OurKidsCode
FAMILY CODING CLUBS

1. Setup
2. Warm up
3. Create
4. Share
5. Reflect
6. Plan

Workshop Guide

MICRO:BIT

COLLECT A BIG STICKER HERE
When you complete the Project!

PET





Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Rialtas na hÉireann
Government of Ireland

Taighde Éireann
Research Ireland

BEFORE WE START

Be positive & read the words below together as a family.



BE POLITE AND SAFE

Use kind words, be patient and respectful of others.



BE FRIENDLY

Make friends, ask questions and share learning.



BE CURIOUS

Show interest, share ideas, there's no such thing as "bad questions or wrong answers."



TAKE ACTION

Make decisions, note results and enjoy the activity.



RECOGNISE EFFORT & ACHIEVEMENT

Cheer your own and other's successes alike.

Write or draw your answers to these questions:

What is your ideal pet? Why?

What did you feel about the Taster workshop (Rock, Paper, Scissors)?

How can we create a positive atmosphere again this time?

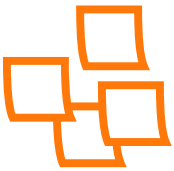
1 SETUP

SELECT YOUR ROLE IN YOUR TEAM:



ORGANISER

- ❑ Write a simple plan with the team
- ❑ Check if the team is on track
- ❑ Make sure the team starts and stops on time
- ❑ Collect stickers for finishing each step



DESIGNER

- ❑ Turn ideas into a picture for the team
- ❑ Show what the project will look like
- ❑ Partner with maker and coder



CODER

- ❑ Build the brain of the project
- ❑ Operate the laptop/tablet/phone
- ❑ Connect the coding blocks on MakeCode website
- ❑ Test the code and fix mistakes



MAKER

- ❑ Build the body of the project
- ❑ Cut and prepare material
- ❑ Partner with the designer on how to decorate it



REVIEWER

- ❑ At the end, check and review the project
- ❑ Is it working?
- ❑ Does it look right?
- ❑ Any steps missing?

Collect the following for this project:

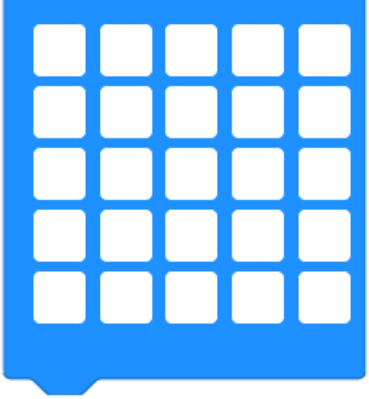
- ❑ Micro:bit
- ❑ Paper Bag
- ❑ Craft materials
- ❑ Coloured Paper
- ❑ Masking tape
- ❑ Markers

DESIGNER TASK

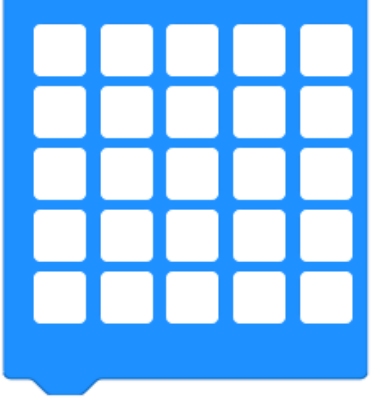
Designers! You need to come back to this page once your team reaches Step 3. Create.

Fill the Micro:bit grid to show how the mouth shape will look for your Pet. The Coder will copy your design onto the Micro:bit screen.

HAPPY



SAD



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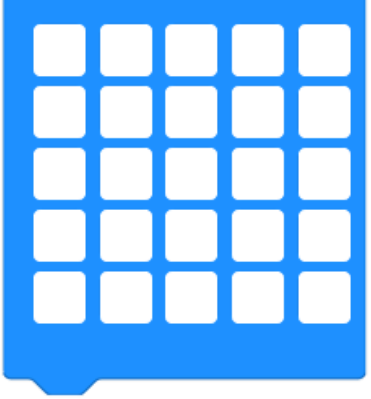
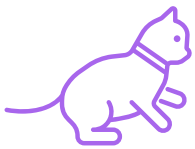


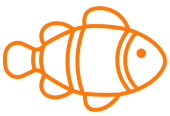
Notes

COLLECT sticker

2 WARM UP

ORGANISER JOB





3 CREATE: Make

MAKER + DESIGNER TASKS

1



Cut a hole through the paper bag and make sure it's the **size of the microbit.**

2



Unleash your creativity and **decorate your Pet** as you desire!

3



Use masking tape to **attach the Micro:Bit to your Pet.** Keep the side with the wire free and clear of tape.

4



Your Pet is ready! Make sure the Micro:bit is visible through the cut-out.

COLLECT sticker

REVIEWER JOB

Test
Make sure the Micro:bit is securely attached with space left to easily attach the wire and the battery pack.

3 CREATE: Code

https://ourkidscode.ie/club-projects-pet/

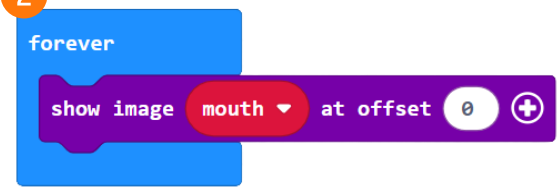
CODER + DESIGNER TASK

- ❑ **Coder**, go to makecode.microbit.org. Click New Project and give your Pet a name.
- ❑ Copy **Step 1 & 2** code shown on right.
- ❑ Create **Variable → mouth**
- ❑ **Step 3, 4 & 5:** Make 3 different function blocks as shown below. Click on **Advanced→ Functions→ Make a Function.**
- ❑ Copy the rest as shown. **Designer** provide Coder with Pet's mouth shapes.

1



2



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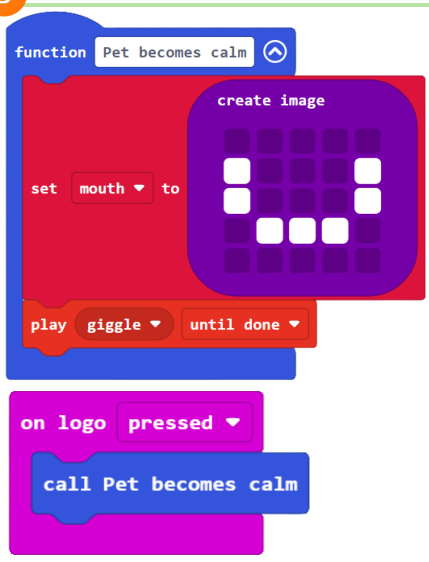

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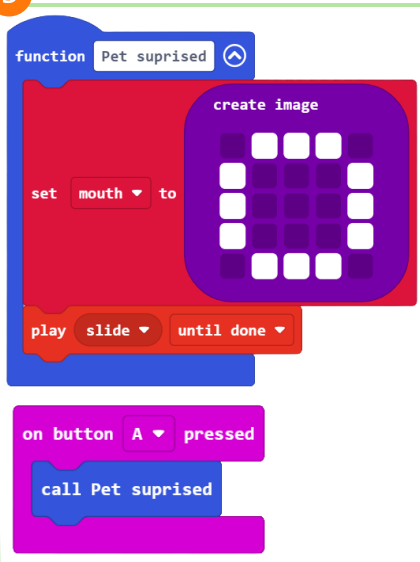
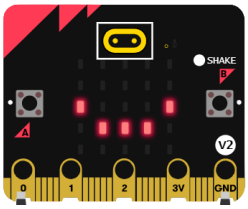


REVIEWER JOB



Download & Test
Connect your device and click download, then test the code on the real Micro:bit.

COLLECT sticker

4 SHARE



CONGRATULATIONS!

You made your very own Pet!

Give your Pet a name _____

Play with it and introduce your Pet to the other families' Pets.

5 REFLECT

Discuss with everyone in the room **what you felt** and **what could you do in the future**.

- ❑ Did you have fun? Did you help someone?
- ❑ What was your favourite part? Least favourite?
- ❑ Learn anything? Feel more confident?
- ❑ Think you and your family would like to do more?

6 PLAN

At the end of every MeetUp, families plan the next one by choosing a project to work on and deciding who will do which tasks to organise it.

You'll find lots of useful documents on our website, including more projects and resources for family-led coding clubs at: https://ourkidscode.ie/club-hub

Acknowledgements and copyright

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