Using the Dialogue Builder with Unity

Some game engines for story based games, such as Neverwinter Night's Aurora Toolset or Skyrim's Creation Kit, make creating conversations, or dialogues, easy with specific tools. However, since Unity is not exclusively used for story based games, it does not provide a simple way to create dialogues. To solve this issue, we have created a Dialogue Builder for ScriptEase II to create dialogues in Unity.

We are going to use the Dialogue Builder and some effects to make one of the most beloved types of quests: the fetch quest. The player will speak with Jake, who will tell the player to go find an iPad. Returning to Jake will complete the short quest.

> *Warning:* The undo system has not been implemented yet for the Dialogue Editor. Be careful with changes you make.

Adding Dialogues:

1. First remember to back up your *.ses file. Open your story if you have closed ScriptEase II

2. Find the ⊕ add button in the Game Object pane beside the "Dialogue" category. The category will be empty at first.

3. Click on the button to add a new Dialogue. It will be added right into the Dialogues category and will be called "New Dialogue". It has an edit button and a delete button.

Editing Dialogues:

4. We can now edit the dialogue by clicking on the 🔍 edit button beside it. This opens the Dialogue Editor over top of the story editing pane. Let's take a look around before we continue.
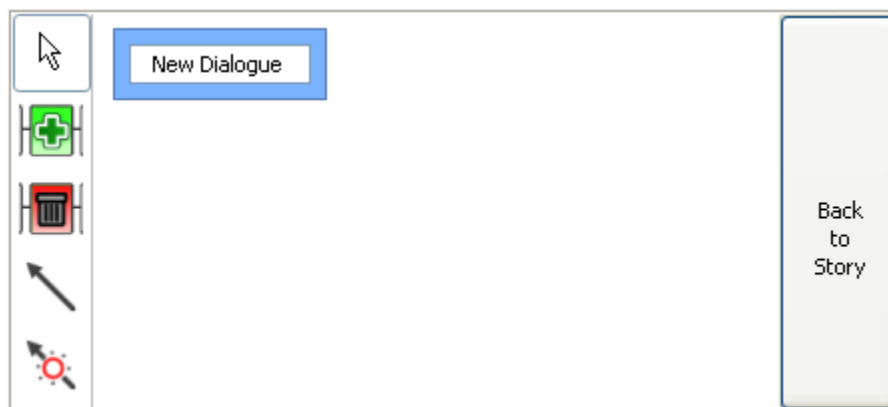

Figure 1: The Dialogue Editor pane.

5. The Dialogue Editor will look like Figure 1, although it will likely be a bit bigger. The graph looks almost identical to the story graph, and in fact, the tools work in the same way. To the right of the graph is a "Back to Story" button. This closes the Dialogue Editor and brings us back to the story editor. To reopen the Dialogue Editor, click on the blue wrench edit button again.

6. First, we should click on the text field to change the name of the Dialogue to "Jake's Conversation". Notice that the name also changes in the Game Object panel to the left.

7. Click on the Add button that is identical to the one in the story graph and add a node.
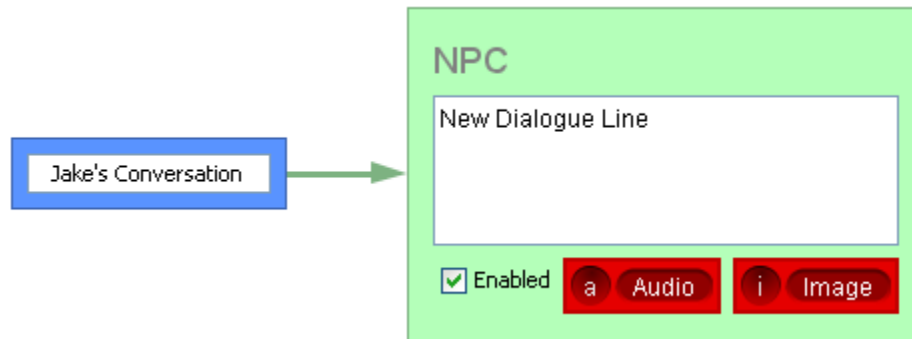

Figure 2: The Dialogue so far.

8. The new node that gets added looks a lot different from the first one, as we can see in Figure 2.

9. The first node is never seen in game. It's just the place you add all of the first nodes of the conversation. So right now, our conversation has one node in it. The top of the node says "NPC", which is the speaker. The middle text box represents what the NPC will say. Right now they would say "New Dialogue Line". Change that to "Hey there! Could you help me for a second?" without the quotes around it.

10. The "Enabled" box determines whether the dialogue line is enabled by default. That means whether it will show up when you speak with the person. We will be using it once we add some more starting options for Jake's conversation.

11. We can also add Audio or an Image to the dialogue line. Audio plays a sound when the dialogue line is shown, while image will show an image. For an NPC dialogue line, the image will be shown as the background of the conversation. For a PC dialogue line, the image will be shown beside the conversation choices. This is helpful if you have some sort of morality system based on dialogue choices.

Caution: Audio for player lines doesn't do anything yet! It will be added in a future update.

Tip: Audio and image files need to be in a Resources folder anywhere inside the project's Assets folder. For example, Assets/Resources/Audio for audio, and Assets/Resources/Images for images.

12. Add two nodes onto the NPC's line with the text "Sure!" and "No way." Order doesn't matter.

Warning: Dialogues must end in a PC line, or else there will be no way to exit the conversation.
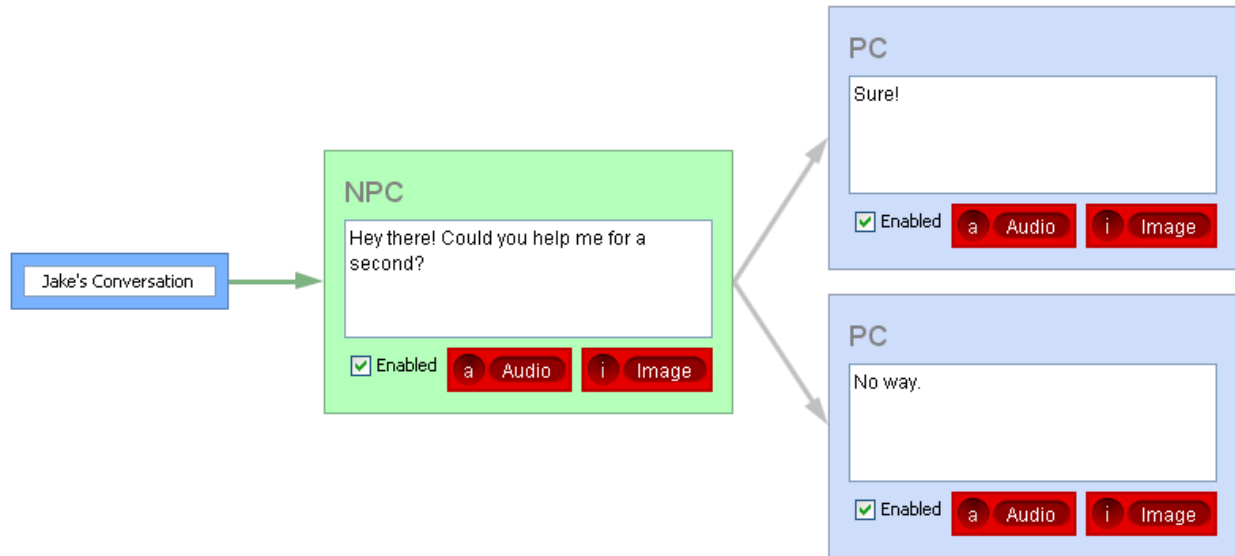
Figure 3: The dialogue so far.

13. Save your story. We could also save the story file without writing code to Unity by pressing Ctrl+Shift+W or using the option in the File menu. This won't add any code; it only saves the ScriptEase II story file. It's a lot faster, but you'll have to save normally to change anything in the Unity files. If you're not sure which save to use, it's always ok to save using File → Save or Ctrl+S.

14. Let's get Jake to start the conversation when we click on him. We always want this to happen, so the Cause will go into the start story point. Switch back to the story editor by clicking on the "Back to the Story" button on the right side of the pane.

15. Use a "When Mouse Button is clicked on Subject" story point and drag Jake into the subject.

16. The dialogue should show up regardless of where we are in the story, so delete the Is Active description and question from the cause.

17. Find the "Start Dialogue" effect and drag it into the Cause.

18. Drag the Jake's Conversation object into the effect's slot to match Figure 4.

Figure 4: The cause that starts a dialogue with Jake.

19. Save again and test the game. Jake now asks you for help, but doesn't give any information.

20. Go back to ScriptEase II's dialogue editor. Open up the Dialogue Editor. Add a new line to "Sure!" and give it the text, "Can you get my iPad for me from the table? Thanks!"

21. Add another player line to that line with the text, "Ok, I'll be right back." to match Figure 5.
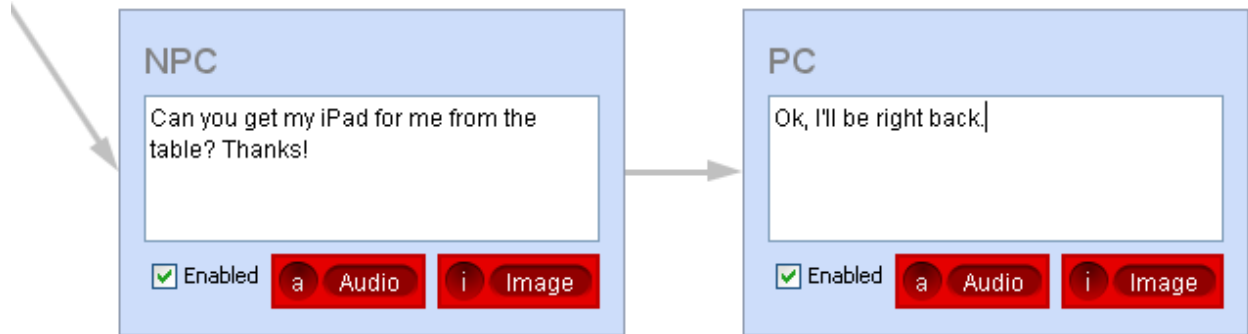

Figure 5: The dialogue with more information added.

22. Save and test it out again. Now we need the player to actually be able to get the iPad.

23. Switch to the story editor and add a new story point after Start with the name, "Get the iPad".

24. Select the "Get the iPad" story point. Add a "When Mouse Button is clicked…" cause. Drag the iPad, found in Props, into the subject.

25. Find the "Play pick up animation for Character holding Object" effect. Since we want this to depend on the story, we drag it into the Yes part of the Is Active question.

26. Drag the Player into the Character slot and the iPad into the Object slot.

27. Succeed the story point with the "Succeed story point" effect. Your cause will look like Figure 6.

28. Save your story and try out the game. Notice that Jake doesn't actually say anything different if we have retrieved the iPad. We need to give him some more dialogue lines.

29. Go back to the Dialogue Editor for Jake's Conversation. We need to add another possible starting line for Jake. Add a new line to the first node, Jake's Conversation.

30. Name the line "Oh, you found it! Thanks a lot!"

31. Add two player responses with the text, "You're welcome! Here you go.", and "Huh? No way, this is my iPad now!"

32. We now have two starting lines. Since they are both enabled by default, a random one will be chosen to show up. We should disable the "Oh you found it! Thanks a lot." line by clicking on the "Enabled" checkbox to uncheck it. Your dialogue should now match Figure 7.

Tip: We don't need to disable the player responses; since the NPC line is disabled, we have no way to get there.
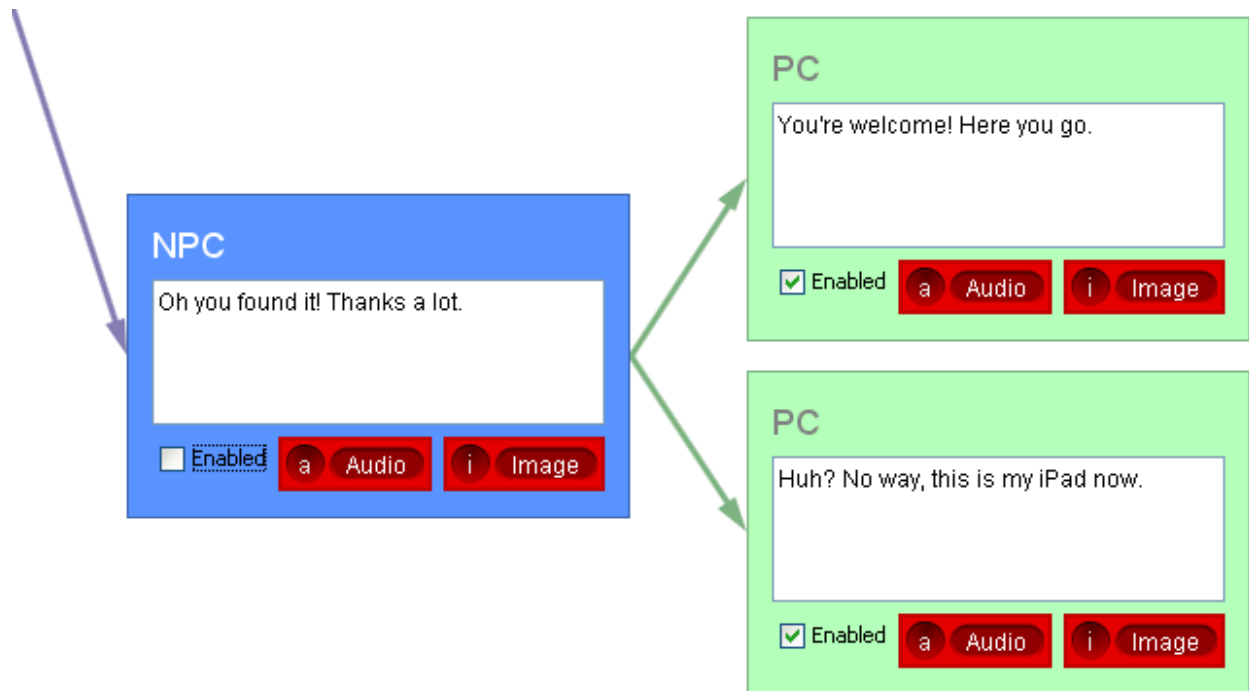
Figure 7: A new starting line added.

33. Save your story but don't bother testing it; there is no way for the new line to show up without enabling it with an effect. Switch back to the story editor.

34. Go back to the Get the iPad story point. Find the effect "Disable Dialogue Line" and drag two of them into the Yes part, before we succeed the story point.

35. The old line needs to be disabled and the new one enabled. Dialogue line objects are located under the Jake's Conversation Dialogue in the same way that Unity GameObjects are nested.

36. Drag the two dialogue lines into the effects, and change the second line's effect's box to Enabled to match Figure 8.

Figure 8: The Cause now enables and disables the appropriate lines.

37. Save the story and try the game. One bonus to the way our story is set up is that we can pick up the iPad before speaking with Jake. Some games have arbitrary restrictions on these sorts of things, but thoughtful use of ScriptEase II's story system helps prevent design flaws.

You have now finished creating a small conversation for your game. In fact, you have finished the tutorials! You could go further and find the appropriate effect to drop the item that the player is holding. You could also add some descriptions and questions, as you have done before, to make the player be closer to Jake and the iPad before being able to interact with them.

It is possible to change the way dialogue lines look in Unity by editing the SEDialogue Javascript file that is added to ScriptEase II. However, it will get overwritten the next time the story is saved in ScriptEase II. Eventually it will be possible to prevent ScriptEase II from overwriting this file.