



Wildcat Code

MICRO:BIT ICE BREAKER

LEARNING TOPICS:

Variables

MATERIALS:

Micro:bit

Computer

Internet Access

INTRODUCTION:

Today, students will learn about a little bit about their peers while also getting comfortable with the micro:bit editor. Students will be programming their Micro:bits into a device to share information about themselves. Moreover, students will have the opportunity to modify the program to decide on other options and explore other possibilities.

Before starting with the activity, have students answer the introduction questions below:

- What do you like to do in your free time/what are your hobbies? (try to keep the answer concise)
- What interests or fascinates you?
- Do you have any nicknames?

VOCAB:

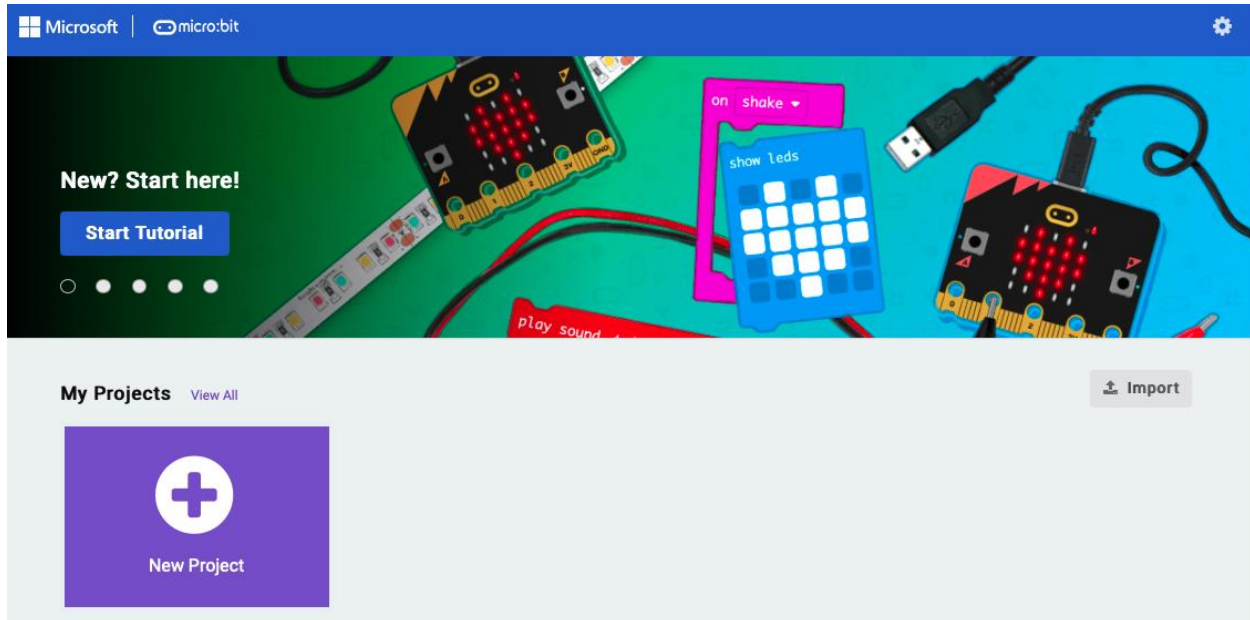
Next, let's discuss some Micro:bit and computer science terminology:

INSTRUCTIONAL CONTENT:

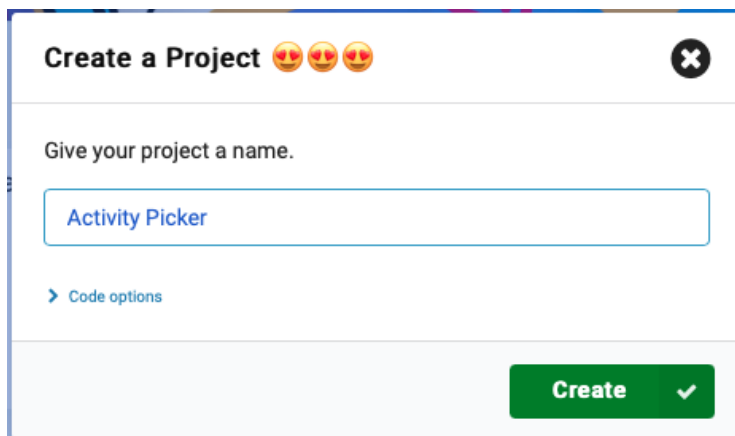
Let's get started! First, click or type the following link

“<https://code.org/https://makecode.microbit.org/>” which will take you to today's activity on the Micro:bit website.

Review both the Micro:bits and the MakeCode tool with students if needed.

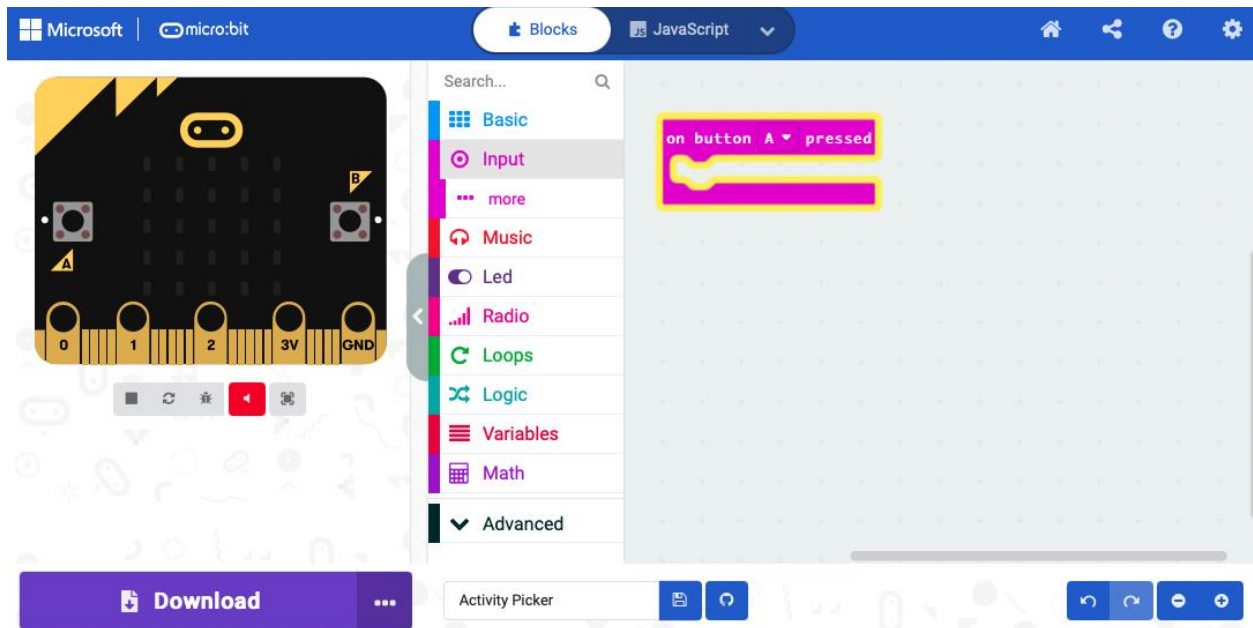


Once students have their MakeCode program loaded, have students click on “**New Project**”. Name the project “IceBreaker”.

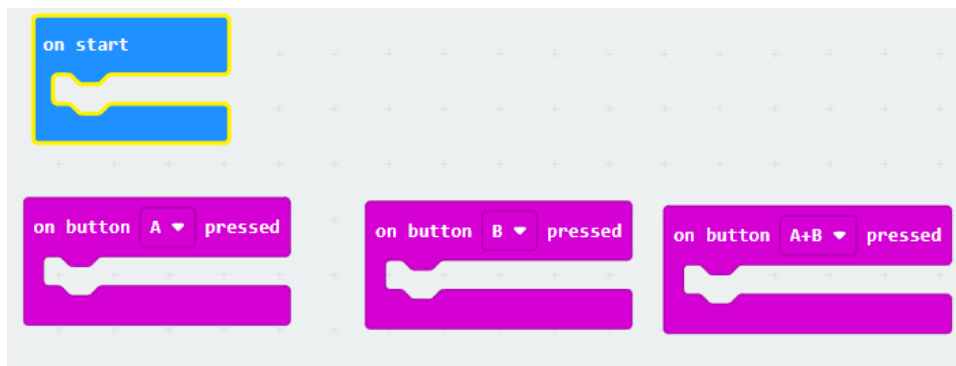


For today's lesson, students will get acquainted with one another and hopefully leave our session with at least one new friend.

To do so students will trade microbits with various information stored on them such as hobbies and interests. Once students have created their new project on the MakeCode editor, have them start with the *On Button A Block*. We intend to use this button to fire off a specific message

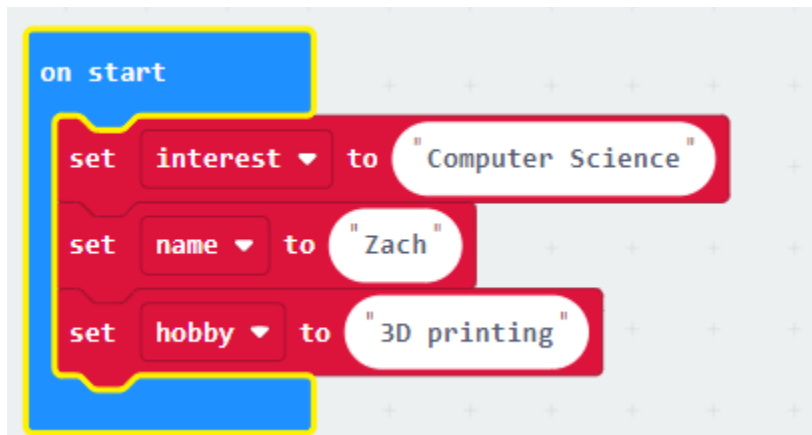


Since we have three distinct pieces of information, we will need to have 3 different button-pressing combinations. We can accomplish this by right clicking the block and clicking duplicate twice so that you have the following:

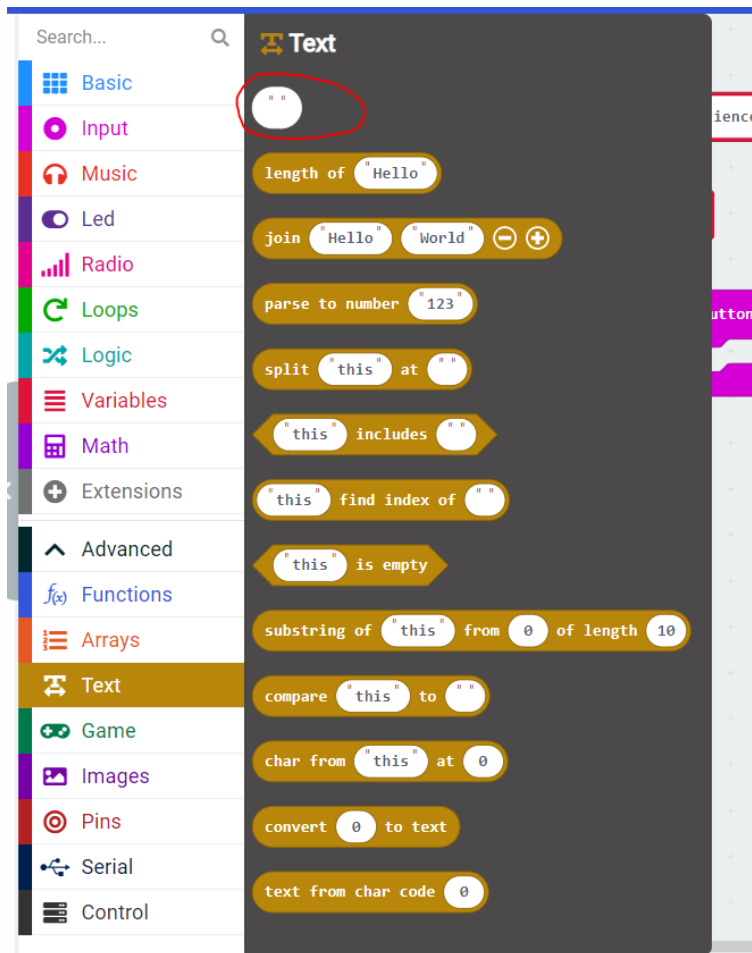


This will provide a nice outline for our code.

Now that we have an outline it is time to start providing instructions on what to do for each of these cases, but first lets work on the 'on start' code block. This block can be thought of as getting our program setup, as the name implies the code will run when the micro:bit is started/turned on.

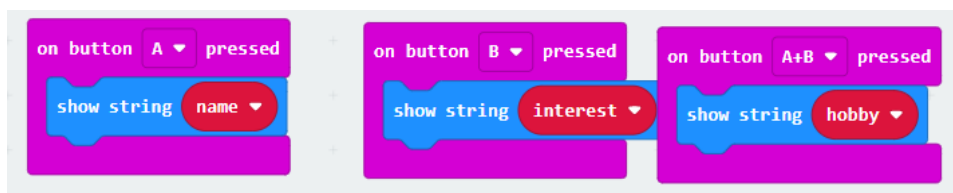


In this case we set up 3 variables on startup, this can be done by going into the variables tab and clicking 'Make a Variable' as well as going to the 'Text' tab and grabbing the following block:



This block can then be added to the set variable to block in order to set a string type variable.

Now that our on start has been filled out we can begin assigning instructions to each button combo like this:



This will make the micro:bit display a different piece of information for each button press.

Now that your code is complete pick a few classmates to exchange micro:bits with and try to learn a few things about your peers!

