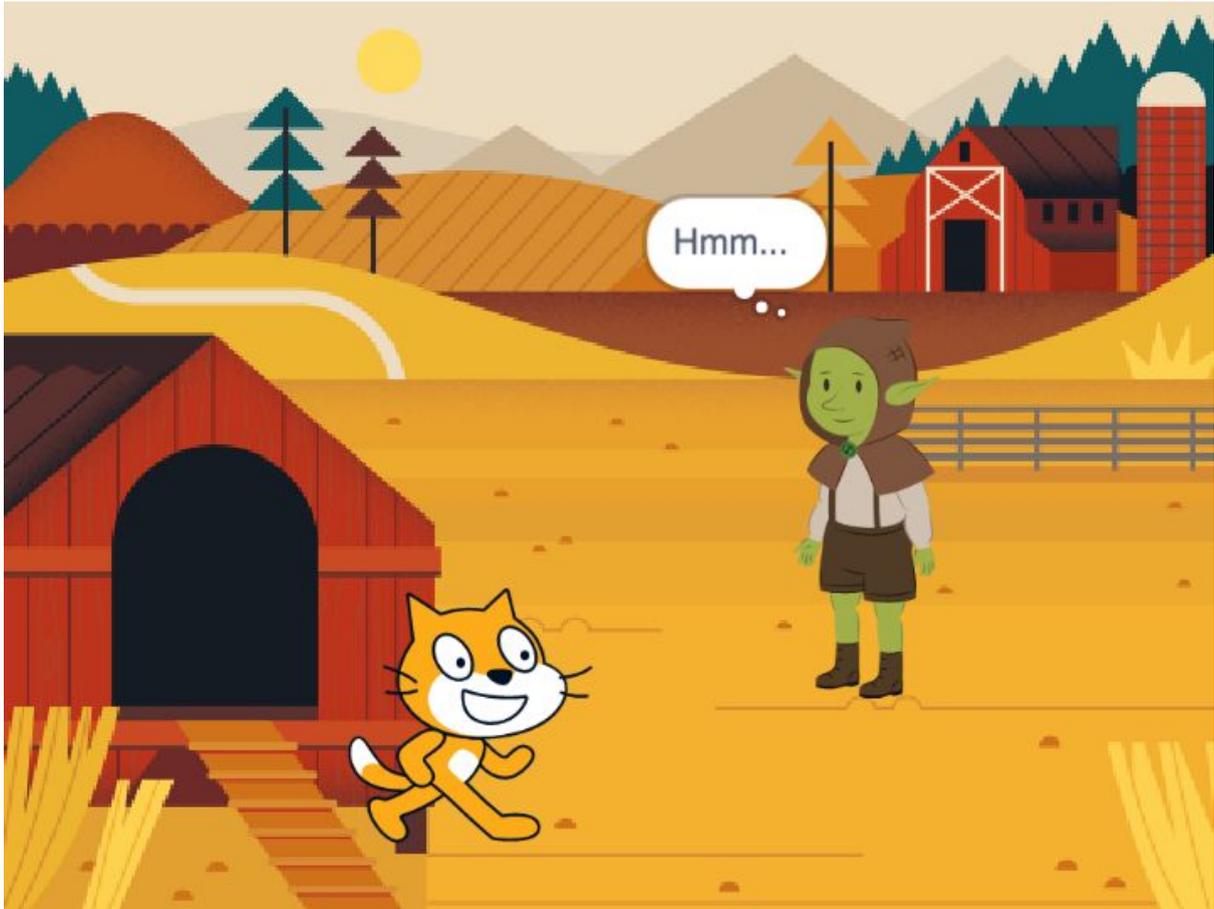


Phoenix



You will need:

Access to the [Scratch](https://scratch.mit.edu) website, from a computer or laptop.
(It might also work from an ipad or tablet)

This tutorial is best for people who have used Scratch a little bit before.

Setup:

If you haven't used Scratch before, click join scratch at the top and create an account. You might need your parent's email to do this, so ask for help. If you can't make an account, you can follow along, but you won't be able to save your work.

Once you've made an account follow the Phoenix Scratch studio [here](#). This is where you can find the template versions of all the workshops we create. Feel free to remix them and post the new things you create.

Wait, what is Scratch?

Scratch is a free, online, **block-based** code editor. You might have used it in school. If you've been to one of our family workshops, you've probably seen us using it there.

There are lots of different tutorials available for using Scratch. Here we are going to focus on showing you ways of using Scratch that link to the work we do at Phoenix. This will include things like animation and drawing.

Improvised Sketches

In this project we are going to think about how we can set up different events to happen in different ways. This will allow us to tell surprising, random stories.

Have a look at the finished project here,
<https://scratch.mit.edu/projects/387083079>

And then open this project and remix it.
<https://scratch.mit.edu/projects/387823771>

Step 1

If you've watched the completed project, you might have some ideas about what is going on.

If not, don't worry as we are going to go through everything.

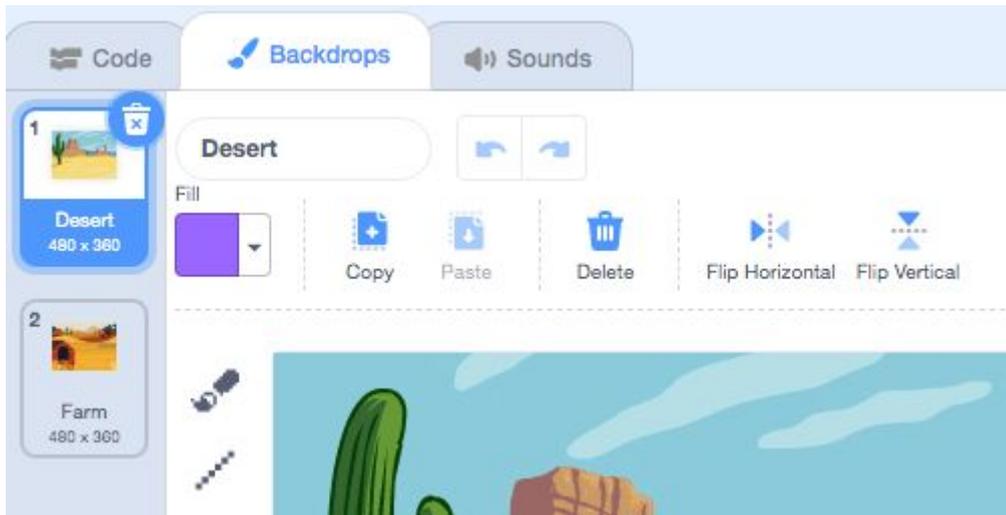
Most of this project relies on **broadcasting messages**. This is useful as it allows us to make things happen at certain times.

It also gives us the flexibility to make different things happen depending on a range of variables.

Throughout this project we will be making use of the images available to use on Scratch. Feel free to draw your own, if you'd prefer.

Step 2

First of all let's set up our stage with some interesting backdrops. Open up the Stage and click on the Backdrops tab.



Find the Add Backdrops button at the bottom of the page and add in a few more that you like the look of.



Step 3

Now open up the code tab and make sure you have something similar to below.



Here we are using the Stage to control the different elements of our story.

Imagine it as if each backdrop is a page in a comic book. When the page is turned a new scene is beginning.

For the moment, to keep our story quite simple and easy to follow, we are just going to set up three messages to be sent out.

We can think of these like this;

message 1 - greeting

message 2 - question

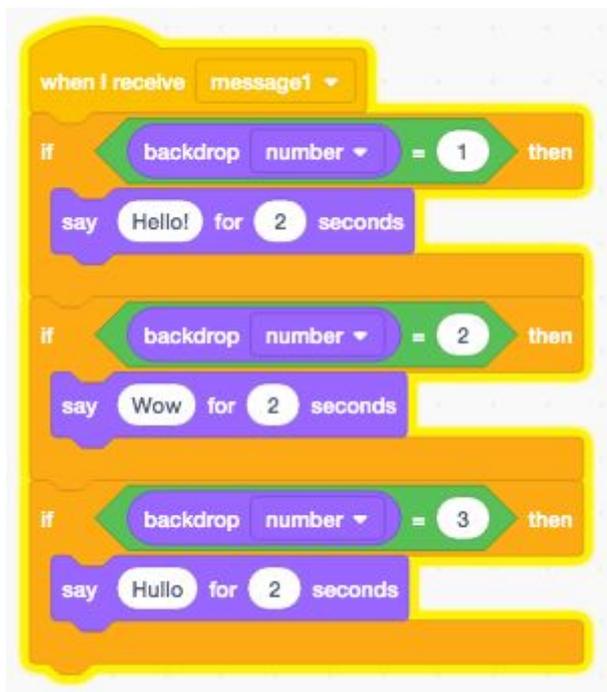
message 3 - answer

This gives us a very simple structure. But we can use it to do lots of different things. As soon as you understand this part of it, you can start adding more levels.

We are using the **broadcast and wait** block to ensure that our actions don't get out of sync.

Step 4

If you switch across to one of the Sprites now, and open up their code, you should see something like this.



When this sprite receives message 1, we use the **if** block to check which page of the comic book, or which backdrop, we are on.

Once you have done this, choose which character you would like to say the question line. Copy the block of code for **message1** but make it work for **message2**.

Do the same for the character you would like to answer, but this time make it work for **message3**.

If you want to do this quickly, you can right-click on the **when I receive message1** block and click duplicate. Just remember to change it to the right message.

Step 5

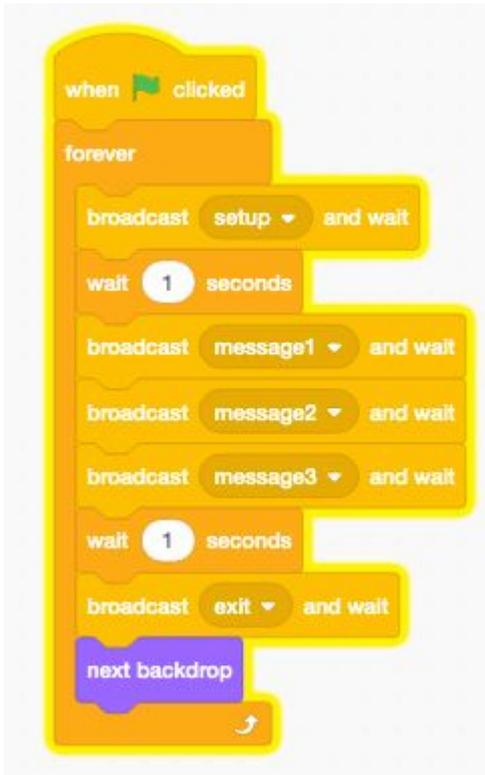
Now we can start experimenting with the conversation our characters are having. You might find it helpful to draw a table to work on this part. You could try doing something like this.

Backdrop	Message 1 Greeting	Message 2 Question	Message 3 Answer
1 Desert	Hello / Hi	Did you bring any water?	Oops, I thought you were bringing the water.
2 Farm	Howdy / Hullo	Where are all the chickens?	I don't know. This isn't my farm.
3 Baseball field	Hey / Hi	What's your favourite team?	Well, I do like the Goblin All Stars.

When you have a couple of scenes that you are happy with. Move on to the next step.

Step 6

Let's add some extra messages that we can use to set up and end the scenes.



Now we need to create our actions and listening blocks.

Open up a Sprite again and add the **when I receive setup** block.



We've attached the **glide** movement block to move this sprite in and out of each scene. See what you can come up with.

Step 7

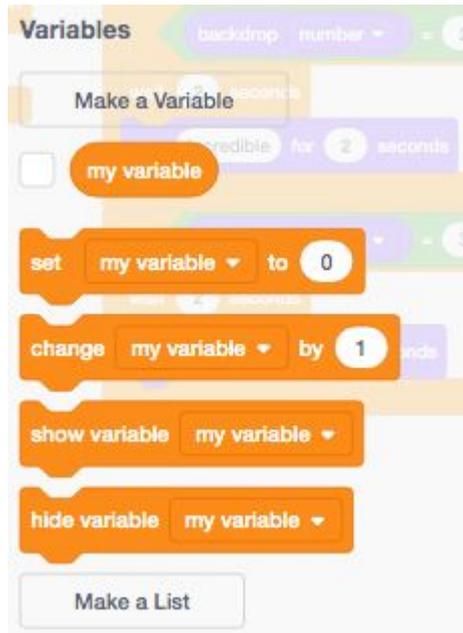
Excellent. So now we have a scene that is starting to tell a story. Things are happening in time and there is some movement.

At the moment though, it is just the same each time it loops around.

Can you think of a way to make the speaking parts change each time?

Step 8

We're going to try and make it working using a list. Make a new list, by clicking the button in the variables block section.

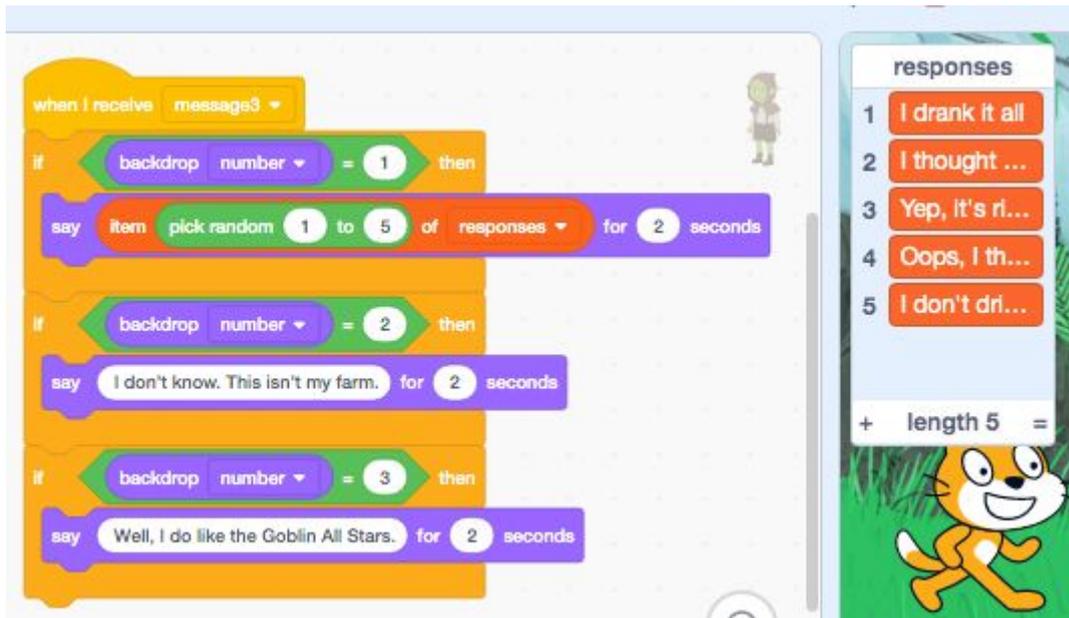


You can name you list something like responses. Now an empty window for the responses should appear on the stage. You can click the plus symbol to type in some alternate responses.



Step 9

When you have some responses you are happy with, add in some code to make them be selected in the conversation. Something like this, should work.



Step 10

Now we have the basics of our Funny Talking project.

At this stage you might find it useful to add some code like this, which will allow you to quickly hide and show your lists as you are working on them.



You might find it easiest to create multiple lists for different sections. You could also just create one long list. Each time you use the **pick random** block, you would just have to choose the right set of numbers.

Extra steps

And that's it. You have the basic Funny Talking project up and running. See what kind of funny things you can come up with. If you need some inspiration, try completing some of the tasks below.

- Can you add a third character to the scene?
- Can you add some extra **wait** blocks to help the flow of the conversation.
- Try drawing your own backdrops.
- A lot of the Scratch characters have extra costumes for animation. Can you use these?
- Instead of making the characters speak, could you make them decide to do a dance?

Remember to share your project to the Phoenix Scratch studio!

Hopefully you found this exercise interesting! We can't wait to see what you create.

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