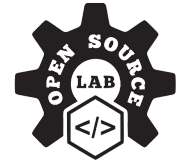


Build a game with CoBlocks

* A CoSpaces Edu Pro license plan is needed for this lesson.



Lesson complexity: Intermediate

Grades: Grade 4 and up

Subjects: STEM, Mathematics, Languages

Created by: Open Source Lab

Introduction:

This lesson plan will teach students how to use variables and make clouds move on the x,y,z cartesian plane that is in CoSpaces Edu. This lesson works as an extension from previous coding lessons. A basic knowledge of lists, variables and uploading pictures would be beneficial before starting this lesson but isn't required if you several days are given for this lesson.

Benefits:

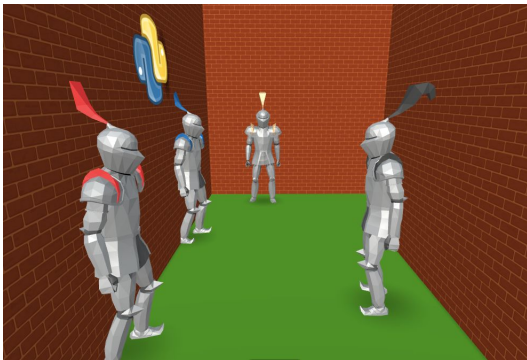
- Prototyping, testing and reflecting on a design idea
- Learning basic movement skills on a 3D plane
- Lesson easily weaved into multiple subject areas
- Learning the fundamentals of block-based coding
- Creating variables and lists in CoSpaces Edu

Preparation:

1. The tutorial videos in this lesson require prior preparation by the teacher. Teachers should review the lessons beforehand to ensure that they know how to help students when they run into an issue. Students can also try and help each other.
2. Set a few boundaries to add some structure and challenge your students' creativity. For example, let students create whatever they wish, but in relation to a particular topic that you define as a general direction.
3. Test logical or critical thinking by providing a specific theme based on which your students will have to find a creative idea.

Creation guide

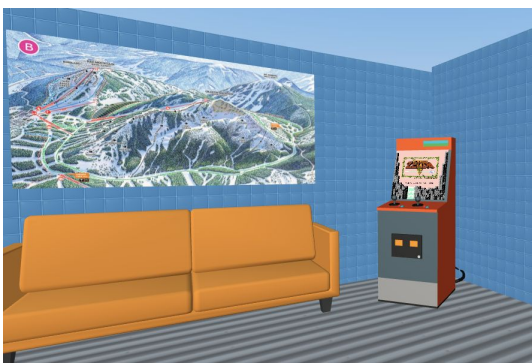
Click on the image to get to the video on YouTube.



1. Our character is moving from one room into another. Each room should hold a mystery, but the mysteries in each room should somehow connect.

2. Learn how to build moving clouds in a mini game. Then, learn how to make multiple mice move across the floor when an event is triggered in the game.

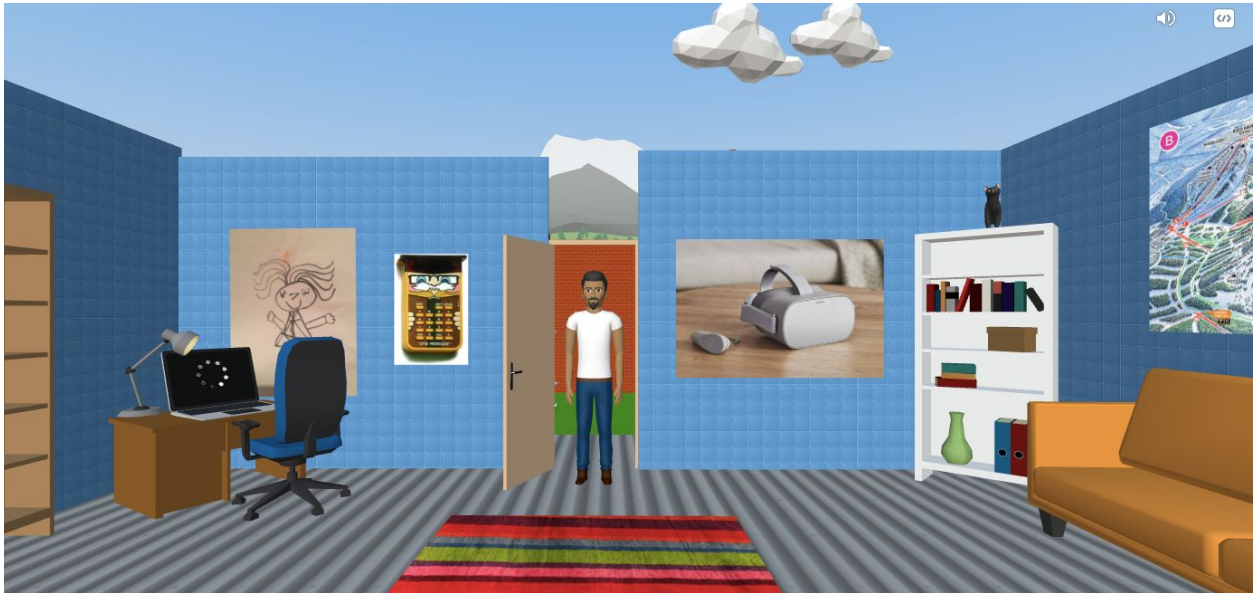
Video link: youtu.be/DfGaLBDQ200



3. Learn how to use a object collision to trigger an event, in combination with lists.

Video link: youtu.be/k5dviHmXkM8

Example space



[View example space](#)



Next steps

Now that you know how to create lists, go back to your ideate phase and think about how you could use this in your maze. Perhaps you could shoot fireworks up when the player finishes a challenge, or fire out arrows from a wall when you step on the wrong colour?