

## Extension

### Bop It Battle! (Game Master Code)

Create a multiplayer game where you battle for each point with your friends!

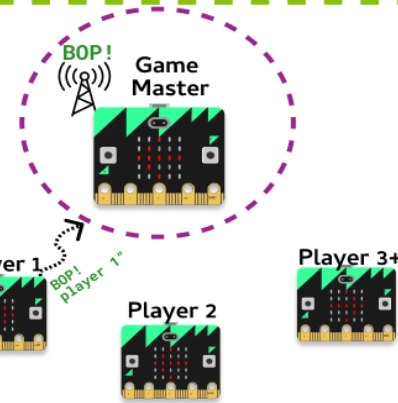
"I win!"

Player 1

BOP! player 1"

Player 2

Player 3+



#### Task 1.1: Configure the Radio

We'll need to start a new file for our game master!

1. Go to the Grok Playground called **Bop It Battle (Game Master)**
2. At the top of your file, **import** the `micro:bit` and `radio` modules.
3. Turn the radio on with `radio.on()`.
4. Configure the radio to use the channel that the room coordinator gave you.

#### Task 1.2: Ready, Set, Go!

Let's set up the variables we need!

1. Create a variable called `winner`, and set it to **None**.
2. Constantly scroll a message that says **"CHOOSE ACTION TO START"**.
3. Make sure your message has a wait of **False**.

#### Task 1.3: Game loop!

Now, let's set up the game loop!

1. Create a **while** loop that continually loops until `winner` is not equal to **None**.
2. Inside the **while** loop, set `winner` to be the incoming radio message.
3. Outside the **while** loop, at the end of your code, `scroll` who won the game continuously!

### Task 1.4: Choose your move!

Now, we need to choose our move and send it to the players!

1. Inside the **while** loop, check to see **if** `button_a` was pressed.
2. If it was, show a left arrow, and send a radio message saying `"button a"`.
3. Create another if statement that checks **if** `button_b` was pressed.
4. If it was, show a right arrow and send a radio message saying `"button b"`.

### Task 1.5: Testing time!

Try playing a game with your game master!

1. Test your Game Master! Which player won?

### ✓ CHECKPOINT ✓

**If you can tick all of these off you have finished this Extension:**

- ☐ You have configured your radio using the channel number the room coordinator gave you.
- ☐ Your radio sends a message of "button a" when `button_a` was pressed.
- ☐ Your radio sends a message of "button b" when `button_b` was pressed.
- ☐ When there is a winner, their name is displayed!