Virtual maths museum Lesson plan

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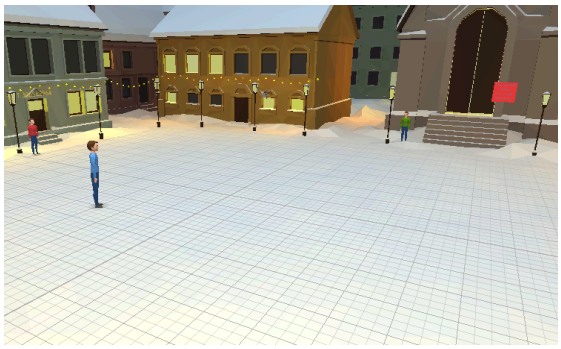
Education level: From middle school

Subject: STEAM, mathematics, computer science, arts

Format: Individual activity

Duration: Approx. 2 hours



Introduction and lesson objectives:

With Delightex Edu's creation tools, kids can easily create a virtual museum on any topic and later view it in Virtual Reality. This enables students to explore 3D creation while deepening their understanding of a topic or educational resource and lets them explore new ways of demonstrating their knowledge in the classroom.

This lesson plan provides instructions for creating a Mathematics and Arts museum. The steps in this lesson can be adapted to create a similar project on any subject. In addition, this lesson plan also provides a section with instructions for programming different interactions with CoBlocks, the visual coding language in Delightex Edu.

Learning goals and student benefits:

- Learn 3D creation skills
- Learn basic coding skills
- Conduct research
- Revise class study material
- Demonstrate learnings
- Foster creativity

Activity example:

1. Ask your students to do some research on a topic or a specific subject for their virtual exhibitions. You can either let them come up with a subject based on their interests or assign one. For example, for a Maths class, your class could create an exhibition on the relationship between Maths and Arts.
2. Give your students some time to search images or GIFs in relation to the chosen topic online, in order to use them for the visuals in their exhibitions.

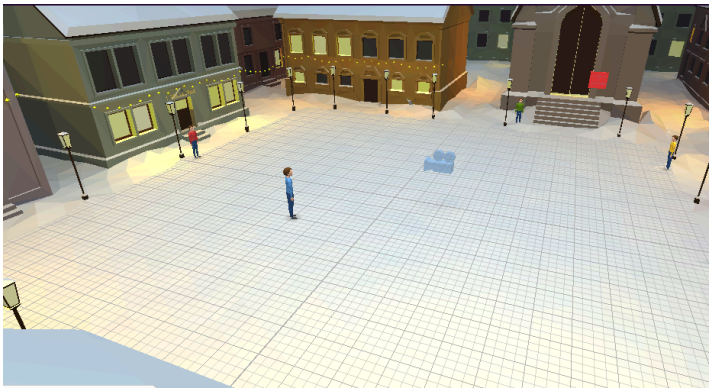
Extension idea:

Ask your students to present their museums to the class and discuss how they created it and how it demonstrates what was learned in class.

Assessment and evaluation suggestions:

- Have your students managed to create their virtual exhibition in Delightex Edu?
- Did your students conduct successful research to gather information that they included in their museums?
- Does the information provided in their exhibits demonstrate their learnings?
- Did your students use CoBlocks code?

Creation guide

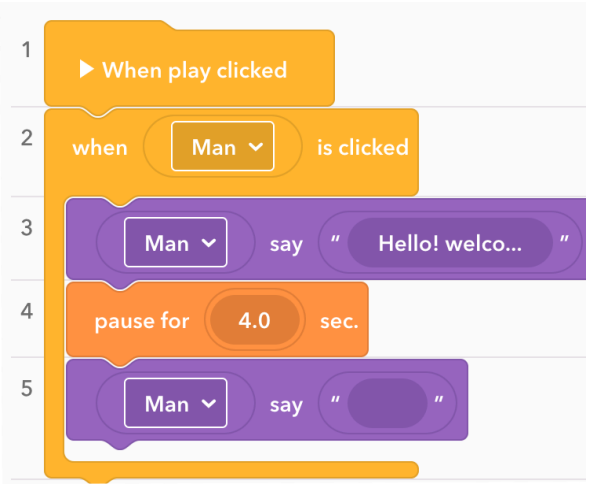


Start preparing the main scene in which your virtual museum will be built. For example, you can use the village environment and add its inhabitants with 3D characters.

Choose an **Environment** and click **Library** to add objects.

Every character can be coded to explain something related to your exhibition when you click it.

The short code below shows an example you can use to make your characters interact and say something. Try to understand the code and use it in your scene.

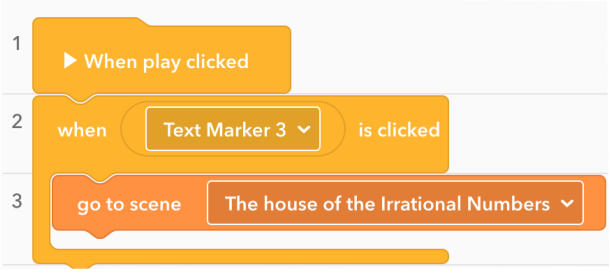


- Line 1 simply starts the code when the Project is opened in **Play** mode.
- Line 2 activates the coded action following it when the character is clicked.
- Line 3 defines the interaction - in this case, saying something - and specifies the words that the character should **say**.
- Line 4 makes the character take a **pause** for the amount of time specified.
- Line 5 defines a new interaction.

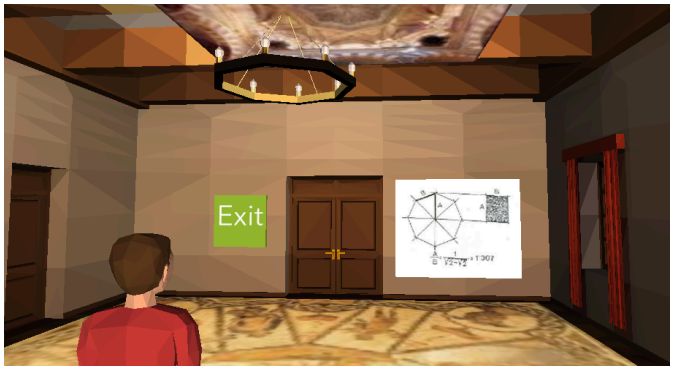
You can use the facade of the buildings in the village to create portals to enter the different rooms.

This action can be coded with a simple combination of CoBlocks.

To do this, each room will have to be defined as a separate scene.



- Line 1 starts the code.
- Line 2 activates the code following it when the text marker object is clicked.
- Line 3 defines the action of switching to another specified scene.

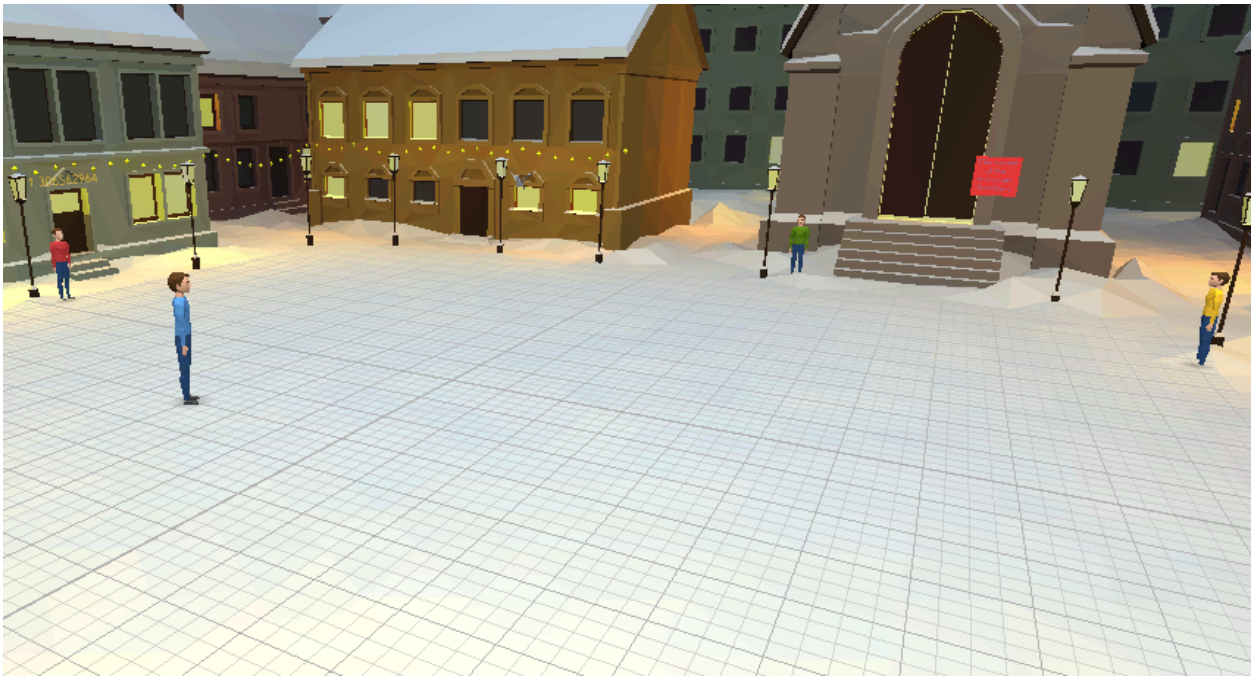


To create the different rooms of the museum, you can use the standard 3D room available in **Environment**.

You can also include an interactive text panel in this room in order to go back to the main scene.

- Line 1 starts the code.
- Line 2 activates the code following it when the text marker object is clicked.
- Line 3 defines the action of switching to another specified scene.

Example Project



Irrational numbers museum

https://edu.delightex.com/PZX-BHK