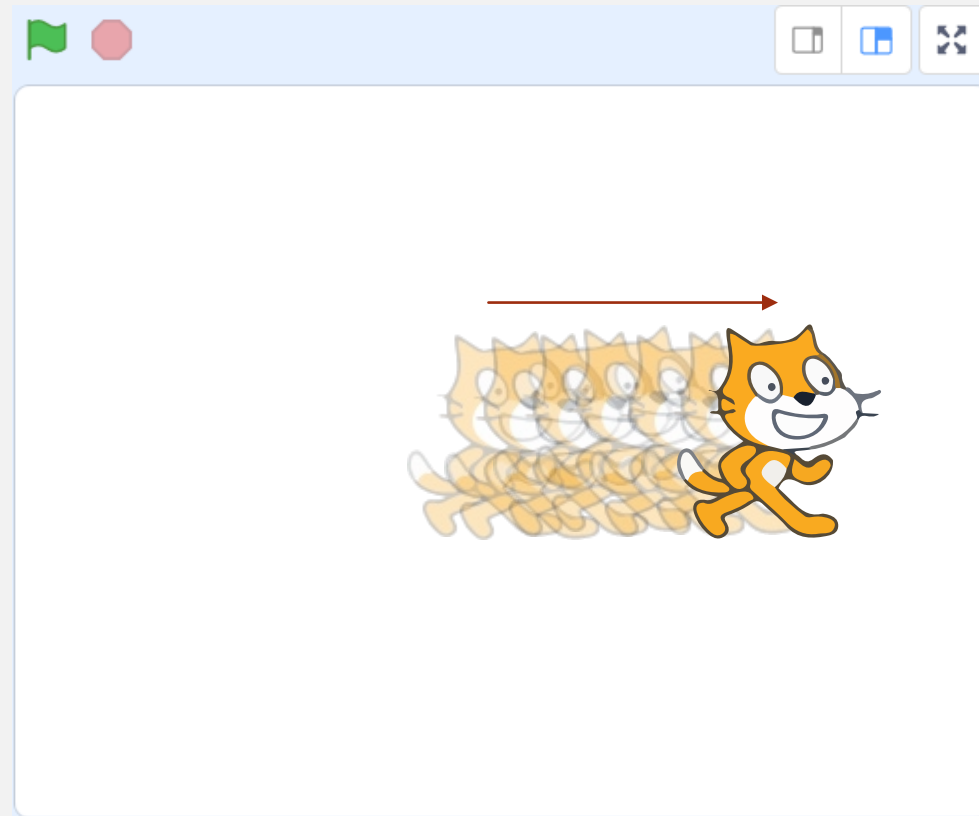
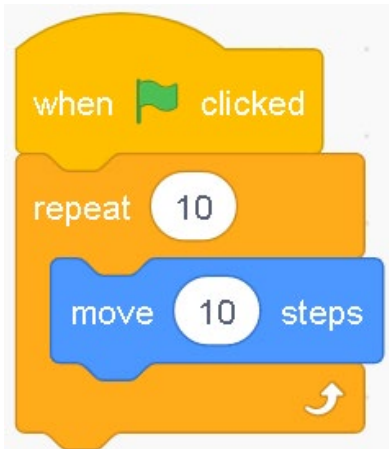
Conversation Story

Presented by Advaspire Team



Review Last Topic – Animation move

Script:



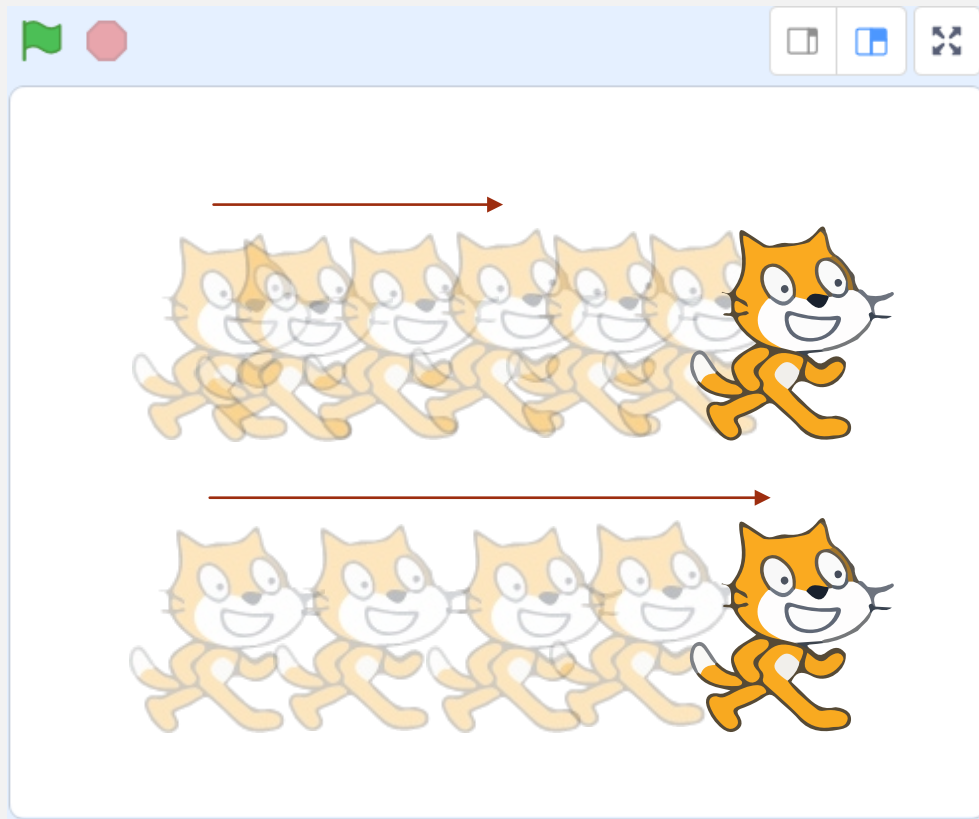
To make animation move, you need to make the steps repeat for few time.

>> Move forward for 10 times, each time moving 10 steps. Total travelling distance = 100 steps.

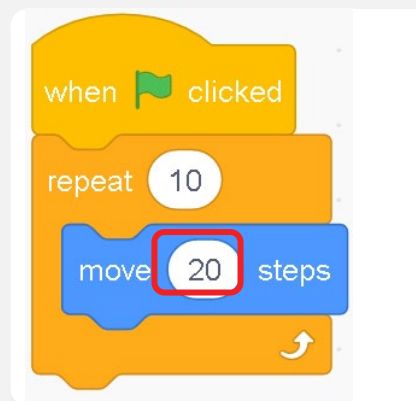
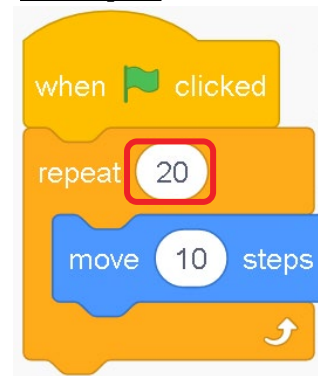
1 repeat block processing time = 0.03 second



Review Last Topic – Move steps



Script:



If you put higher value in repeat block (without changing the move steps), the cat should move further.

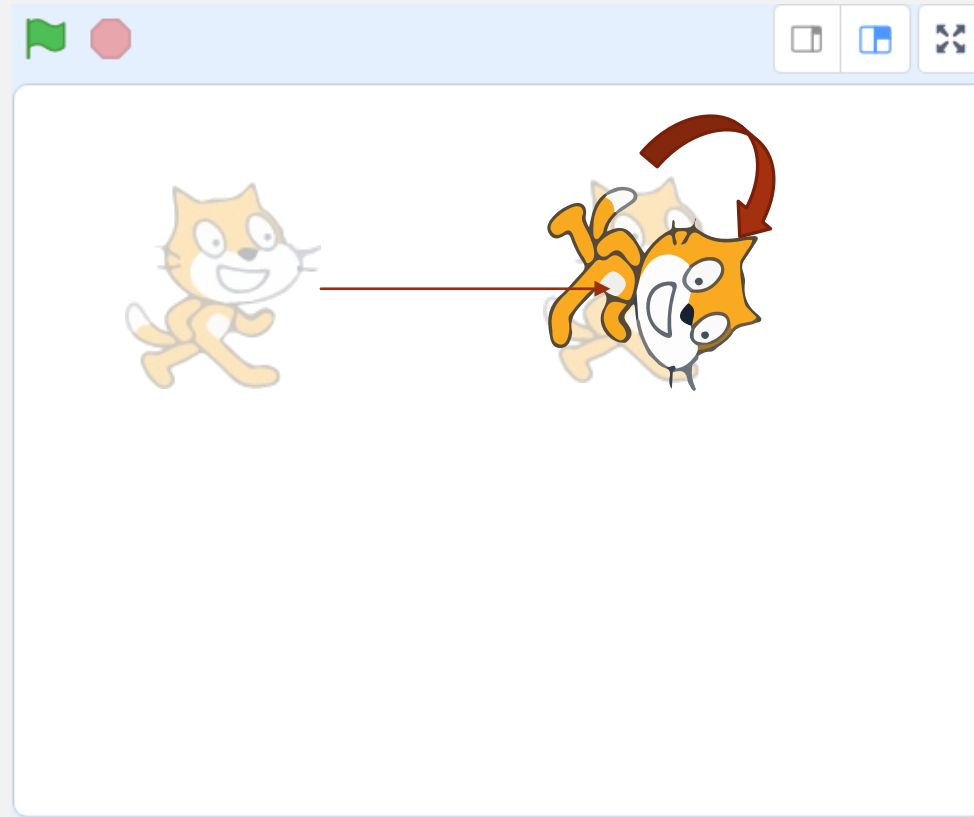
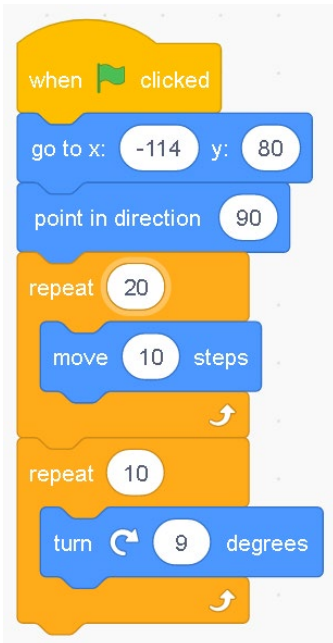
If you put in higher value for move steps, the cat will move faster. Lower value will make it move slower.

***Let's put your hands on and test the effect on this.**



Review Last Topic – Combining action

Script:



You can combine the blocks together to make the motions.
This is to make the cat move front 200 steps from the starting position then turn 90°



Today's Topic

1. Looks Block – Say Something
2. Rotation Style Left/Right
3. Use Wait Block for timing conversation
4. Broadcast Function

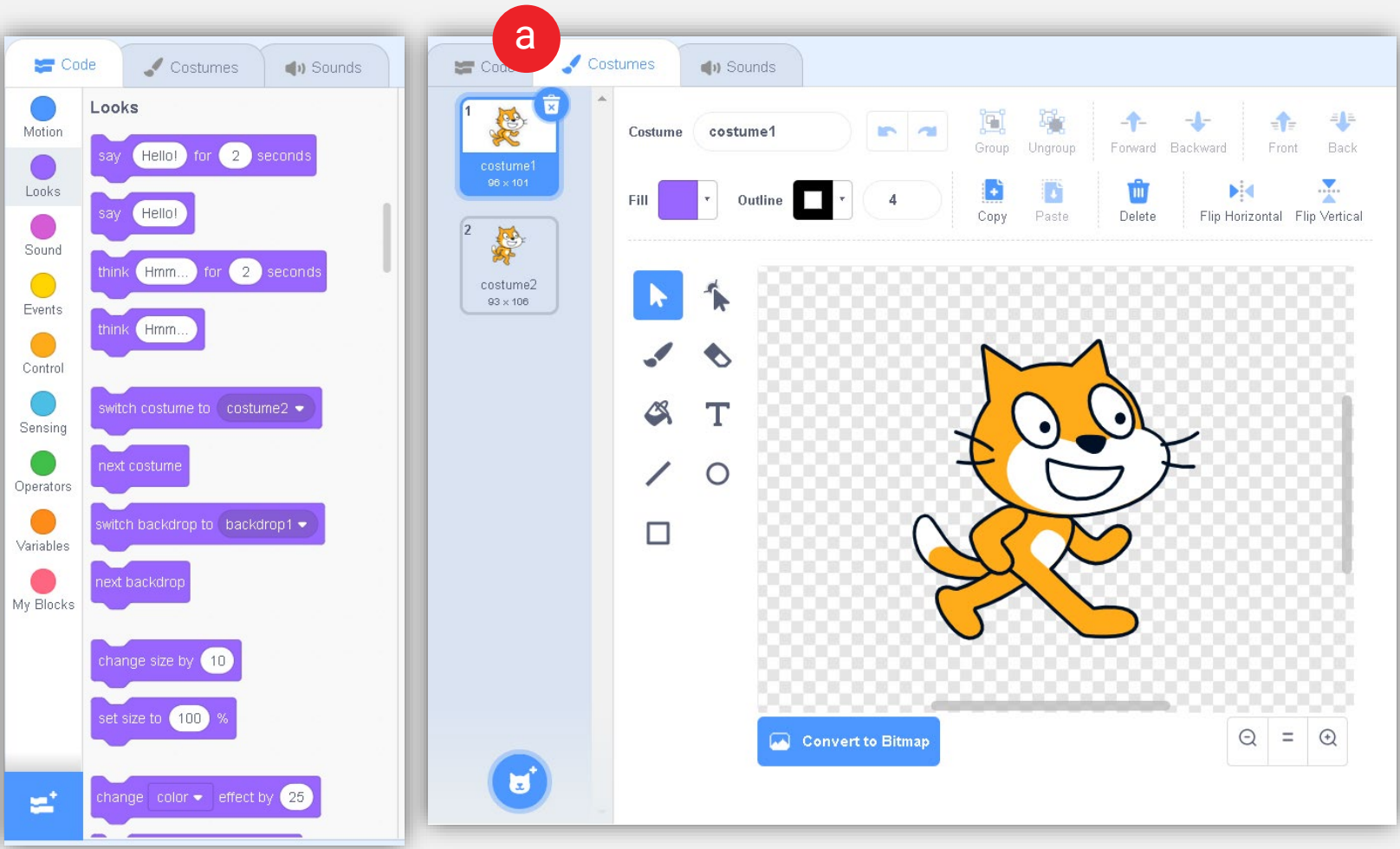


Learning Outcome

- 1. Able to make story with conversation**
- 2. Able to code dialog using say block and wait for block**
- 3. Understand how to make dialog story using broadcast function**



Looks → make it talk



a You can transform your object into animation by changing the costumes of the sprites.


Click costumes tab to edit or draw your costumes.

The concept is like a flipping comic, by changing the costumes very fast, it gives us an optical illusion that the object is moving.



Looks → make it talk

a



Say

b



Think

Script:

a

when green flag clicked

say Yes! It's my lunch time!! for 2 seconds

wait 1 seconds

think Hmm... What should I eat? for 2 seconds

b

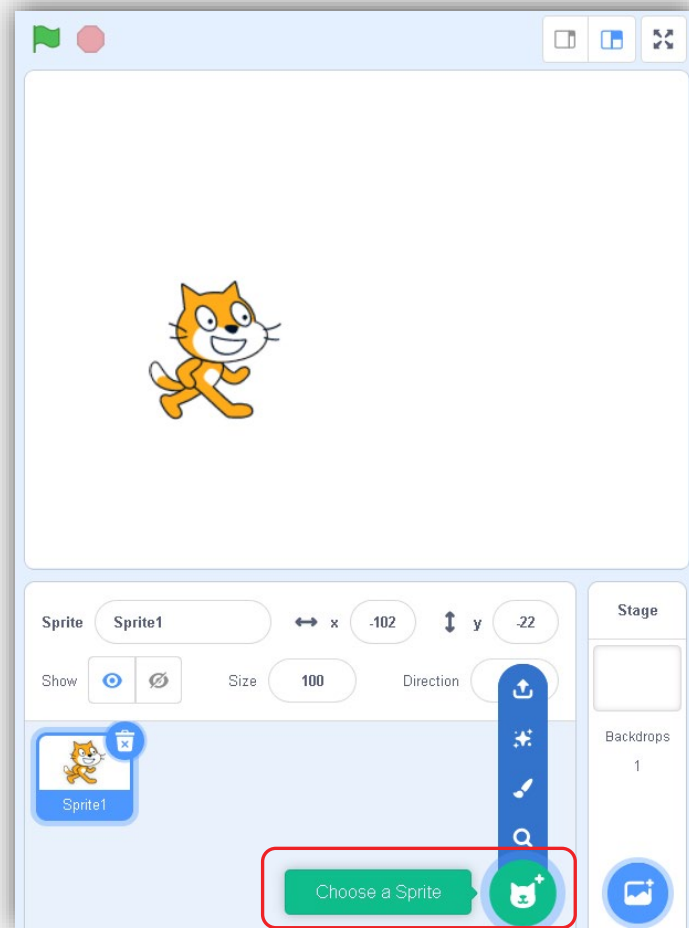
You can either make your cat say something or think about something.

“say ____ for __ seconds” block is to make your cat to say a sentence for certain seconds.

“think ____ for __ seconds” block is to make your cat think about something for certain seconds.



Add a New Sprite or Character

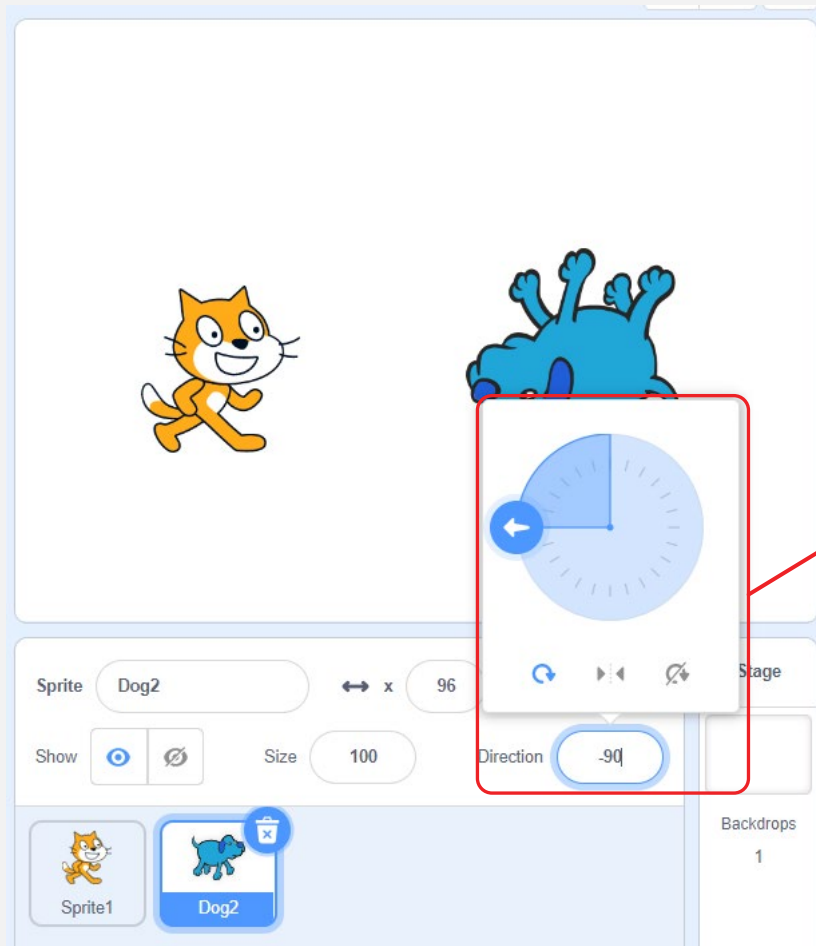


Click “Choose a Sprite” (bottom right icon) to add a new character.

I will add “Dog2” as a new sprite.



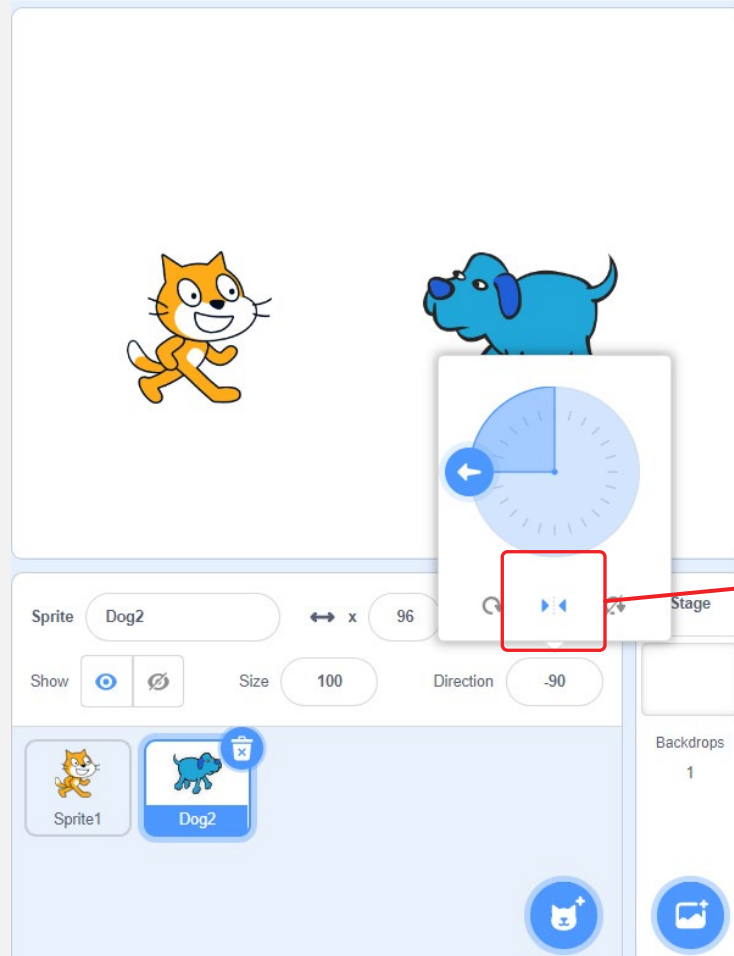
Looks → Edit the costumes



Turn the direction of the dog to -90° to make it face to left.



Looks → Edit the costumes

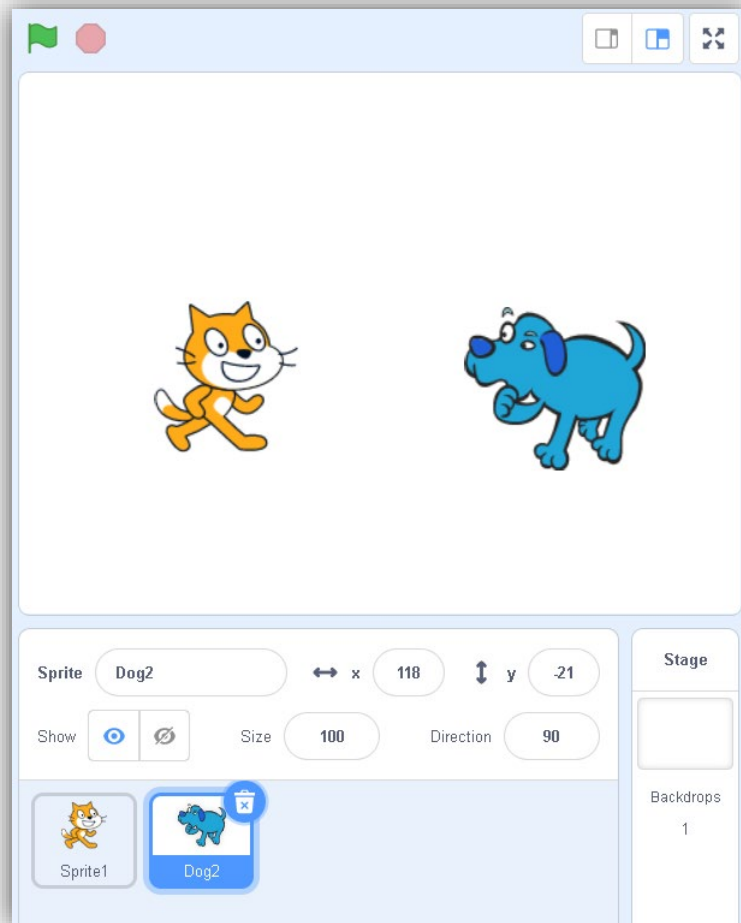


In rotation style, select the middle one to make the dog only flip to left or right.

Then your dog should be standing now.



Starts a conversation

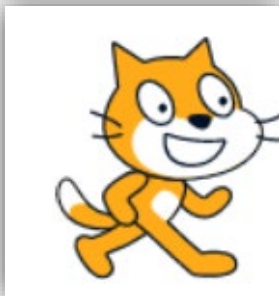


Lets make a conversation like below:

Cat: Hi Doggy!
Dog2: Hi Catty!
Cat: What's up!
Cat: How are you?
Dog2: Quite busy lately...
Dog2: I'm going to have my lunch
Dog2: Wanna grab some food together?
Cat: Sure! Let's go!



Conversation Arrangement



Script:

```
when green flag clicked
say Hi Doggy! for 1.5 seconds
wait 1.5 seconds
say What's up! for 1 seconds
say How are you? for 1 seconds
wait 4.5 seconds
say Sure! Let's go! for 2 seconds
```

Script:

```
when green flag clicked
wait 1.5 seconds
say Hi Catty! for 1.5 seconds
wait 2.5 seconds
say Quite busy lately... for 1 seconds
say I'm going to have my lunch for 1.5 seconds
say Wanna grab some food together? for 1.5 seconds
```

Arrange the conversation accordingly.

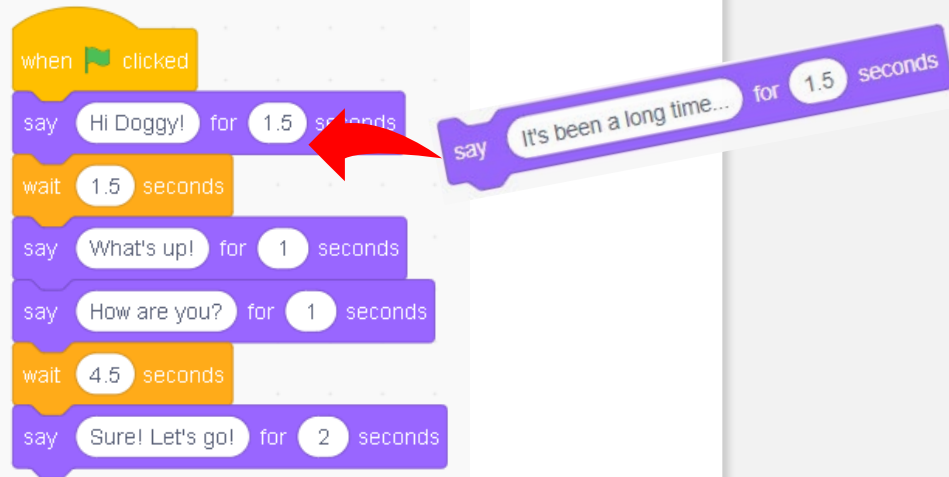
For example, cat will be the first one to talk, then it will say “Hi Doggy!” for 1.5 seconds, then dog will wait for 1.5 seconds until cat finishes its speaking, then only say “Hi Catty!”, so and so on.



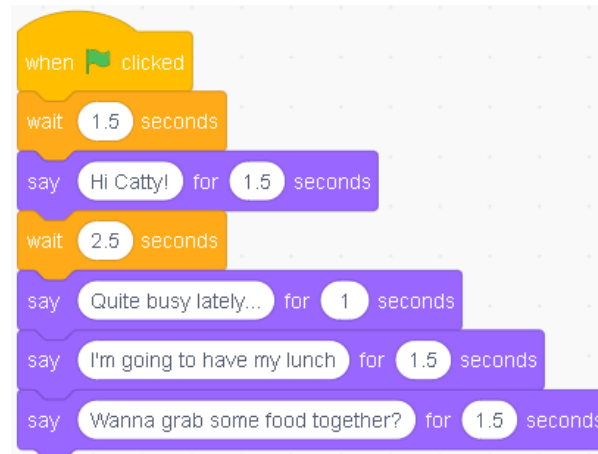
Issue – When the dialog is modified



Script:



Script:



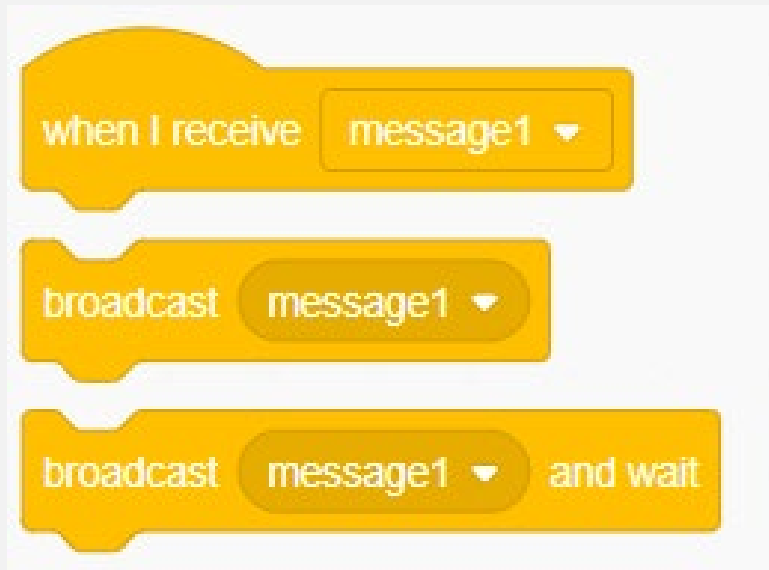
There is a problem if you have your dialog modified (add or remove dialog), unless you recalculate all the timing for wait block and rearrange it.

You will need to add duration if you slot in dialog into to conversation.

If will be confusing when you have a lot of dialogs, you must add duration to correct wait block in order to run it without overlapping.



Broadcast Function

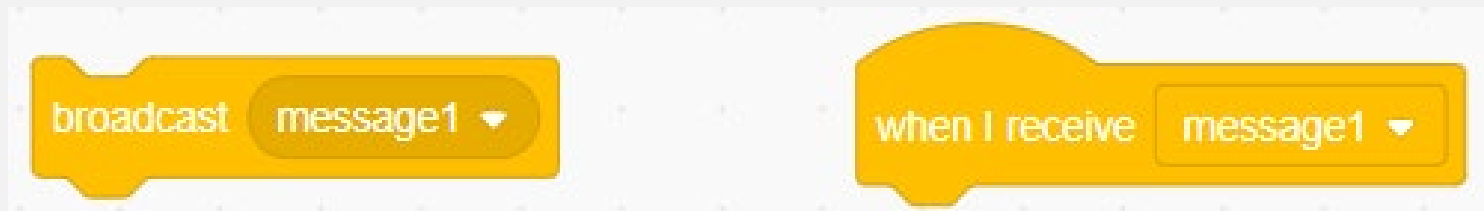


Instead of using wait block to time the conversation for different sprites, there is a better way to arrange the conversation, we will use broadcast method to arrange our conversation story over wait block.



Broadcast Function

Send out Broadcast



This is an event to sent out a broadcast to all sprites including backdrops.

Each of the sprites will receive the message including the sprite that initiate the broadcast.

Receive Broadcast



This is an event that triggers following blocks to do the actions once receive the message stated.

If this block is absence in the sprite, it won't do any action even if it receives message from broadcast.

Broadcast Function



Script:

```

when green flag clicked
  say Hi Doggy! for 1.5 seconds
  broadcast message1

when I receive message2
  wait 0.5 seconds
  say What's up! for 1 seconds
  say How are you? for 1 seconds
  broadcast message3

when I receive message4
  wait 0.5 seconds
  say Sure! Let's go! for 2 seconds
  
```



Script:

```

when I receive message1
  wait 0.5 seconds
  say Hi Catty! for 1.5 seconds
  broadcast message2

when I receive message3
  wait 0.5 seconds
  say Quite busy lately... for 1 seconds
  say I'm going to have my lunch for 1.5 seconds
  say Wanna grab some food together? for 1.5 seconds
  broadcast message4
  
```

We can also arrange the conversations with Broadcast function.

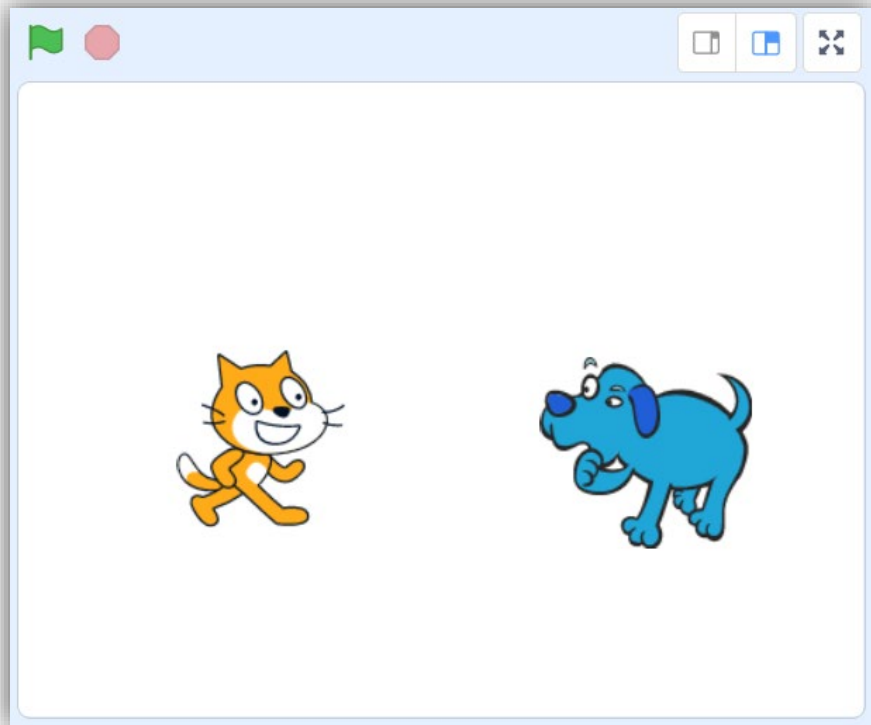
Broadcast function is like acting based on cues.

If Catty is the conversation starter, after first sentence, Catty will send a message to Doggy as it's Doggy's turn.

Then after Doggy ends its turn, it will tell Catty to start its turn.



You can try to create your own story





ASSIGNMENT *for*

Topic 1.2

T1.2 – Mission 1

Do a conversation like below:

Cat: Good morning, Doggy!

Dog2: Good morning, Catty!

Cat: How is everything going?

Dog2: I'm good... ..

(pause a moment)

Dog2: But I'm quite worried about my exam

Dog2: I think I screwed the exam.

(pause awhile)

Cat: Don't worry about it, let's catch some drinks first!



T1.2 – Mission 2

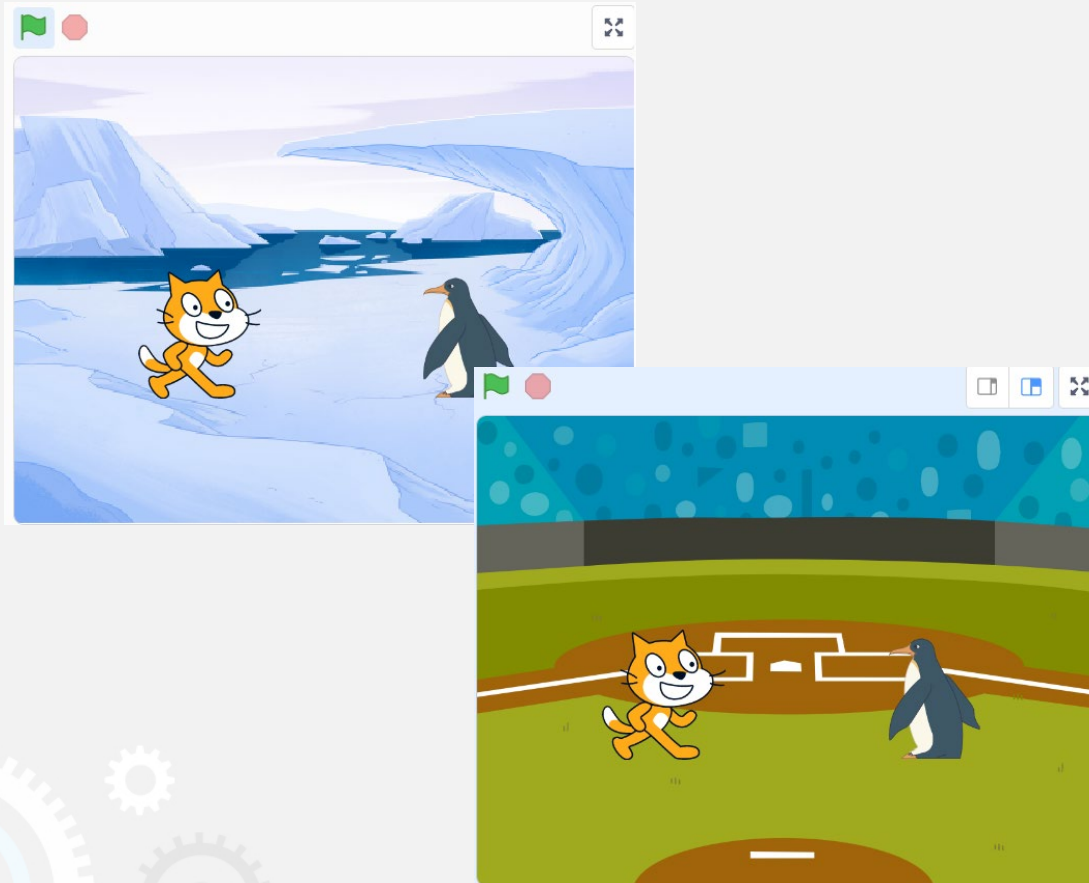
Try to change these 2 characters to other sprites.

Design your own conversations that's talking about Covid-19 things.

Conversation keeps to 6~10.



T1.2 – Mission 3



Make a story with at least 2 different scenes.

Create your own conversation story and use broadcast function for the flow.



Summary

1. You can transform your object into animation by changing the costumes of the sprites.
2. “say ____ for __ seconds” block is to make your cat to say a sentence for certain seconds.
3. Using “wait __ seconds” block can pause the sprite for awhile while waiting other sprites to complete their dialog
4. Broadcast method is a better way to arrange conversation when you have a lot of dialogs going on



You can direct message your teacher and ask your question through [Slack Robotene Community](#) or arrange a [One-to-One Consultation](#) with your teacher.



Any Questions?



Thank you :)