

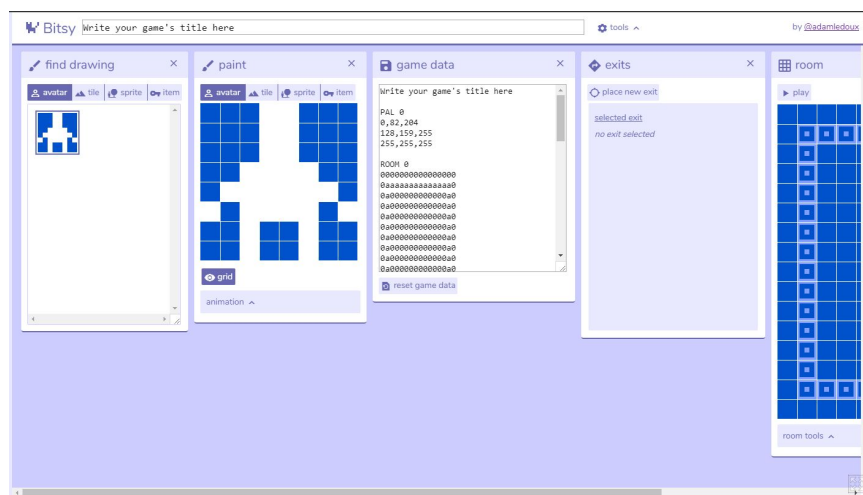
Making Interactive Stories in Bitsy

A workshop to help you get started

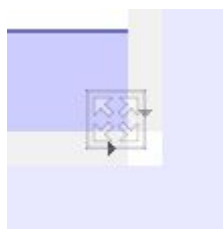
Bitsy is a simple tool for creating interactive stories. You create a set of linked rooms and fill them with characters who have something to say when you bump into them. Bitsy allows anyone of any skill level to begin creating stories in this format, with no need to do any coding.

Getting set up

Bitsy runs in the browser so all you will need to do is open <https://ledoux.itch.io/bitsy> in your web browser (or google for "bitsy game maker"). We should be able to provide you with login details for the wireless. If the wireless isn't working for whatever reason, it is possible to run Bitsy on your computer without the internet-- ask us to give you a copy from my memory stick. Remember you can always ask for help!



When you start Bitsy you should see something like this - it has loaded a default story (or the last one you were editing if you've tried it already).



This button in the bottom-right corner makes Bitsy take up the whole screen.

Bitsy has a number of smaller windows that you work in to change different parts of your story. You can choose which windows are open by clicking the "tools" menu:



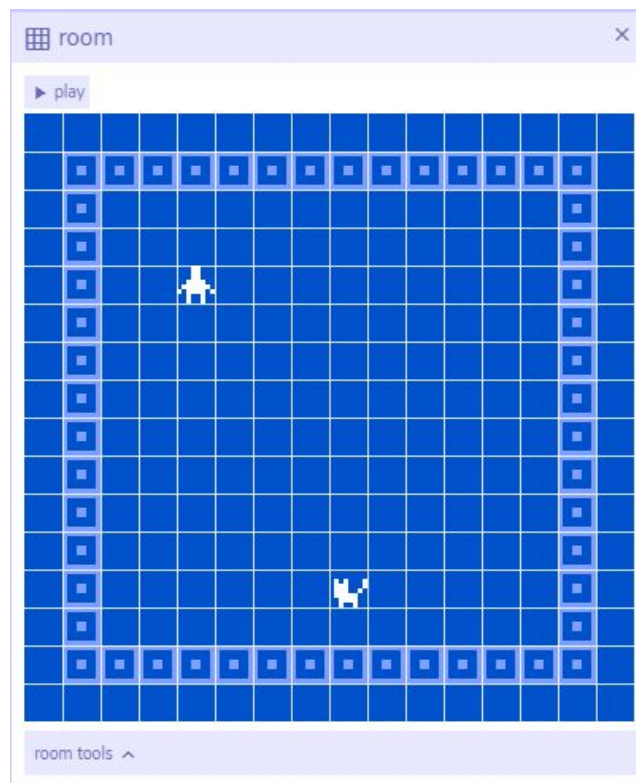
This button is near the top-right of the screen, it open and closes the tools bar.



This is the tools bar, it lets you choose which windows are open.

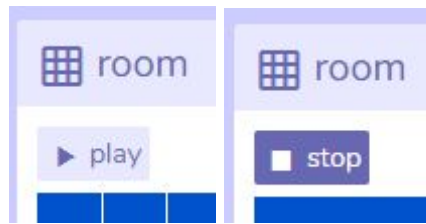
For the first half of this workshop, it will be useful to have "room", "paint", "find drawing", and "colors" open.

First steps and playing the default story



This is the "room" window. It is where you will preview all the rooms in your story. When someone plays through your story they are walking through rooms and talking to the characters in those rooms -- this is where it all happens!

In the "room" window press the "play" button to play the default Bitsy story. Move with the arrow keys and walk over to the cat to see what it has to say. Press the "stop" button (above the room, where the "play" button was) to exit play mode and continue editing your story.



This button in the "room" window puts Bitsy into "play mode" which will allow you to play through the story instead of editing it. You need to press the "stop" button before you can continue making your story!

Try changing the title in "Write your game's title here" to something different, and then press "play" again to see your new title appear at the start of the story!



The title box is always on the top left of the screen, whatever you type here appears at the very beginning of the story.

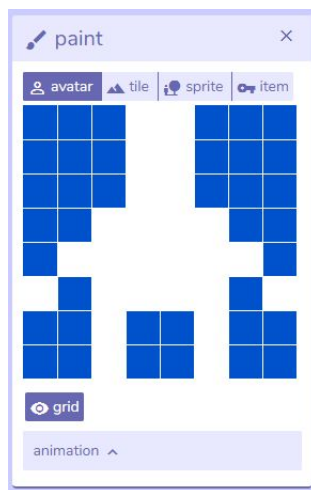
Go to the "colors" window and play around with the colour wheel to change the colours in your story. There are 3 types of colour you can change: "background", "tile" and "sprite". Play around and see how each one affects the preview in the "room" window.



This is the colors window. Here you can preview all the colour schemes in the story. In Bitsy everything in a room is always one of three colours. Characters (sprites) and items are one colour, decorative tiles are another colour, and everything else is a background colour!

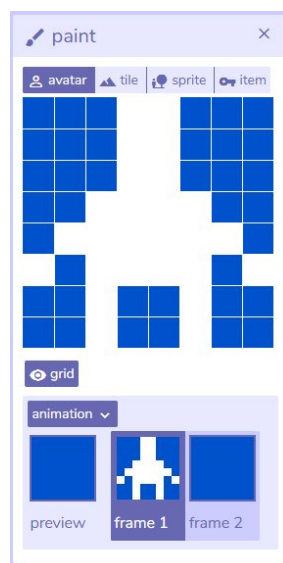
Changing the characters and dialogue

Now let's go to the "paint" window to edit the main character (which in Bitsy is called the "avatar"). Click on some of the squares in the picture to switch the colour of the squares (pixels) between background and sprite colour - you will see this changing in the "room" window automatically! Play with this until you're happy with how your main character looks.



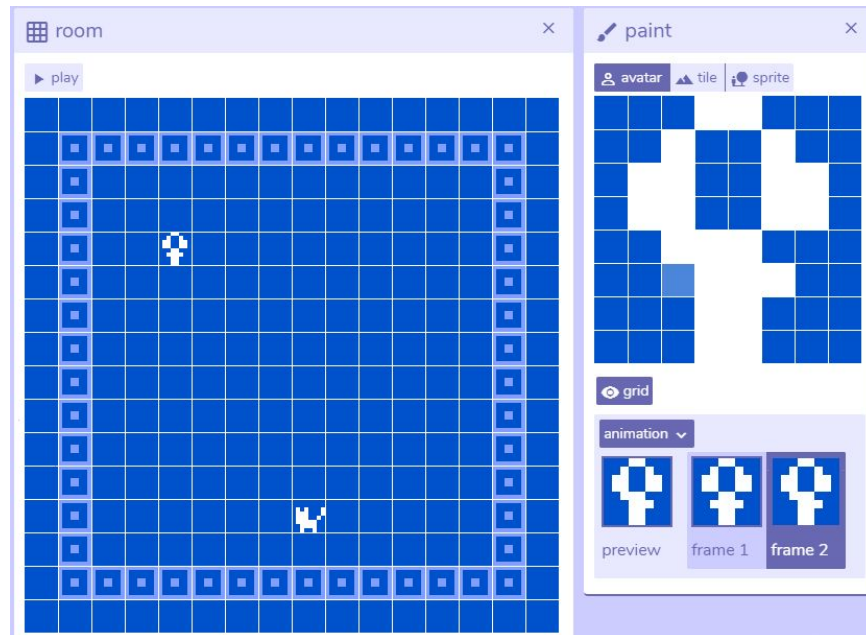
This is the "paint" window. Here you can draw characters and tiles (tiles are the individual squares that make up a room). The main character of your story is called the "avatar", all the others characters are called "sprites".

The next thing to try is to animate the avatar (main character). Click on "animation" at the bottom of the paint window and the avatar in your room will begin to flash - don't worry! This is because half of the animation hasn't been drawn yet.



With the "animation" section open you will see a "preview" and two smaller drawings "frame 1" and "frame 2". Think of these as two poses that your character can be in. You started by drawing the first pose, but clicking on "frame 2" will let you draw the second pose.

Click on "frame 2" to switch to drawing the second pose (frame) of your character's animation. Bitsy shows a ghost image of the other pose so that you can trace over it if you want.



By changing just a single square between the two poses, we made it look like the main character is waving - try this out yourself to see!

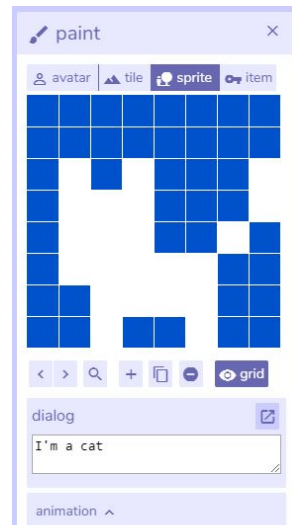
Your main character, which you control and move around with the arrow keys, is called the "avatar". The cat character, which you do not control, is a "sprite". When the main character (avatar) tries to walk into another character (sprite), that character can say something.

In the "find drawing" window, click on "sprite", and then on the cat. This will switch to the cat character in the "paint" window so you can change how it looks just as you did with the main character.



The "find drawing" window is how you can look through all your characters and tiles, and even create new ones.

There is also now a "dialog" box in the "paint" window where you can type in text for the character to say. Make the cat say something different. Use the play button in the "room" window to see it in action.

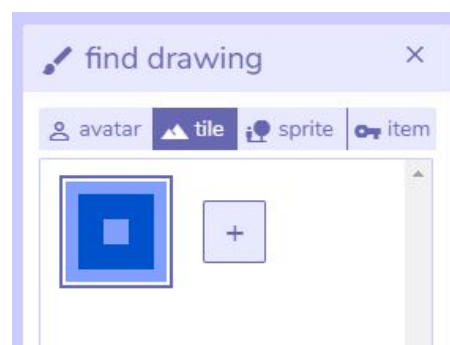


When the "paint" window has a "sprite" open, there is an extra "dialog" box for typing in words for the character to say. When you make a new story the cat character has "I'm a cat" written in here, which is why it says that when you played through the story at the very beginning!

Making and placing tiles

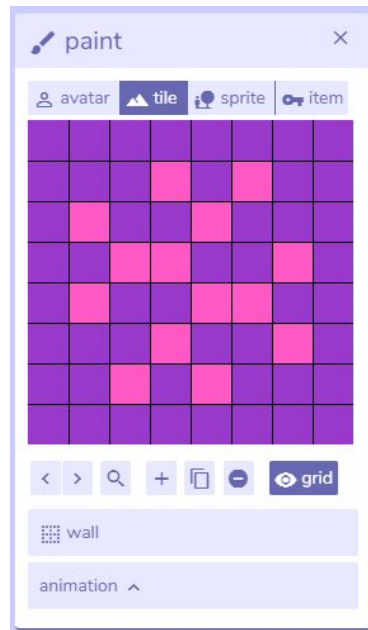
The blocks around the edge of the room are called "tiles". Tiles are like bits of scenery: your character can't talk to them but you can use them to decorate the room or make parts the character can't walk through. If you've played minecraft you can think of them as the "blocks", except in Bitsy you get to decide what they look like!

In the "find drawing" window, click on "tile" to see the tiles in your story. There is one tile already, which you can edit if you like, or you can click the + button to make a new one (like sprites you can have as many tiles as you want).



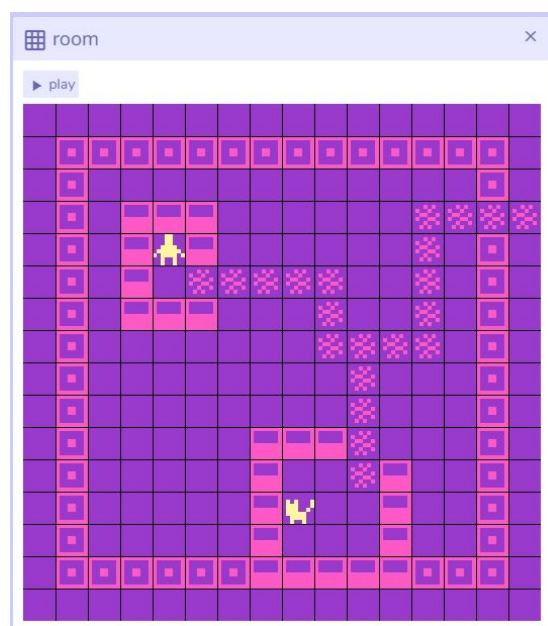
This is the tile section of the "find drawing" window. Here you can see all the tiles in your story, just like with the characters in the sprite section. You can make more tiles by clicking the + button. When a tile is selected you can change how it looks in the "paint" window.

Now you have a tile selected, go to the “paint” window to change how it looks. You can click “wall” to stop the player walking through it. You can also animate tiles if you like!



You can draw tiles in the "paint" window just like characters. Tiles can also be set as "wall" which means the main character can't walk through them.

Click the squares on and off in the “room” view to place tiles, or click and drag if you want to colour an area in with them (if you have lots of tiles, make sure you have the right one selected in “find drawing”).

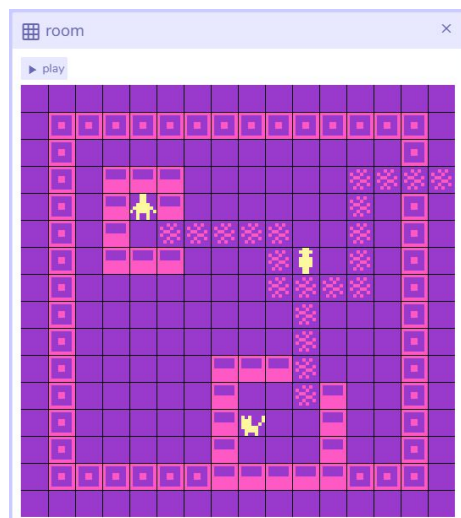


Here's a room with some new tiles. You can use tiles to make things looks like paths or walls, or anything really!

Adding more characters

You may find it difficult to tell a story with just one character, so head to the "find drawing" window and click on "sprite" to enter the sprites (characters) section again. Click the + button to add a new character. Go back to the "paint" window and decide how they look.

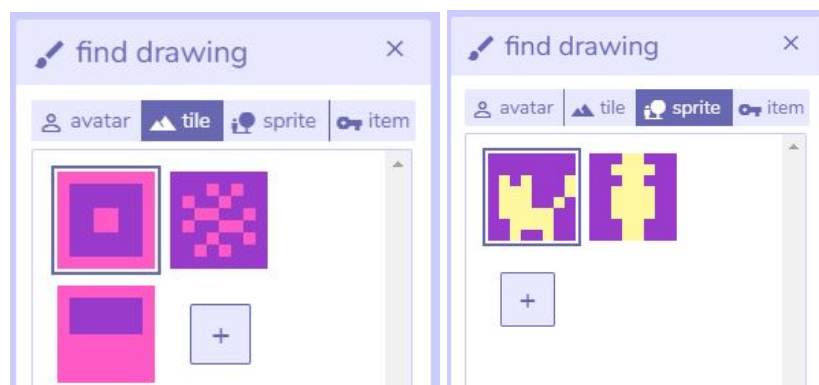
You can put the new character in your room just by clicking in the "room" window where you want the character to be. Try clicking on a few places and you will see each character can only be in one place at a time!



I've added a new character here at the crossroads in my room -- maybe I'll make them tell you where to find the cat.

The main character (avatar) can be moved around in the same way (select them in the "find drawing" window).

Spend some time adding a few new characters and give them something to say. Remember to click the "play" button to try out your changes!



I've only added a couple of tiles and a new sprite. Sometimes this is enough to tell a whole story, but you can add as many as you like

Adding more rooms

Once you are happy with this room, you can try out adding new ones to make your story even bigger!

Click on "room tools" at the bottom of the "room" window and you'll see a few new options. You can name your room in the same way that you named the story at the beginning.

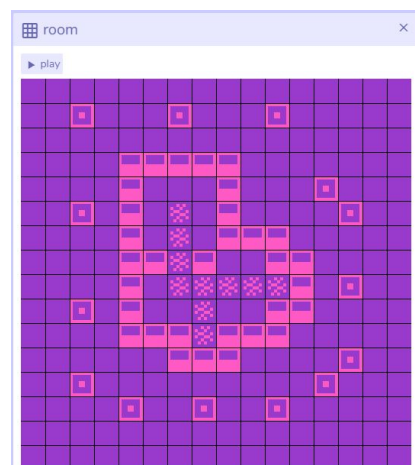
Now click on the + button next to this to make a new room. Your old room will be hidden and you'll see a blank new room -- don't worry your old room and characters are still there!



In the "room tools" section of the "room" window you will find a + button. Clicking it creates a blank new room. The arrow buttons (< and >) to the left let you switch between all the rooms in your story.

Decorate your new room with some of the tiles you already made, just like you did for the first room. You can even make some new tiles if you like.

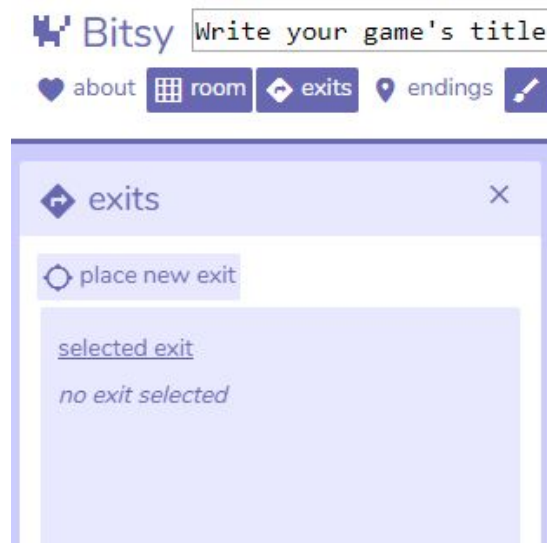
Remember that your characters (sprites) only exist in one place at a time, so if you put them in this room they will disappear from the other room. If you want a character in two rooms you need to make a new copy -- but at least that means you can make the copy say something different in each room.



Here's my new new room, I didn't add any characters so it's quite bare -- maybe it's just a corridor to get to another area.

Now you need to tell Bitsy how the main character can get to this room -- where is the door in the first room that will take us to this room, and whereabouts does it put us? In Bitsy these are called "exits".

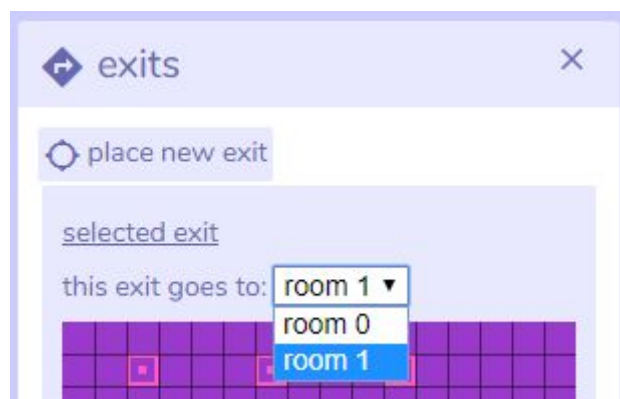
We now need to open a new window. In the "tools" menu, click on "exits" to open the "exits window".



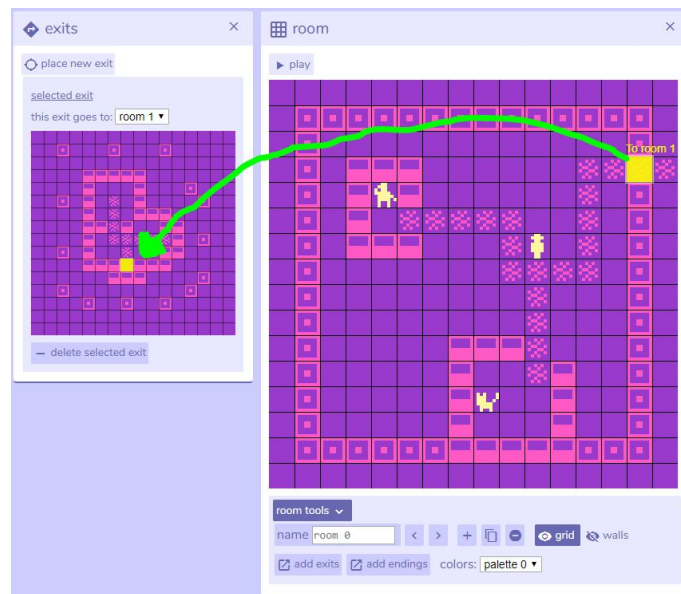
The "exits" window is how you connect rooms -- think of it as creating teleporter squares that will transport the main character to another room when they step on them. This window can be quite hard to work out so remember to ask for help if you need it!

Go back to the first room you made, and decide which square should take the main character to the next room.

Click "place new exit", and then click on the square you chose. Look back at the "exits" window and you'll see a little version of your room there. Next to "this exit goes to" is a list of all your rooms. Select the one you want to link to. Now click on a square in the mini-room in "exits" - this will be the square that your avatar appears in when it appears in this room.



Here I am choosing which room this exit goes to. Notice that an exit can take you to the same room -- what could you use this for?



Here you can see a yellow square in the "room" window and a yellow square in the exits window. They will both be hidden when you play through the story. When the main character stands on the yellow square in the room shown in the "room" window, they will move to the yellow square shown in the "exits" window

It's normally a good idea to close the "exits" window when you aren't using it so you don't change the exits in the room by accident.

Test this out by playing your story! If you get stuck, ask one of us for help.

If you want to delete an exit, make sure the "exits" window is still open. All exits are marked as yellow squares in "room" - select the one you want to delete and then click "delete selected exit" at the bottom of "exits".

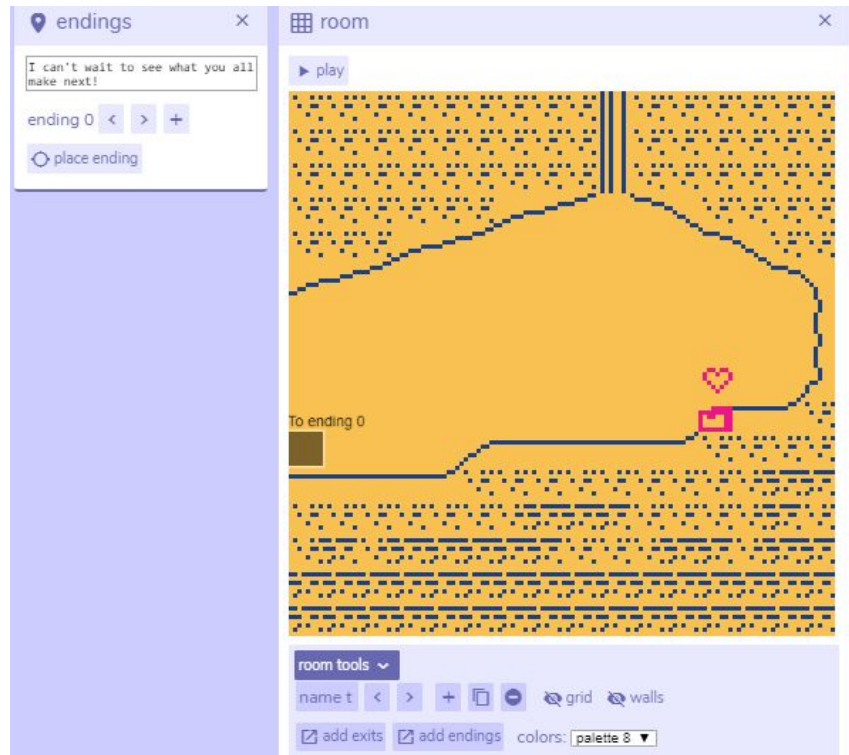
Now that you have a few rooms, you can try different colour palettes for each room! Back in the "colors" window, click on "palette select". You can name and make new palettes here. Once you have more than one colour palette, go back to "room tools" and try selecting different palettes from the list next to "colors" at the bottom of the window.

Adding endings

Bitsy has a feature called "endings" that lets you bring the story to an end and show some text -- it's a good way to let the player know that the story has come to its conclusion. The story will restart itself after that so they can play again if there are more things to see.

We need to open another window. In the "tools" menu, click on "endings" to open the "endings" window. This window is similar to the "exits" window, except instead of choosing a destination for the ending, you write some text to show the player.

Click "place ending" and click on a square in a room that you would like to be the end of the story. Type some ending text into the "endings" window. Type some ending text into the "endings" window.



The "endings" window is very similar to the "exits" window, but you write some words to show the player instead of moving them to another room.

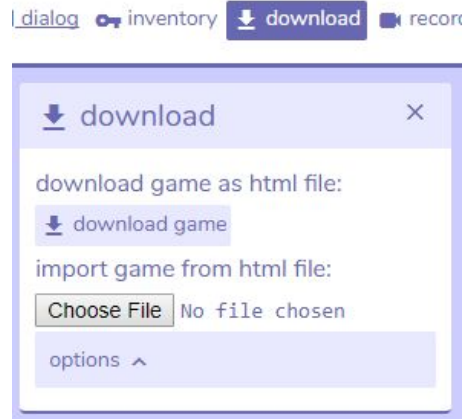
Now try to make a story!

Now you have seen enough to make really interesting Bitsy stories! Some of the best Bitsy stories were made before you could even have more than one room, so don't be afraid to keep your stories simple!

Ask for help if you want it!

Sharing your story

If you want to let other people on the internet play your story, you can use the "download" window to download it as a shareable web page (an html file). You can share this file by email or messenger attachment (and then it opens in a web browser when double-clicked). Alternatively, you could create an account on <http://itch.io> and publish your story there!



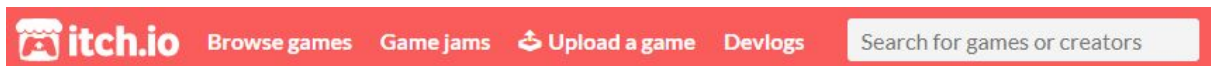
This is the download window, which you can find by clicking "download" in the tools menu

Going further

Hopefully this workshop will have taught you enough to get started with Bitsy, and given you some idea of what can be done with it. Through clever use of writing and room design you can create some very interesting stories and experiences.

Bitsy also has a scripting system that lets you do a limited form of programming that runs when characters say things and when items are picked up -- you can do some clever things with this, but it's quite difficult to learn at the moment, and many of the most interesting Bitsy stories are told without using it.

There are over 500 Bitsy games authored by over 300 people. You can find a lot of them by searching "bitsy" on <http://itch.io>.



Thanks for taking part in the workshop, and have fun making Bitsy stories!

