Lesson Plan 1 Outline

Objectives:

- Students become acquainted with the Alice IDE.
- Students add objects to a scene, he/she builder and trees.
- Students call built-in methods, some with parameters, to animate Story 1.
- Students are introduced to the ego-centric nature of Alice objects.
- Students will learn to use the doTogether construct.
- Students use a world function to get input from the user and Boolean variables to hold the answer.
- Students will learn how to search the galleries.
- Students will use the quad view capability.
- Students will learn about object properties, specifically the vehicle property.
- Students use a marker (dummy) to mark the initial camera position.
- Students will use the opacity property to make an object invisible and then appear.
- Students will add a built-in sound to their animation.
- Students explore the Gallery.
- Students are exposed to (object-oriented) programming terms e.g. object, method, parameter, if/else.

Talking points:

1. Hand out thumb drives and have them put their names on them.
2. Students team up in groups of 2 or 3, or they may work alone.
3. Show students how to log into the system and bring up Alice.
4. Begin by dropping a dummy at the camera. (Note that the usefulness of doing this will become apparent later.)
5. Add our main character using he-builder or she-builder. (Limit student time to 10 minutes)
6. Save the file, giving it a good name.
7. Add trees to the scene.
8. Talk about built-in methods (for all objects and then for our particular character) and demonstrate a few.
   a. Demonstrate idle – to get our character’s arms down.
   b. Demonstrate stand and turn to face.
   c. Demonstrate do together with hello and say, and then walk and move.
   d. Demonstrate asking the user a yes/no question.
      i. Discuss variables and use a Boolean variable to hold the answer
   e. Demonstrate the if/else
      i. If the user said no, then the character gets angry, thinks that we are “no fun,”
         turns, and with another do together of walk and move, walks away.
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ii. If yes, ...
10. Add the magic wand (search the libraries for it) and position it in the character’s hand (introduce quad view – this will be rather difficult – talk about the Undo option).
11. What happens when we play the animation? [The magic wand doesn’t move. Introduce the vehicle property.]
12. Make the wand invisible [Talk about properties. Set opacity initially to 0]. Then, if the user responds with yes, make the wand appear [by setting the opacity to 100%].
13. Use the character’s hello method for “waving the wand.”
14. Have the character wave the wand, after which ...
   a. The students decide what they want the tree to do. Brainstorm ideas ... spin around, disappear, change color, ....
15. Add a sound to go along with the magic.
16. If time remains, students can add scenery and/or add more to the storyline.