Learn to program on phone with Pocket Code

Lesson 10: Magic Panda
Code to Enhance Learning is a nonprofit organization that uses coding as a tool to build critical thinking, creativity, collaboration, and perseverance in children in grade 4-9.
Objective:

We will make an application magic panda.
Let’s Recall:

1. What is Sequence?
   A logical Order

2. What is Events?
   An event in an action due to which something happens.

3. What is Loop?
   Repeats a sequence of instructions

4. What is Nested Loop?
   Loop within a Loop.

5. What is Conditionals?
   Conditionals are expressions that evaluate to either true or false.
Let’s Recall:

6. What is Parallelism?
   The ability of the brain to do many things (aka, processes) at once

7. What is Broadcasting?
   Instructions are transmitted from a sprite or backdrop to cause other things to happen.

8. What are Operators?
   Operators are a part of an expression and allows us to operate on values i.e. operands. The expression returns a value.

9. What is Variable?
   Variables are used to store information to be referenced and manipulated in a computer program.
Accelerometer

An accelerometer is an electromechanical device in our phone that is used to measure acceleration forces. In our phone it helps to measure the dynamic of sense movement or vibrations.

Talk to your partner:
• Any use of Accelerometer in our phone, you know?

Let’s share the response.
Magic Panda: (Teacher Models)

Let’s do abstraction (i.e. to identify important details) to make understand project and make it simple

1) What will happen on the stage?

- When Scene starts, our sprite panda is a bottom left corner as we will shake our phone, if we shake it with high intensity, our panda will go out of screen and then there will be a sound of firework.

2) What sprite and backdrop will be needed on the stage?

Backdrop

Sprite 1
Magic Panda: (Teacher Models)

Let’s make the project and write codes for the sprites…

Backdrop

Codels/Programs

When you receive start
Repeat 10 times
Wait 0.3 seconds
Change color by 25
End of loop
Magic Panda: (Teacher Models)

Let’s make the project and write codes for the sprites…

Sprite

Codes/Programs

When scene starts
Place at
x: -239 y: -483
Set size to 150 %
Forever
Broadcast start
If acceleration x > 5 is true then
Turn flashlight on
Glide 1 second
to x: 500 y: 500
Vibrate for 2 seconds
Start sound and wait fireworks
End if
End of loop
Quiz:

1. What is Accelerometer?
Quiz:

2. Which Code Block will help the panda move if x acceleration is greater than 5?

A) 

If acceleration x > 5 is true then

Glide 1 second
to x: 500  y: 500

End if

B) 

If acceleration x > 5 is true then

Start sound and wait
yeah-1

End if
Closing:

- What did we do today?
- What is one thing that you liked in the class the most?
- What did you learn?
Code To Enhance Learning

Website: www.codetoenhancelearning.org