OurKidsCode
FAMILY CODING CLUBS

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

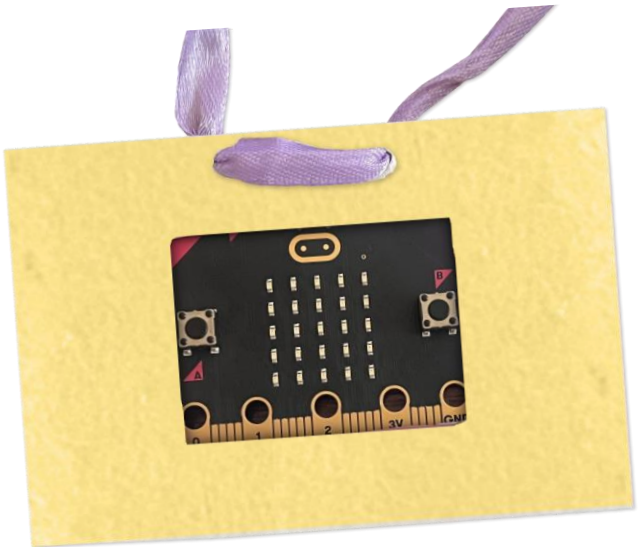
Workshop Guide

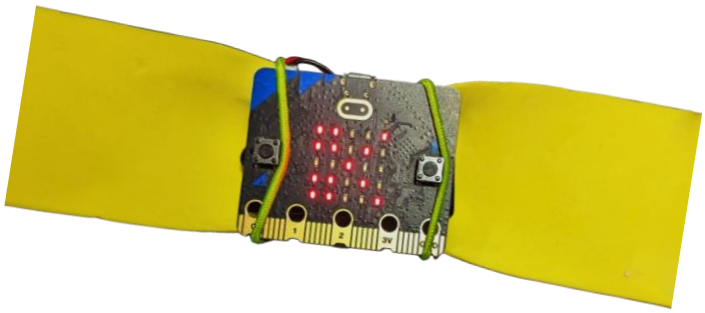
MICRO:BIT

HACKATHON SHOWCASE

BADGES

COLLECT A BIG STICKER HERE
When you complete the Project!





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:

Think of a fun name for your family coding club

Draw a cool mascot for your family coding club.

Think of some good rules for your club. Are your rules the same or different to your teammate's? Agree on your top 3-4 rules and share them with the group.

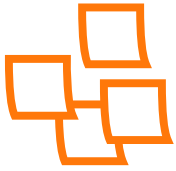
1 SETUP

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



DESIGNER

- ❑ Turn ideas into a picture for the team
- ❑ Show what the project will look like



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

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

Collect base materials for Hackathon:

❑ Micro:bit ❑ Ribbon/Colour Paper ❑ Crafting Items

2 WARM UP

ORGANISER TASK



CHARADES! (Kids vs Parents)

Let's play Charades! It's a fun game **where you act and others guess.**

Twist in our game:
Kids and Parents are on different teams!

THINGS TO DO

01. Prepare

- ❑ Divide into All Kids and All Parents teams of 3-4 people each.
- ❑ Each team writes down or draws 3 animals and 3 actions
- ❑ Link the animals to the actions, like this (but choose your own!):



- ❑ Decide which team member will act out which animal actions

02. Play

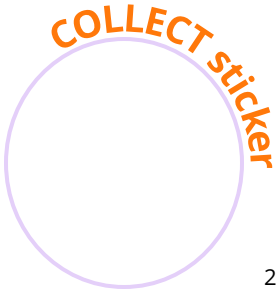
- ❑ The teams take turns acting and guessing – 3 rounds in total
- ❑ Teams have 30 secs to guess the acting team's animal + action
- ❑ Only use body movements to act. No talking! No animal sounds!
- ❑ Be creative, be silly, have fun!

03. Winning

- ❑ The first team to guess the correct **animal** = 1 point
- ❑ The first team to guess the correct **action** = 1 point
- ❑ If teams aren't first to guess, or don't guess in 30 seconds = 0 points!
- ❑ The team with the most points, WINS!
- ❑ The winning team gets a sticker each!

WHY DO THIS FIRST?

It gets everyone active and relaxed, creating a positive, fun atmosphere before starting the project. It builds a warm-up routine, helping families ease into future STEAM activities with confidence.



HACKATHON

OVERVIEW



What is a Hackathon?

- ❑ A Hackathon is a creative team challenge.
- ❑ Teams get a task and a limited time to find creative solutions using new ideas, research, design and coding.
- ❑ At the end, teams compare their inventions and learn from each other

01 CHALLENGE

- ❑ In this hackathon challenge create a **Micro:bit Badge.**
- ❑ You will have 40 mins to complete this challenge.
- ❑ Each team is provided with Base Code and Craft items.
- ❑ Have a Team meeting to discuss what kind of badge you wish to create: Code type and craft style.
- ❑ Don't forget to be creative!

02 SHOWCASE

- ❑ When the time is up, have a **Mini-Showcase** where teams show off their unique badges
- ❑ Choose presenters from your team:
  - The **Demonstrators** show how the badge works
  - The **Explainers** talk about how you changed the base design.
- ❑ What else could you make with code you used?

03 TEAMS

- ❑ Continue the Kids vs Parents theme for this challenge.
- ❑ Parents create teams of 2-4 parents each.
- ❑ Kids make teams of 2-4 *(older kids, please help younger ones!)*

PARENTS CORNER

While everyone is busy creating, take a moment to chat with other parents, reflect, and think about what is next for your family after this programme.

Section 1

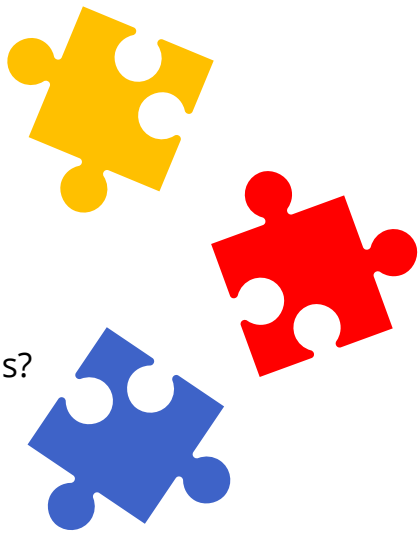
What did your family enjoy most?
☐ Coding
☐ Crafting
☐ Playing warm up games together
☐ Meeting other families
☐ Learning something new
☐ Working as a team

How confident do you feel using Micro:bits now?

☐ Still very new to it
☐ Getting comfortable
☐ Confident to try more projects
☐ Ready to take on the Dream Space challenge!

Section 2

Talk with other parents about:
Why did you come to these workshops?
What surprised you most during these workshops?
What did your child enjoy the most?
What did you enjoy the most?
Are you still excited to form a club with the other families?



Section 3

How often do you want to MeetUp?

☐ Weekly
☐ Fortnightly
☐ Monthly

When is best for your family?

☐ Weeknights
☐ Weekends
☐ After school

What kind of projects would your family enjoy next?
☐ Games ☐ Wearables ☐ Music ☐ Robot ☐ Art & Design

Have a look at the projects and resources on: https://ourkidscode.ie/club-hub
Is there anything else you need before you meet up independently next time?

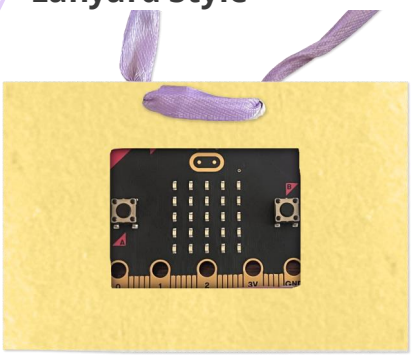
3 CREATE: Make

MAKER + DESIGNER TASKS

1 Base Craft

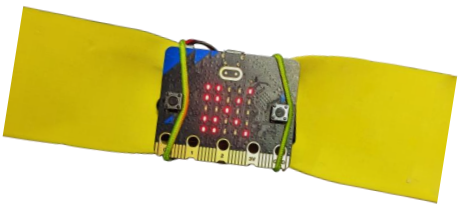
Begin with the base badge craft style – either a Lanyard or wrist band *(as chosen by your team)*.

Lanyard Style



or

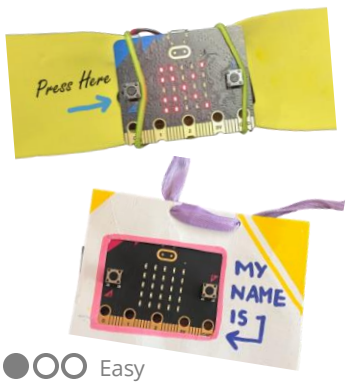
Wrist Band Style



2 Additional Craft:

- ❑ Try to be creative.
- ❑ The craft ideas below might be helpful as a start!
- ❑ When you run out of ideas, think creatively of the previous projects: e.g., Bee and flower, Pet and Rock-Paper-Scissors.

Interactive Badge



●○○ Easy

Decorative Badge



●●○ Mid

Character Badge



●●● Hard

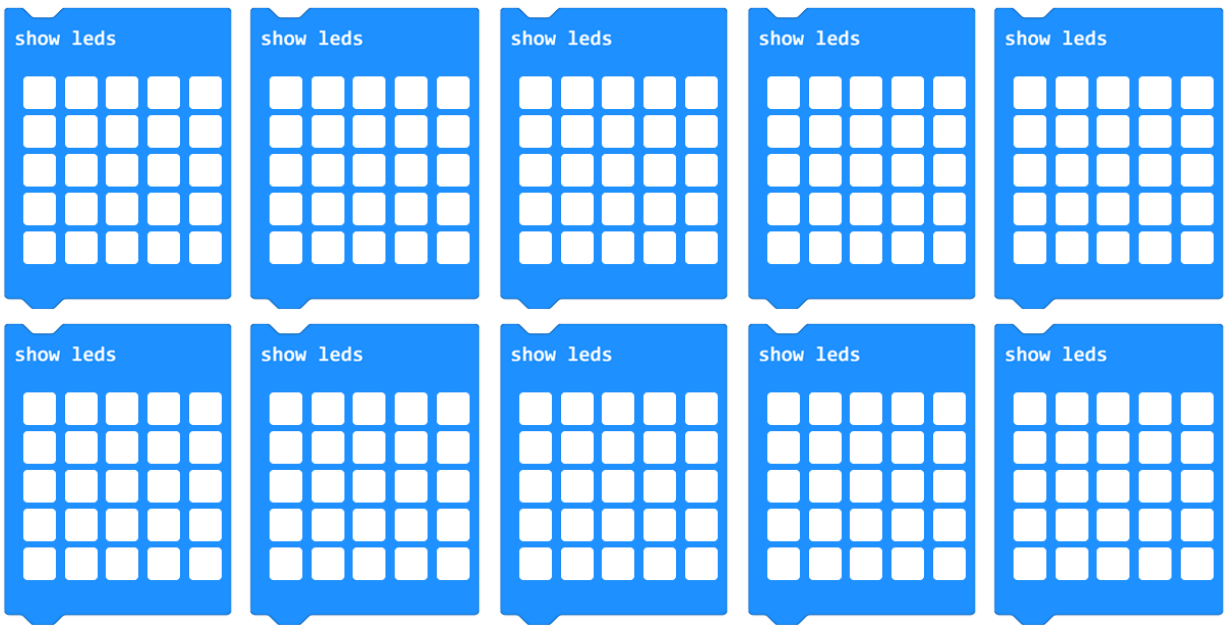
REVIEWER JOB

Make sure the Micro:bit is securely attached.

OPTIONAL

DESIGNER TASK

Designer, if the Coder on your team decides to use **show LEDs** in their code, use this to design patterns for your team's badge!



Notes

3 CREATE: Code

CODER TASK

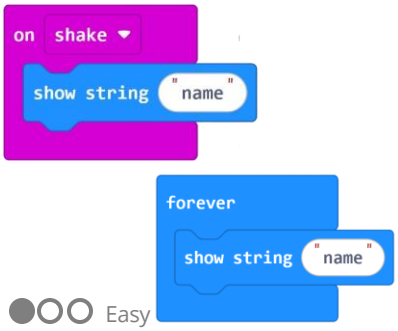
1 Base Code



- ❑ Go to makecode.microbit.org and make a new project.
- ❑ Begin with the base code as shown on left
- ❑ Then build upon this base code to make your badge unique.
- ❑ Choose from additional code below, mix it up!
- ❑ Feel free to explore different functions.
- ❑ If stuck, look up solutions on a search engine.

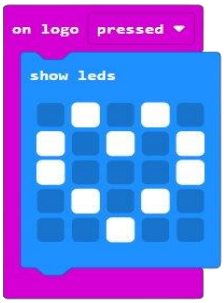
2 Additional Code (Tick the ones you will use):

❑ Change Input



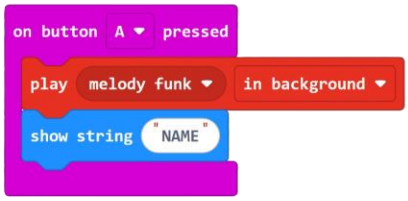
●○○ Easy

❑ Add LEDs



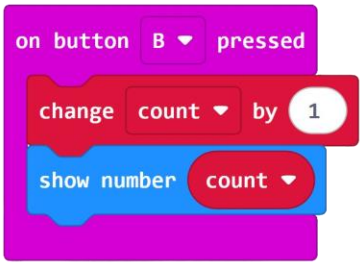
●○○ Easy

❑ Add Music



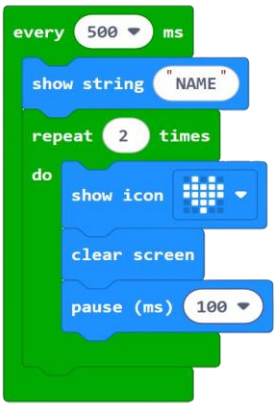
●●○ Mid

❑ Add Counter



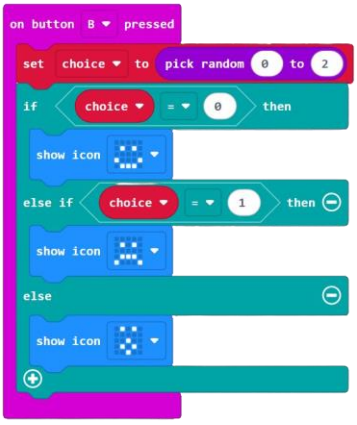
●●○ Mid

❑ Use Loops



●●● Hard

❑ Add Randomness



●●● Hard

REVIEWER JOB

Check and make sure the code works!

4 SHARE



CONGRATULATIONS!

You participated in your first ever Hackathon.

What did you create? _____

Show it to the other families.

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

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