

LESSON 4: EVENTS

OVERVIEW

BACKGROUND

Now that we've got the basics of the scene built. Let's add some functionality to our game. Events are how we can program interactions and systems into our game. This is where all of the things that we think should happen (like a player being hurt by stepping on spikes), happen.

CONCEPTS

ISTE STANDARD

Computational Thinking 1.5.a

REAL-WORLD APP.

Problem Solving

MAIN QUESTIONS

- What can I do with events?
- How do I set up events?
- How do I use events with animations?

TODAY'S OBJECTIVES

- Event systems
- Hazard creation

VOCAB TO INCLUDE

Event: Stipulations for what actions will take place when certain conditions are met. Events provide instructions for how any object in a scene will react when players or other objects interact with them.

Group: The ability to combine multiple objects into a larger whole. By grouping shapes, you're gluing a piece together.

Faces: The surfaces making up a model.

HELPFUL TIPS

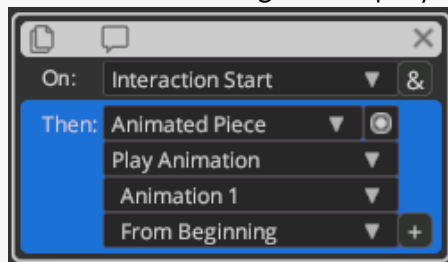
When working in events, it can be easy to lose your space. This is one reason that naming conventions are super important. You can check the hierarchy for a star icon to see objects that are housing events.

USE THE ACTIVITY GUIDE, LESSON SLIDES, AND PRACTICE GUIDE.

LESSON 4 ACTIVITY GUIDE (ABOUT 60 MIN)

WALKTHROUGH

- All events are a cause and effect. We control both but we have to know how to tell Blocksmith what we want it to do
- Begin by identifying what important pieces of events mean while showing them on screen.
 - Interaction Start: When clicked on
 - Awake: When the game starts playing
 - Periodic Interval: Every X seconds
 - Update: Every frame of the game, roughly 25 times a second
 - Entered by Object: When an object enters the space of the trigger
- Run through what each of our options that follow “Then:” mean.
 - Player: The player
 - Myself: The object housing the event
 - Other Object: Another object in the scene that we are prompted to select
 - Experience: The game as a whole
 - Parent: Similar to myself, but talking about the larger group an object is a part of
 - Interacting Object: The object that is triggering the event
 - Entering Object: Only usable with Triggers, the object entering the space of the trigger.
- *“If we use this & sign on the side of the event we can create a conditional. This is important because it allows us to be pickier with what causes our events to occur.”*
- Create a button that starts an animation, this could be a draw bridge dropping or a platform start moving so the player can progress.



EXPANSIONS

- Events can also be used to trigger effects, have students explore other use cases