Game Making

Video game creation is an emergent media for engaging self-directed creativity that also resonates thoroughly with young audiences who are very familiar with the construct.

The skills developed in creating a game in the suggested apps will not only be a creative exercise, but can also inform and expose young people to hard skills demanded of programming, expanding their parameters for future employment into digital fields. Activating areas that deal with risk/reward, goal orientation, and patience, creating games can be a fantastic means for engaging children with curriculum through carefully planned use.

Scratch

Scratch (https://scratch.mit.edu/) is a versatile online programming tool designed for children. It teaches users basic programming notions using a beginner-friendly puzzle format and cartoonish visuals. The tool can be tried out without registering, but in order to save and share their work teachers/children need to register.

Step 1. Create a Project
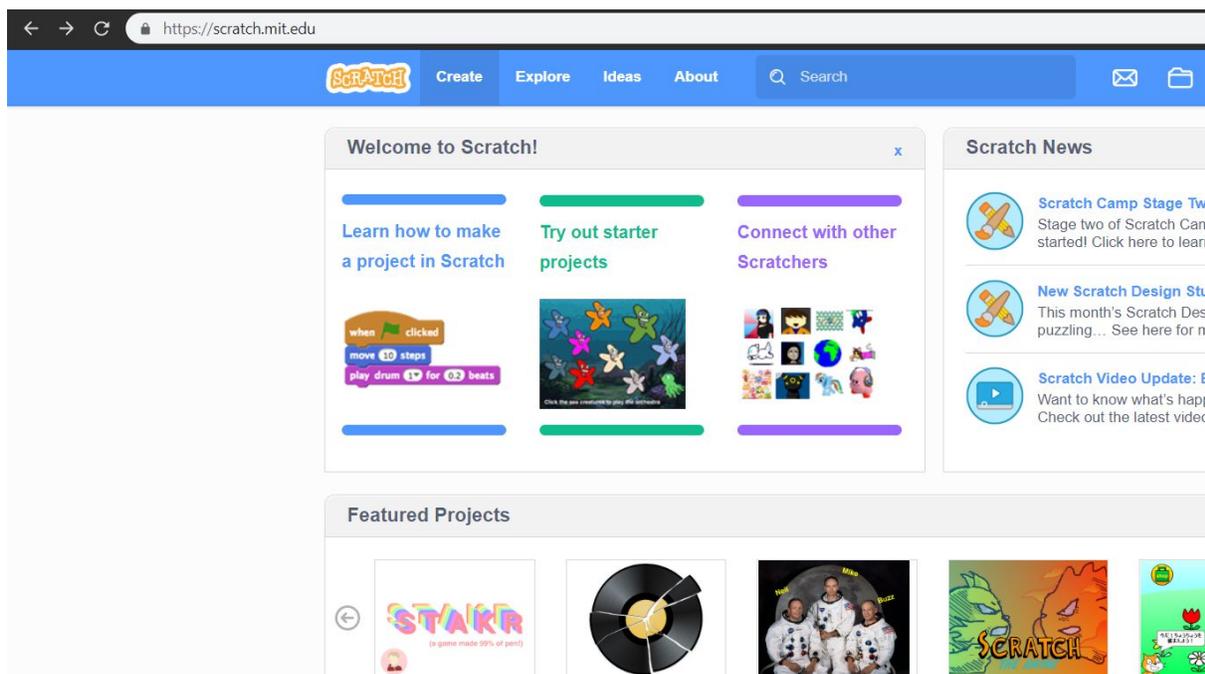
Once registered, click on the Create button in the top left in order to start a new project. You will be greeted with a variety of "building blocks" with which you can control the character on the right of the screen.

Step 2. Actions

First, you need to decide what you want your character to do. You can choose from actions such as "move x steps", "say y" or "play sound z." Once you have chosen an action, drag it onto your workspace in the middle and edit it as you please. You can preview each action by clicking once on their boxes. You can delete an action by dragging it back towards the list.
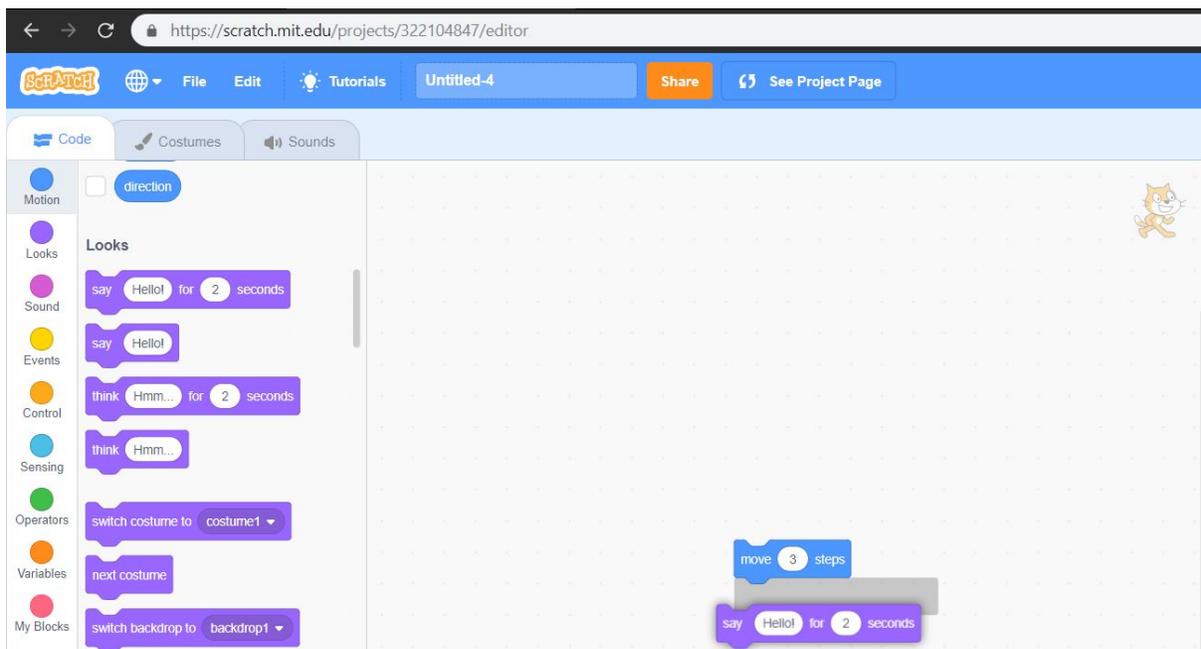
Step 3. Events and Controls

In order for your actions to take effect, you need to choose a triggering event. "When [the green flag] is clicked" is usually the first event that is used, because that is how all games start in Scratch.

You may also look over the Controls tab, which affects the way your actions take place. You can choose to have them repeat, add a "wait" option between them etc.
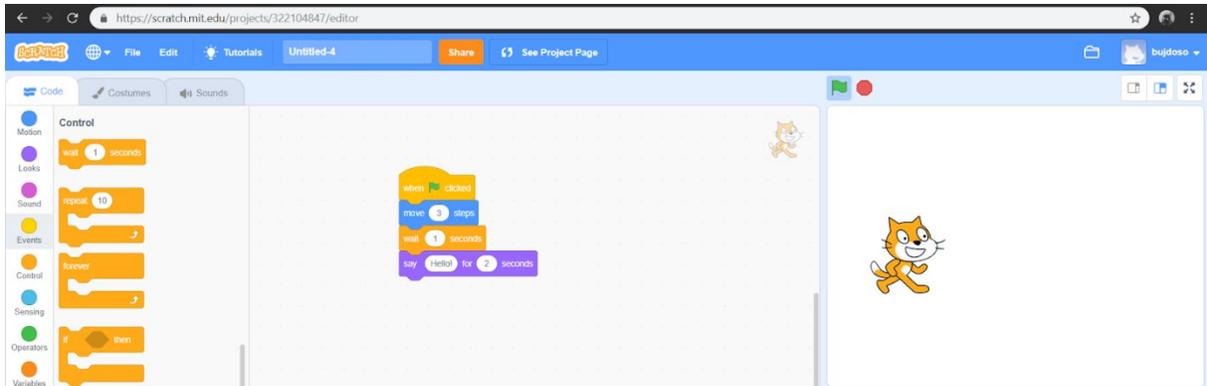
Step 4. Visuals

To make your game or animation look better, you can choose to add more characters or different backgrounds to it by clicking on the icons below your preview.
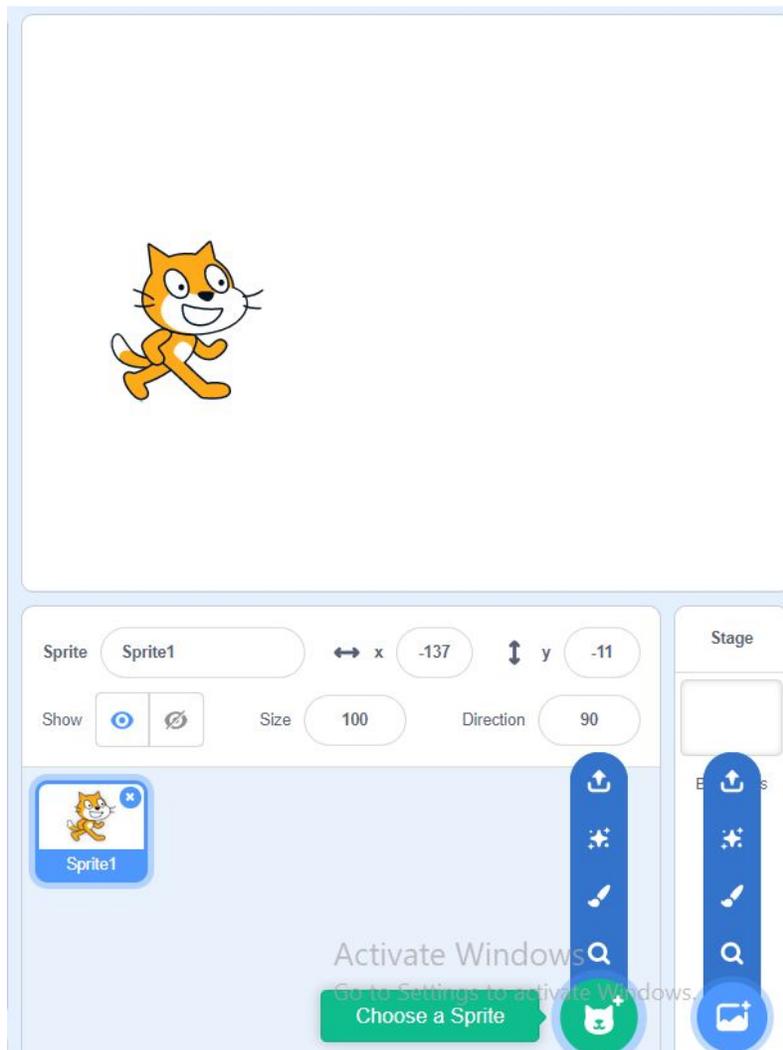
Once you have several characters, the top right corner of your workspace shows you which character you are working on. You can change this by clicking on a different character in the preview.
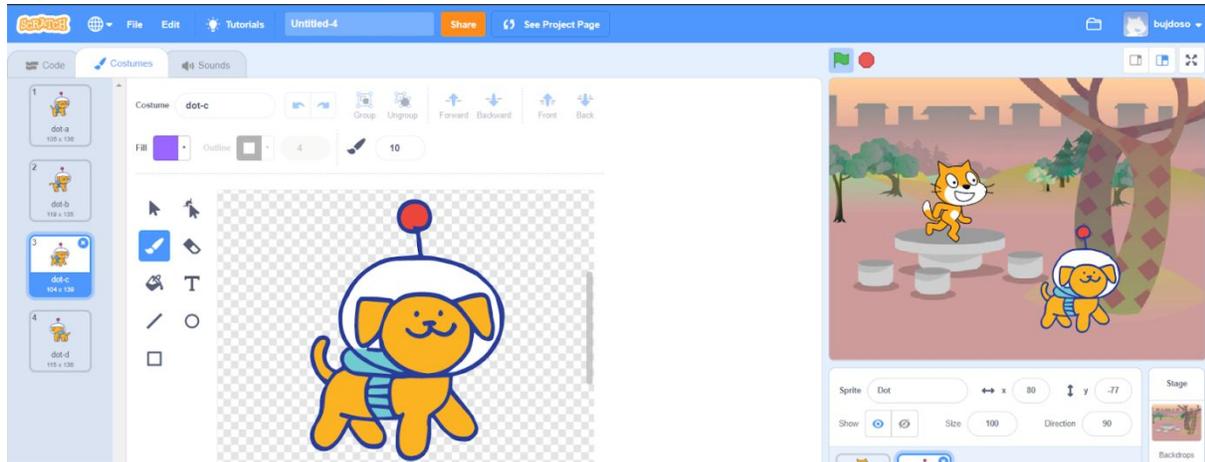
You can also give your characters different "costumes" under the Costumes tab on the top left. You can have them equip one and then later change to a different one with a custom Action. You can either draw your own sprites/costumes or use the default ones.

Step 5. Share

Before sharing your project, head on over to the Project Page to edit its description and see a preview of what it is going look like to others.
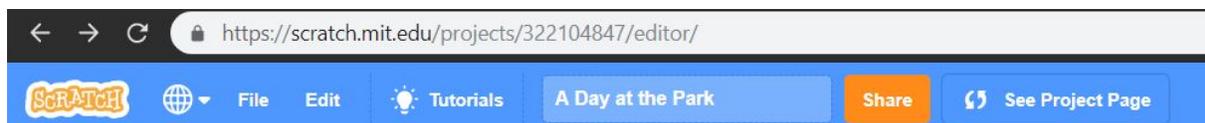
Once your happy with it, click on the share options. The "Copy Link" button will appear at the bottom of the page and you will be able to use this link to share your project with others.

You can find further tutorials on the Scratch website: https://scratch.mit.edu/help/videos/

Quest

Quest (http://textadventures.co.uk/quest) is an online programming tool (also available for download) that lets you create your own interactive story games. These can be either gamebooks or text adventure games. This tutorial will focus on the latter.

Create a new game

About the different game types

A **text adventure** is a game where the player can move around by typing in commands or clicking hyperlinks. Text adventures consist of rooms, and each room can have various objects that the player can interact with. Examples of text adventures include *Zork* and *The Hitchhiker's Guide to the Galaxy*.

A **gamebook** has pages with multiple choices that link between them. Examples of gamebooks are *Choose Your Own Adventure* and *Fighting Fantasy*.

1.   **Creating a Game**

To create a new game, log in to Quest. You will see the "New game" form.

Create a new game

Game name:

Tutorial Game

Game type:

Text adventure

Language:

English

Create

Ensure that "Text adventure" is selected, and choose a language from the list - this tutorial will focus on creating a game in English, but the editor itself will look mostly the same whichever language you pick here.
Enter a name and click the "Create" button. Click the link that appears, and you will see the main Editor screen.

2. The Editor Screen
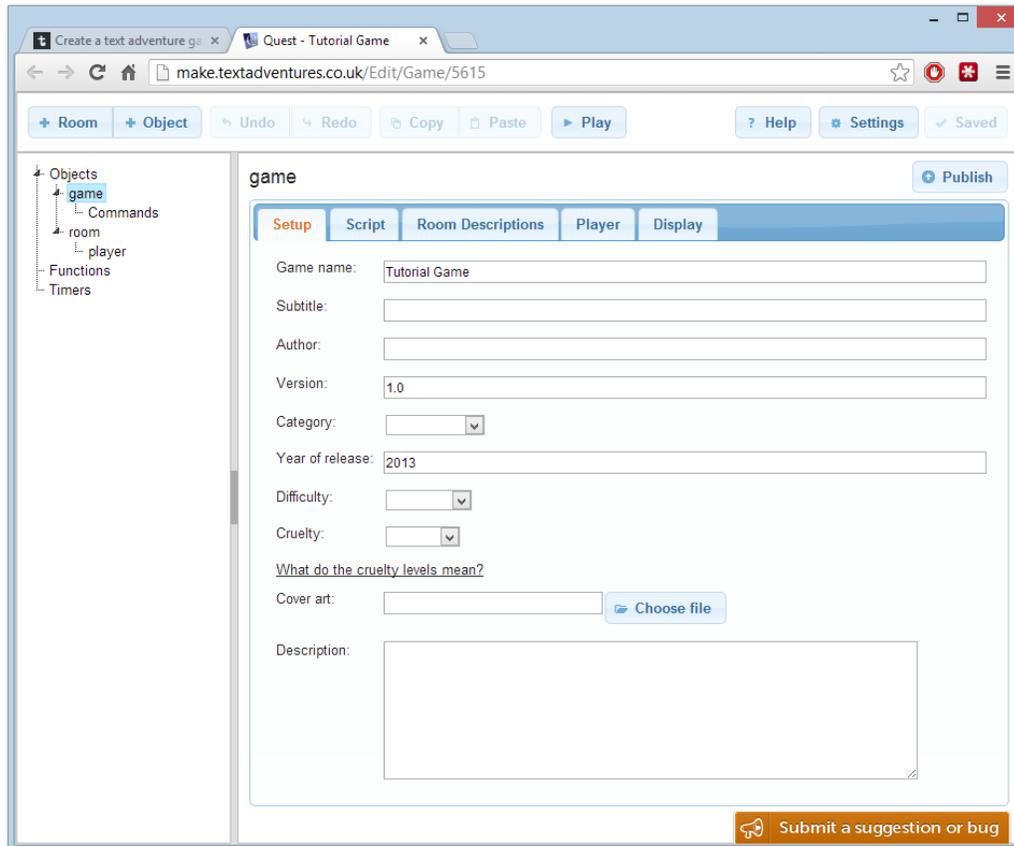
On the left is a tree showing you every element of the game. The "game" element is currently selected, so that is what we can see in the panel on the right.

Quest has created a room called "room" already, and inside this room is the "player" object, so that is where the player will begin when you run the game. You can test the game by clicking the "Play" button. On the Windows version you can also select "Play Game" from the File menu or press the F5 key.

As you will see, it's a pretty empty game at the moment. You can type some standard commands such as "inventory" to see that Quest comes up with some default responses, but that is about all you can do at the moment.
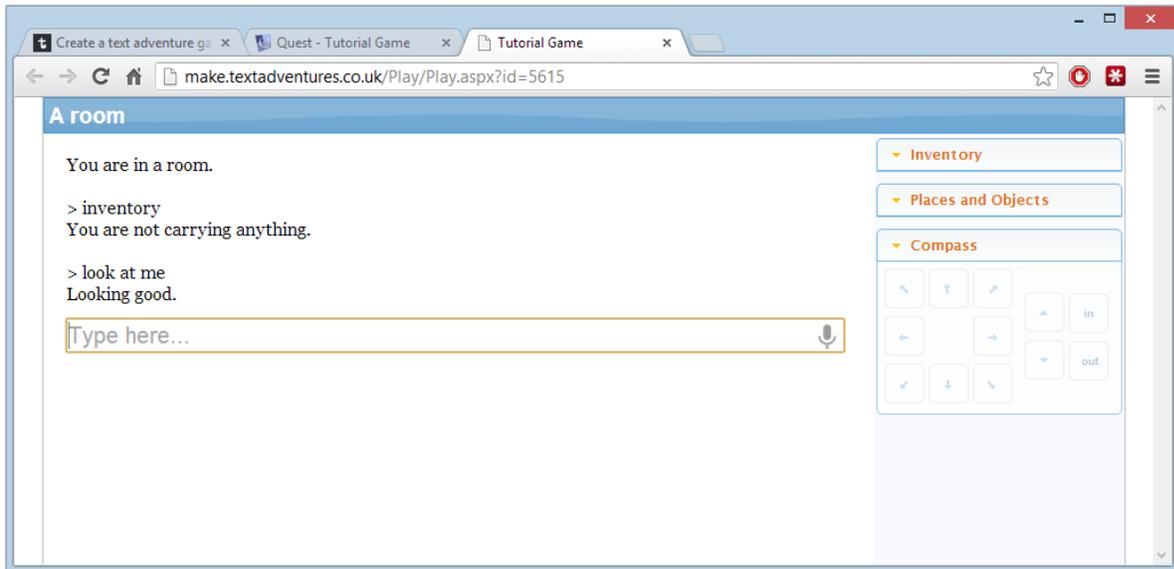
In the Windows version you can go back to the Editor by clicking "Stop Game" in the top left of the screen, or you can also type "quit" or hit the Escape key.

If you are using the web version, you will probably have noticed that the game started in its own tab in your browser. Just close the tab when you have finished.

3. Simple Mode

When starting out with Quest, you may find it easier to run in "Simple Mode". This hides much of Quest's more advanced functionality, but still gives you access to the core features.
You can toggle Simple Mode on or off at any time:

- on the Windows desktop version, you can toggle Simple Mode from the Tools menu.
- on the web version, click the Settings button at the top right of the screen.

4. Setting up rooms

Once you have selected "room" from the tree, you can change its name and description.
To create a room description, click the Room tab and enter a Description in the text editor.
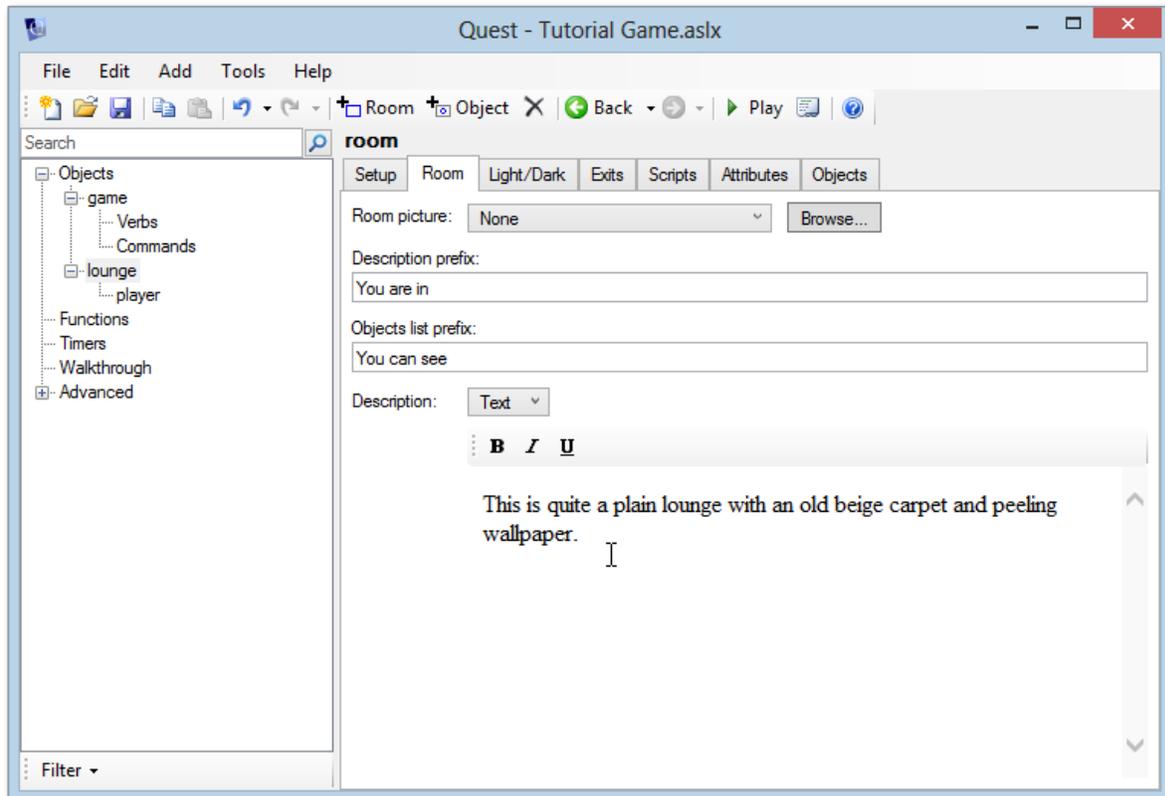
If you want to add a second room to the game, in the Windows desktop version there are three ways you can do this:

- Click the Add menu, then click Room
- Click "Add Room" on the toolbar
- Right-click in the tree, then choose "Add Room"

In the web version:

- Click the "+ Room" button at the top of the screen

5. Adding an exit

You can add exits that will allow your player to actually travel between the rooms under the Exits tab.
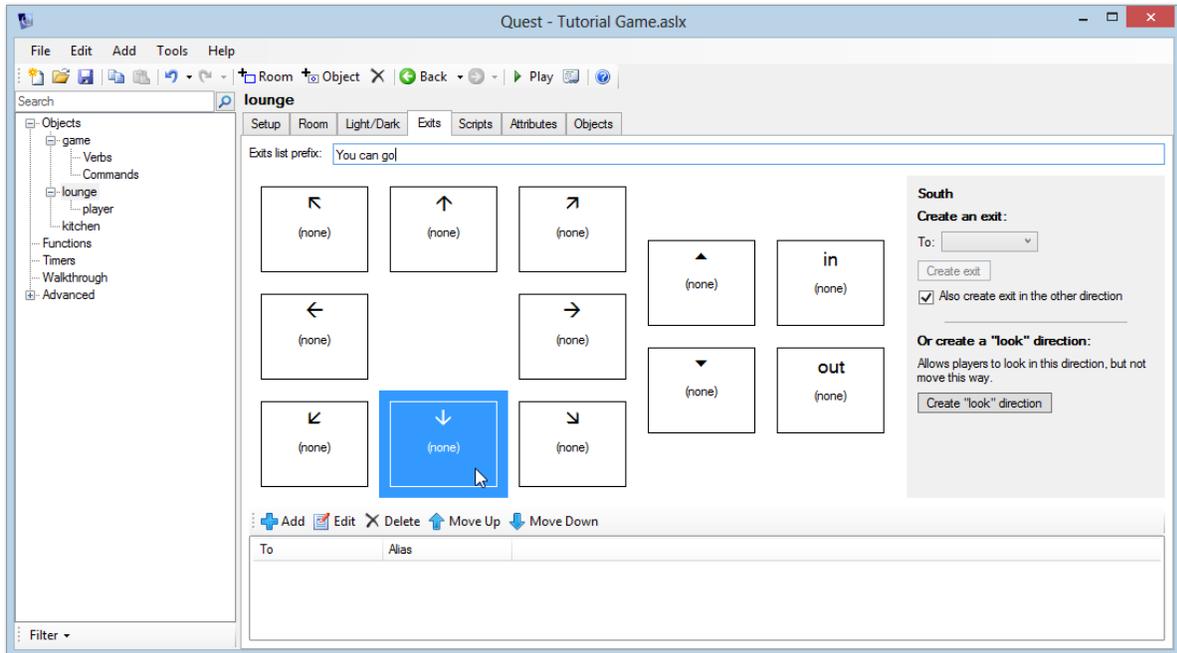
When creating an exit, choose the preferred room from the drop-down list on the right. Ensure that "Also create exit in the other direction" is selected, then click the "Create" button.
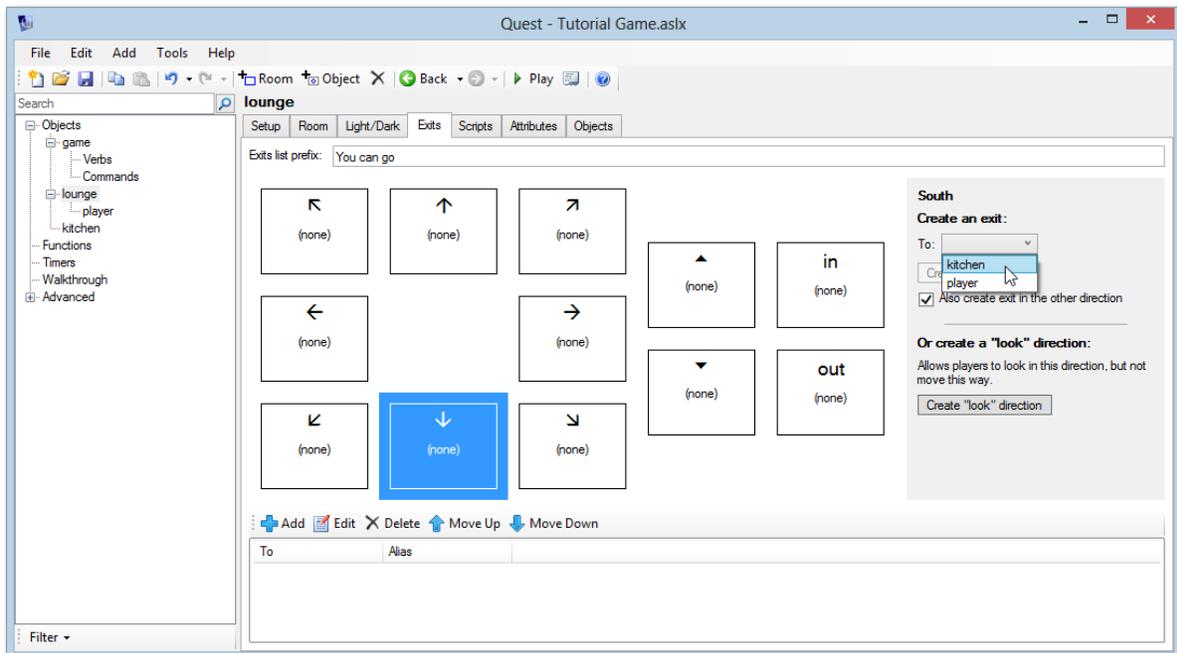
When you click the "Create" button, actually *two* exits are created - in this case one exit south from the lounge to the kitchen, and another exit north from the kitchen back to the lounge. You can see both exits in the tree.

It is helpful to think of exits as "one way". Each exit is "in" only one parent room (the "from" room), and points "to" one other room. That is why we have one exit in the lounge, pointing to the kitchen. A separate exit is in the kitchen, pointing to the lounge.

Exits, like every object in Quest, can have an alias, which is simply a way of displaying a particular name to the player. Notice how the two exits we just created have aliases of "south" and "north". (We could give our exits any alias - it does not have to be a compass direction. If we were setting a game on a ship for example, we might have exits with aliases like "port" and "starboard").

Play the game and verify that the player can go south and north between the lounge and kitchen.

6. Adding objects

When a room is selected, you have four different ways of adding an object to the room. You can:

- Click the Add Object button on the toolbar
- Go to the Objects tab and click the Add button
- Click the Add menu and choose Object (Windows desktop version only)
- Right-click your room in the tree and select Add Object (Windows desktop version only)

7. Object Names and Aliases

It is important to note the distinction between:

- the names that *players* can see and use to refer to objects
- the names that your Quest scripts use

Name: In order to avoid confusion, each object must have a unique name. So, if you have multiple televisions in your game, they must be given different names – like "TV1", "TV2" and so on.
Alias: Of course, this would not sound natural if these were the names that players saw, which is why Quest lets you set an alias. This is the name of the object that the player sees. In the example of multiple televisions, each of your TV objects could have an alias of "TV".
If you do not set an alias, players will see the object name – so you only usually need to worry about this if you want different objects to have the same displayed name.

8. Other Names

If you go to the Object tab, you will see an Other Names box. This lets you specify additional names that players can use to refer to this object. It is important to note that different players will have different ways of interacting with your game. You want to make it easy for Quest to understand what players type in, so you can add additional, alternative object names to ensure that happens. For example, for our TV object, some players might type in "look at television", and would reasonably expect that to work.

So, adding "television" to the list of Other Names will ensure that players can type in either "look at TV" or "look at television" to look at this object.
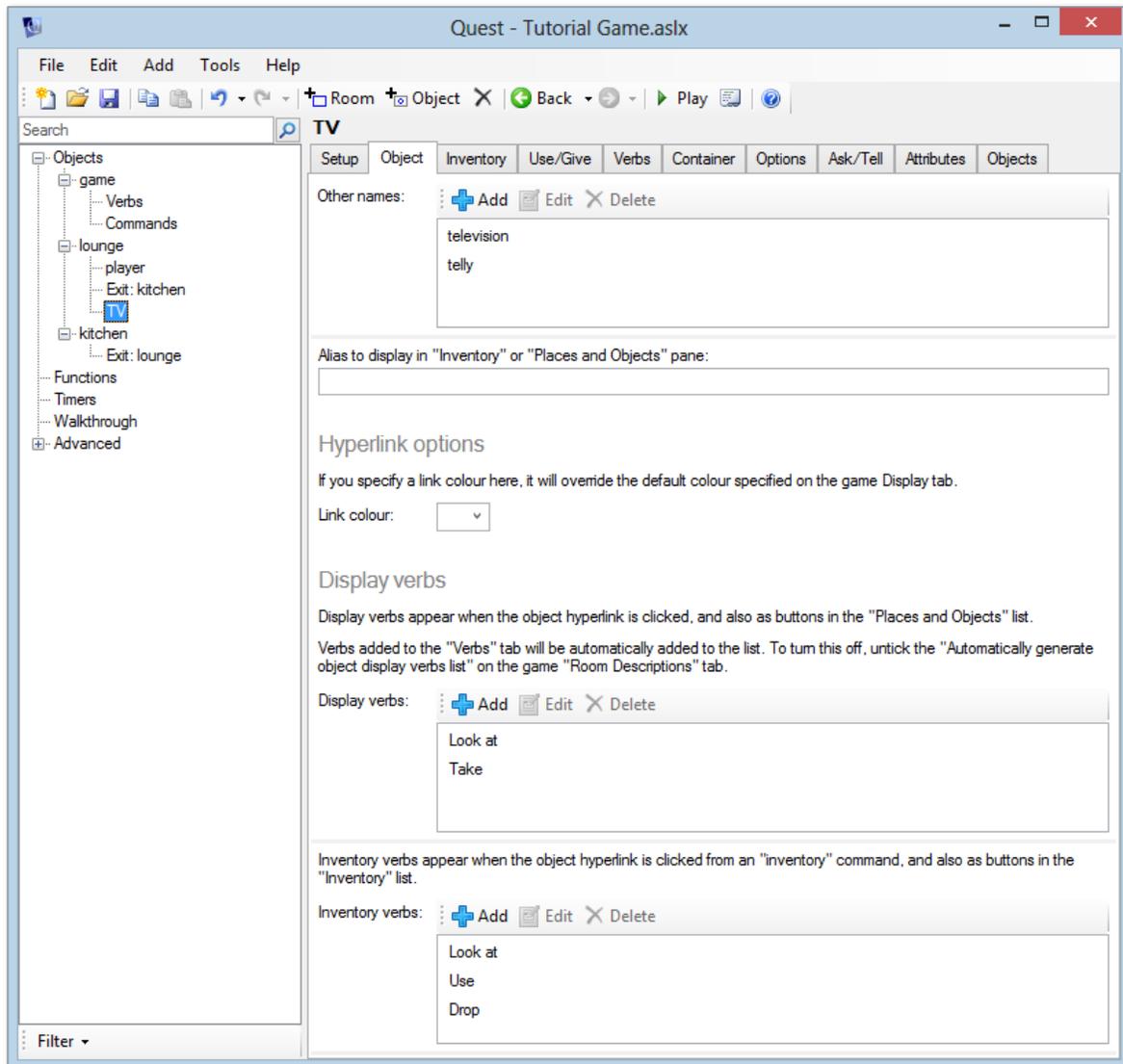
9. Descriptions

When you run the game and decide to look at an object, Quest's default description for it is "Nothing out of the ordinary."
To add a new description to an object go to the Description drop-down in the bottom half of the object's Setup tab and select Text.
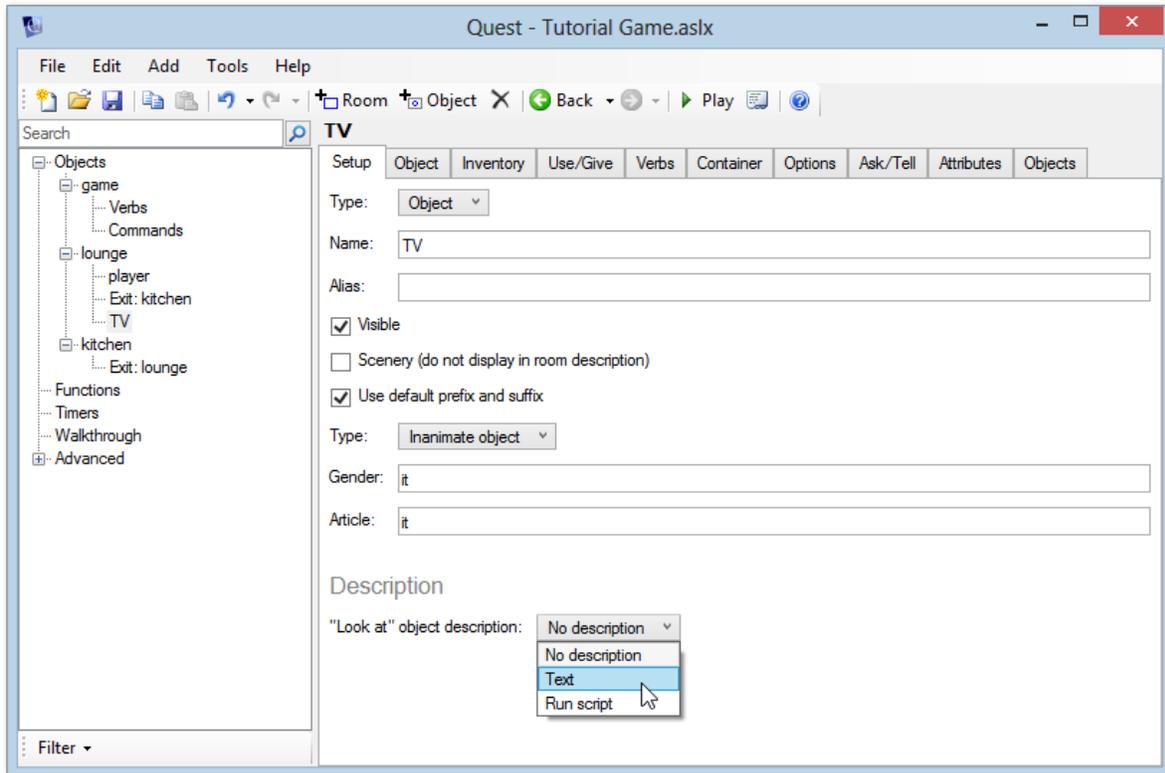
10. Adding a verb

It is a good idea to think about what kinds of things players might try to do to any objects in your game. In our example of the TV, it seems likely that a player might try to type "watch tv", so it would be good if our game came up with a good response, rather than just saying it didn't understand.
To add a verb, go to the Verbs tab, click the "Add" button and type in your verb. You can choose to either print a message or run a script when the player uses this verb. For just a simple description, choose print message.
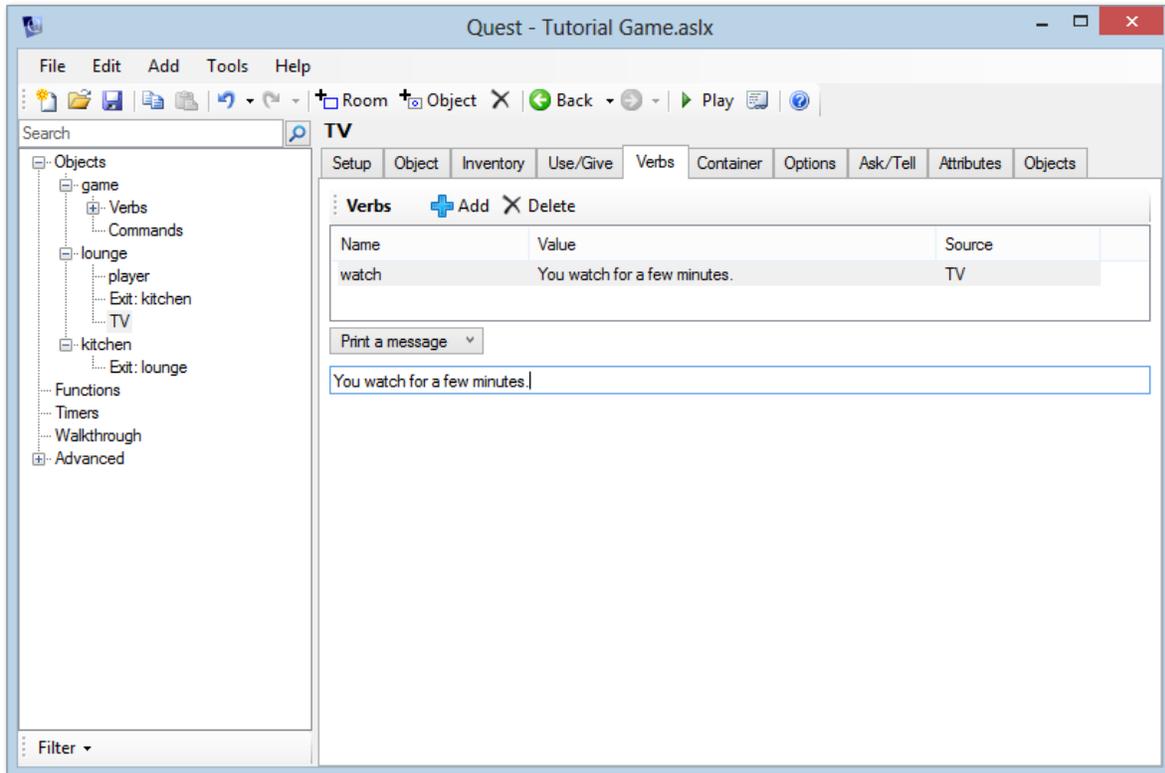
11. Publish

Finally, you can publish your work using the button in the top right corner. Just like with Scratch, this will make your game available on the Quest website for others to play with. Add a description then click on Publish.

Submit a Game to textadventures.co.uk

Uploaded file

Abba.quest

Name

Abba

Who can access this game?

○ Only people I give the link to
○ Everybody

Description

Publish

By ticking the box below, you agree to the following:

- you are the author of this game, or have the author's permission to upload it for them