Quiz Template: Using Mouse Click Events

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Overview

The purpose of this tutorial is to demonstrate how to use a template for quizzes in which the user clicks on a different object as an answer to each question. This template can then be used for different sets of objects. Many of the methods have been provided for you. To enable you to use these methods in any world, they have all been saved to an Alice object that can be imported.

There are five basic steps to creating your quiz world. But first, understand the format of the quiz.
The format of this quiz:

1) An object, which I refer to as an instructor, will ask each question.
2) For each question, the correct answer is one of the other, visible objects.
3) The user must click on one of the objects to answer the question.
4) The user’s answer is then compared to the correct answer.
5) Once the question has been evaluated, the instructor will repeat these steps for the next question.

When you build your own quiz world, setting up the objects and camera views is the first step.

When you downloaded this tutorial, you should have downloaded the starting world, it is called questionClickStart.a2w. If not, do so now.

Save it in a directory that you can find again.

Set up

For the sake of this tutorial, a starter world has been provided.
Step One

Your world.

• It is good practice to set the camera position if you will have multiple views in your world.

First, click on world in the object tree. Click on the methods tab in the details area.

• Click create new method. Name it quiz1Method.

Drag camera, set point of view into it.

Set the Camera View

• Select Dummy Objects, quiz1View. Set duration to 0.

• Drag camera, set point of view into it.

Click on world. myFirstMethod.

Click on world, my first method.

• Create new method. Name it quiz1Method.

The methods tab in the details area.

First, click on world in the object tree. Click on questionClickStart.a2w.

Open Alice and open the world.
Import the quiz object

Click on the File Menu
Select Import
Find askQuestionClick.a2c
You should have downloaded it with this tutorial, if you didn’t, do so
Click on the import button to add the object to your world.

Where is your object?
The imported object appears in the object tree
Remember that it is actually an invisible shape, so you won’t see it in your world screen unless you click on it in the object tree and see the yellow bounding box.

The imported object appears in

Your world:

1. Click on the import button to add the object to your world.
2. With this tutorial, if you didn’t, do so.
3. You should have downloaded it.
4. Find askQuestionClick.a2c
5. Select Import
6. Click on the File Menu
7. Import the quiz object
The steps to creating your quiz method are provided here. We've imported the quiz object before the quiz1Method that we created is where we will put all of the instructions for the quiz. Now, I will walk you through the rest of the steps.

1. The quizMethodTemplate
2. In the methods tab, click edit beside quizMethodTemplate
3. Click on askQuestionsClick in the object tree
4. Click OK.
5. T-rex, cow, cat, bunny,
6. Add these four objects to your list: cat, bunny,
7. Open the list variable quizChoices.
8. Fill the list quizChoices.

Now that we've imported the quiz object, before we finish writing quiz1Method, click on the properties tab. Open the list variable quizChoices.
The purpose of putting all of the object choices in this list is so that the quiz helper methods will not conflict with any other click events that may be in your world.

Step 2: Setting the Instructor

- Click on the properties tab and drag Instructor into your method.
- Click on the quiz1Method tab and drag Instructor.
- Select set value, select teacher, the entire teacher.

Purpose of list quizChoices

- not conflict with any other click events that may be in this list so that the quiz helper methods will not conflict with all of the object choices
The Purpose of the Instructor Variable

- The Instructor asks the question, and explains the correct or incorrect answers. By default, it is set to the camera.

- If at any point during your quiz, you want to change which object is the Instructor, simply drag this property variable into your quiz method again. Set the value to another object.

Step 3: Initialize the score variable

- Drag the Score variable into your quiz method.
- Set the value to 0.

Otherwise, by default, the score is set to 0.

This step is only necessary if you have multiple quiz methods in your world (which all use the same score variable). Otherwise, by default, the score is set to 0.
Step 3: Asking the questions

To ask questions, click on the methods tab.

Drag setQuestionAnswer into your quiz_Method. It looks like this when you drop it:

There are four parameters for each of these ask methods.

1. The first parameter is for the question, and the second parameter is the duration - how long you want the Instructor to say it.

2. When withTries is false, the quiz-taker only gets one chance to answer each question. When withTries is true, and set it to false.

3. Click on the third parameter, correctAnswer, and set to bunny. Then, click on the third parameter, withTries, and set it to false.

4. Set duration to 2.

Click on which animal hops:

- Click on the default string, type in the question: "Click on which animal hops?

- Click on the default string, type in the question:

Setting up the parameters:

- The second parameter is the duration - how long you want the Instructor to say it.
Repeat step 3 for question 2

For the next three questions, we're going to repeat step 4, but with different parameters. We're going to repeat step 3 for question 2

Third Question

Drag setQuestionAnswer into quiz1method

For the parameters:

- Set currentQuestion to "Which animal is extinct?"
- Set duration to 2.
- Set correctAnswer to T-rex, the entire T-rex
- Set withTries to false.

Again:

Drag setQuestionAnswer into quiz1method

For the parameters:

- Set currentQuestion to "Click on the animal that says "meow""
- Set duration to 2.
- Set correctAnswer to cat, the entire cat
- Set withTries to false.

Again:

Drag setQuestionAnswer into quiz1method

For the parameters:

- Set currentQuestion to "Which animal is extinct?"
- Set duration to 2.
- Set correctAnswer to T-rex, the entire T-rex
- Set withTries to false.
Fourth Question

Drag setQuestionAnswer into quiz1method again.

For the parameters:
- Set withTries to false.
- Set the correctAnswer to cow, the entire cow.
- Set duration to 2.
- Set currentQuestion to "Which animal provides milk for humans (of all ages)? Click on her."

Score:
At the end of the quiz, if you want to tell the user how many questions they answered correctly, you can have the Instructor say the score.

Click on quiz1Template. Drag the instruction to the clipboard. Then click on quiz1method and drag it from the clipboard to the end of your Method.

Step 5: Score
How to construct the Score Say

If copying from the clipboard does not work for you, follow these instructions instead.

1. Click on properties tab, drag Instructor into your quiz Method. Select say, hello.
2. Drag the function what as a string on top of default string. From the drop down, select default string. From the drop down, select expressions, select the score variable.
3. Drag the function what as a string on top of default string. From the drop down, select expressions, select the score variable.
4. Click on hello and type "You correctly answered: ".
5. Then, set duration to 2 seconds.
6. Play your world.

Construct score say (cont.)

Select default string.

Functions: Drag a joined with b on top of hello, from the drop down, go to Quiz Method. Select say, hello.

Click on properties tab, drag Instructor into your instructor.

If copying from the clipboard does not work for you, follow these instructions instead.
Remember that you can have multiple quizzes. Set question answer, change with tries to True.

Finish playing your world. For every answer? get an answer wrong you are told the correct answer. Play your world. Remember that whenever you play your world again to see the difference.

Here is the full quiz method. Notice I set with tries to false to erase again for every instruction. It may not be necessary to share the score, especially if you set with tries to true. Full method.
Recap

The steps to creating your quiz method:
1. Set up your objects and camera views
2. Create quiz1Method and set the initial values for Instructor and Score
3. Ask your questions. Decide what question to ask, duration, the correct answer, and whether or not to allow the user to try again.
4. Ask your questions. Decide what question to ask, duration, the correct answer, and whether or not to allow the user to try again.
5. Tell the user their score, if you want to.

To Do: Add more animation.

The fun of creating a quiz world in Alice is the animation. Add animation to your quiz1Method, between each setQuestionAnswer instruction.

Here is my final method:

the steps to creating your quiz method