bitsy tutorial
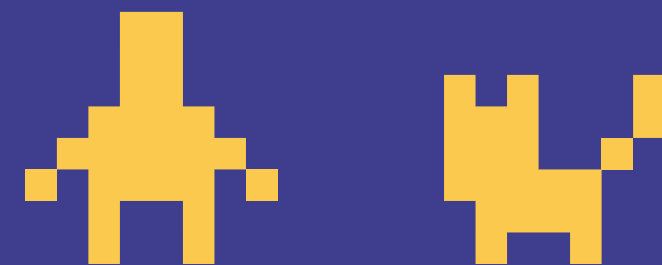## by cecile richard @haraiva

→ bit.ly/BitsyWorkshop

bitsy v7.2

who am i? ✕

hello i'm **cecile**

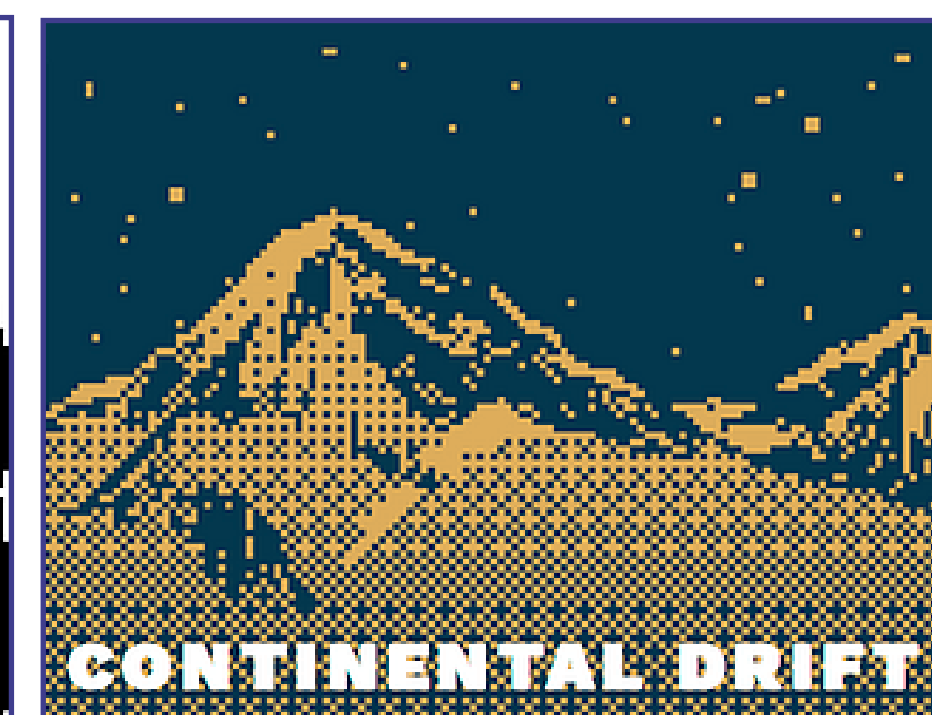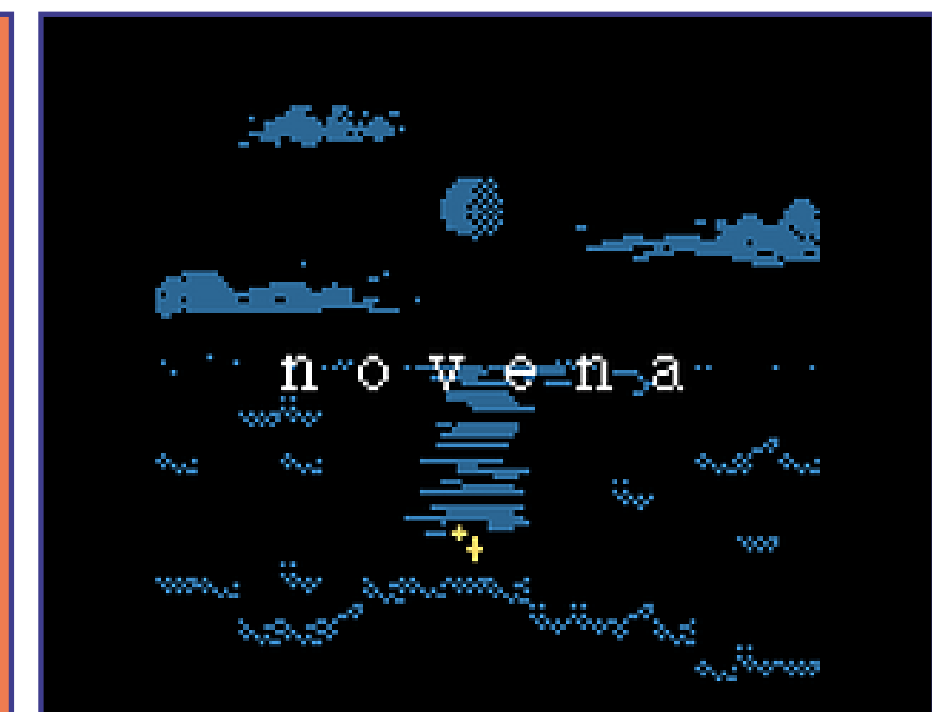i'm a melbourne-based ~~graphic designer/illustrator/zine-maker/comics artist/~~**tiny game dev.**

i make a lot of short, personal games using bitsy and i even won awards for some of them :o

where you can find me ✕

portfolio	cecile-richard.com
bitsy stuff	haraiva.neocities.org
twitter	@haraiva
games	haraiva.itch.io

games i made ✕

HOPE

under a star called sun

ENDLESS SCROLL BY CECILE RICHARD

novena

CROW CRIME A MURDER MYSTERY

CONTINENTAL DRIFT

what's in this guide?   ✕

introduction to bitsy:
— what's bitsy? why use bitsy? what should i make in bitsy?

how to…
— bitsy basics: getting familiar with the editor
— drawing in bitsy
— room design
— exits & endings
— dialog & advanced dialog options
— colour palette, game data, settings, inventory, download game.

useful tools, tips, tutorials, bitsy game recommendations and more

how to share your bitsy game on itch.io

what's bitsy? ✕

"bitsy is a little editor for little games or worlds. the goal is to make it easy to make games where you can walk around and talk to people and be somewhere."

— **adam le doux, creator of bitsy**

i like bitsy because ✕

- it's easy and satisfying to use.
- pixel art is (mostly) accessible and fun.
- it's versatile while also having constraints.
- the community is cool
- there's a bitsy jam every month!

what should i make? ✕

you can make (almost) anything! short narrative games are the most common, but you could also make a vignette game, or a tiny adventure. some people even made a bitsy mmo!

for inspiration, you can take a look at the **bitsy pieces twitter** or **claire morley**'s cool examples of cool games at the bottom of **her tutorial**.

bitsy has a growing, diverse, extremely supportive community, and is a genuinely exciting tool because of its versatility.

→ ledoux.io/bitsy/editor.html
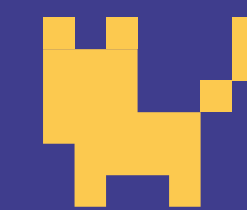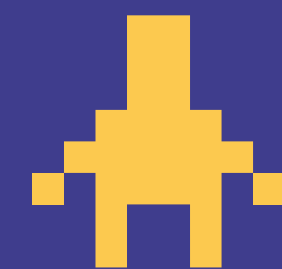
bitsy basics

let's start with the basics.
once you have the editor open you can take a look at the various tools/panels. toggle your toolbar by clicking on the tools button next to the title field.

a **room** is a place or scene in your game world.
you can make multiple rooms that you connect with each other using **exits**.
a **tile** is a piece of scenery in your room. you can make your tile into a **wall**, making it impassable.
the **avatar** is the player character, which you control using the arrow keys, and you can interact with **sprites** by walking up to them.
an **item** is a sprite you can pick up. you can assign **variables** to your items if you want, but you don't have to.
an **ending** is an exit that ends the game. you can have multiple endings.

buttons

navigate rooms/tiles/sprites

find specific room/tile/sprite

create new room/sprite

duplicate room/tile/sprite

duplicate room/tile/sprite/exit

visibility toggle grid/ walls/exits & endings view

wall toggle to make your tile a wall

animation toggle to make a 2-frame animation

exits & endings add exits & endings in the room

drawing in bitsy

×

each tile and sprite's canvas is a **8×8 grid**.
you can draw in the `paint` panel by clicking on the squares.

once you're done making your avatar, you can click on `animation` to make a **two-frame animation**. edit your second frame and now your avatar is moving!

this process is the same for tiles and sprites.

paint

×

| 🏃 avatar | ⬚ tile | 🐾 sprite | ⚑ item |

| avatar | ◀ ▶ ＋ 🗐 🗑 🔍 |

⊡ grid
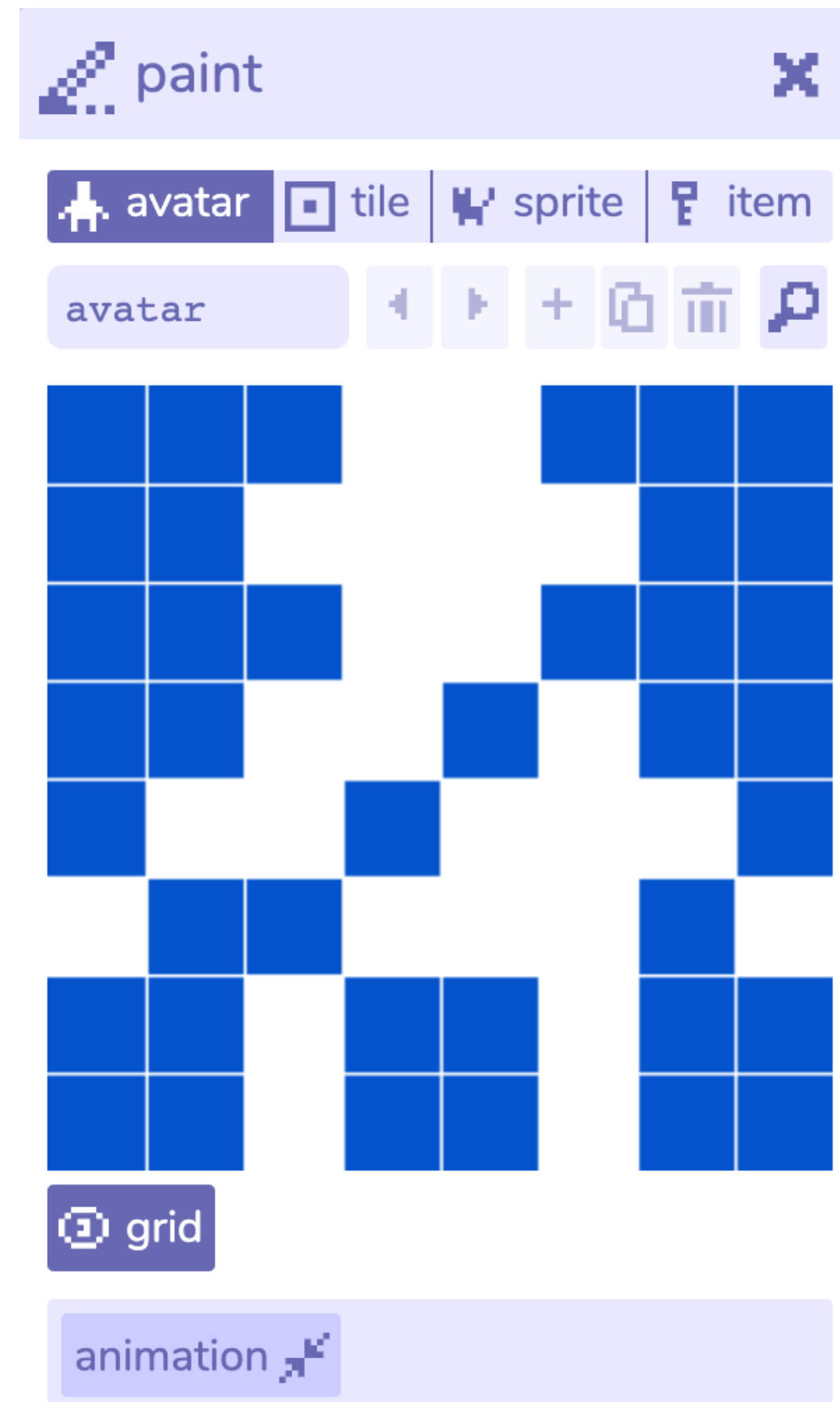
animation ↙

toggle for this for
2 frame animation

paint

×

| 🏃 <u>avatar</u> | ⬚ tile | 🐾 sprite | ⚑ item |

| avatar | ◀ ▶ ＋ 🗐 🗑 🔍 |

⊡ grid

animation ↗

preview frame 1 frame 2
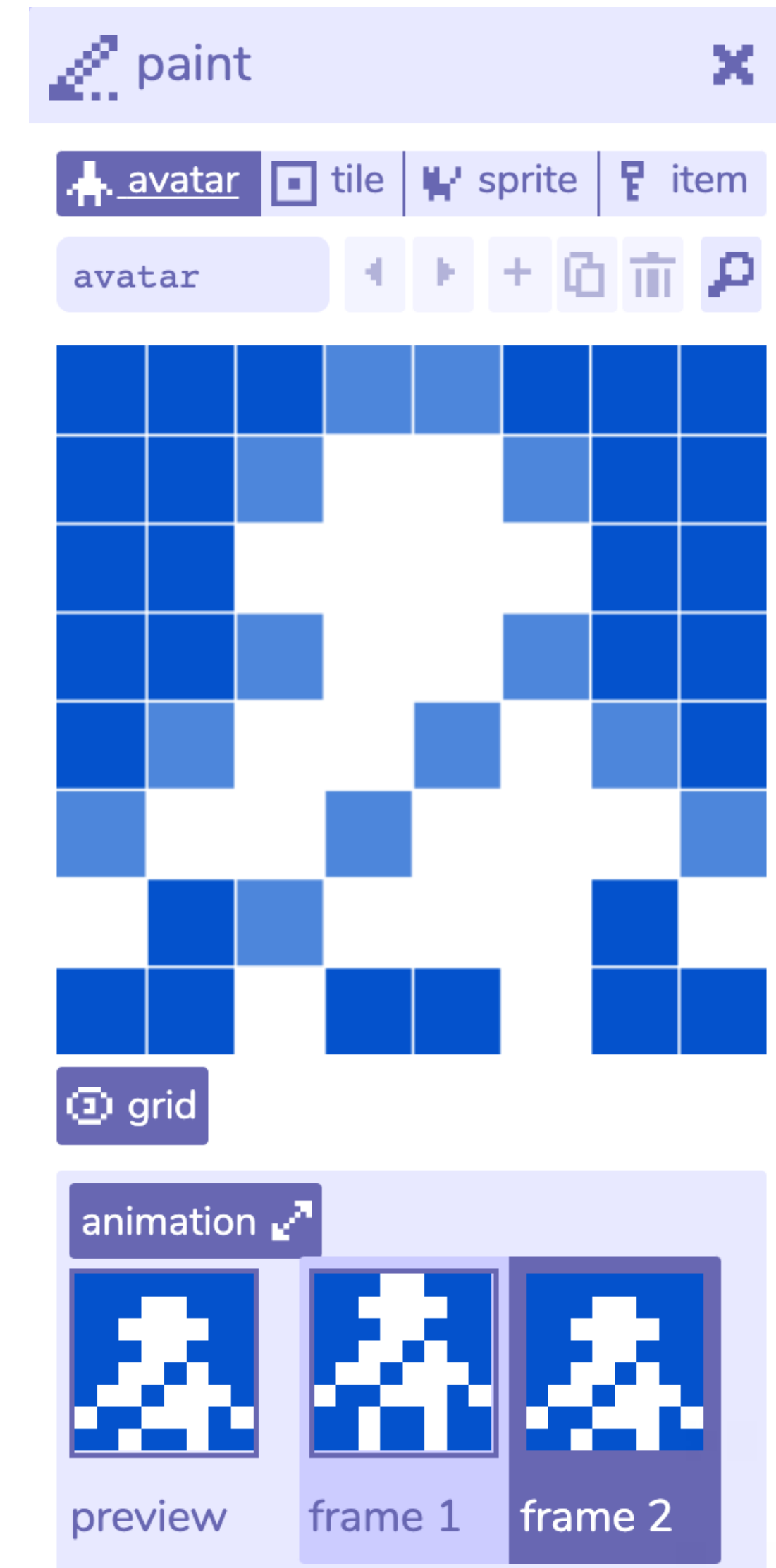
drawing in bitsy ✕

the one thing that's different in tiles is the `wall` **button.**

you can toggle this to make your tile **impassable**, which means your avatar can't go through, or on it.

you can make as many tiles as you want.

also, you can only have one iteration of a given non-item sprite in a game, so if you want multiples of the same sprite, you have to `duplicate` **them.**

✎ paint ✕

| 🪑 avatar | ⊡ tile | 🐾 sprite | 🎏 item |

| block | ◂ ▸ ✛ ⧉ 🗑 🔎 |

⊞ grid

▢ wall

animation ⤢

---
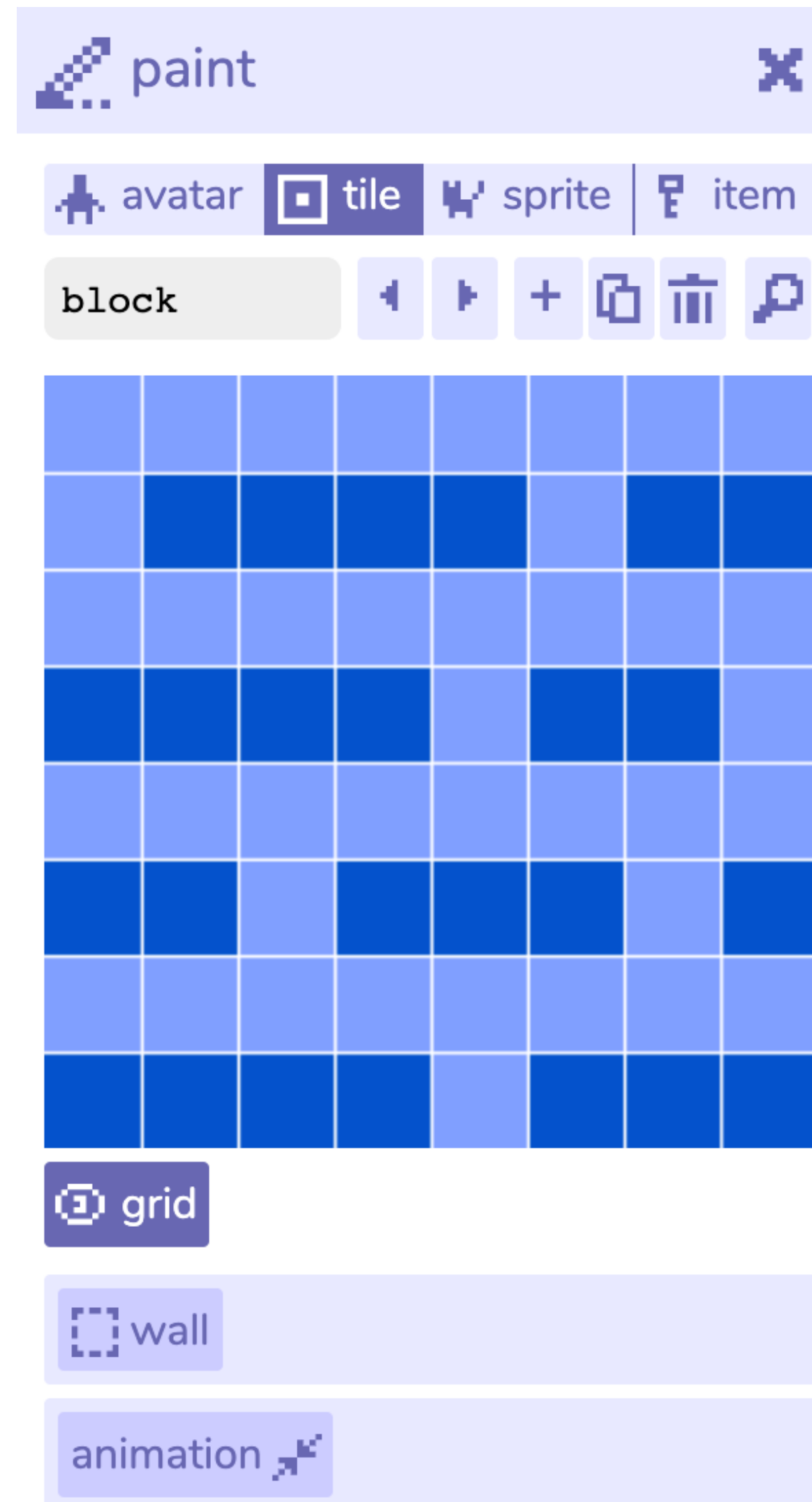
tips

don't overthink your drawings! in pixel art it's important to get across the essence of whatever you're drawing, but it's also okay to keep it vague. vagueness can bring interesting results.

don't forget to name your tiles and sprites! it's helpful when you end up having a lot of them and you can easily search them using the `find` **button.**

room design

now that you have some sprites and tiles set up, it's time for some interior design. let's put the tiles in your **room**!

you can **find** your tiles and sprites easily in the find drawing **panel**.

place your tiles in your room. **click and drag** on the room if you want to place a tile multiple times quickly.

find drawing

avatar | tile | sprite | item

block | door | window

wall left | wall right | roof left

roof right | roof middle | ground

filter drawings

room

play | example room

colors: blueprint

exits & endings | visibility

visibility: grid | walls | exits & endings
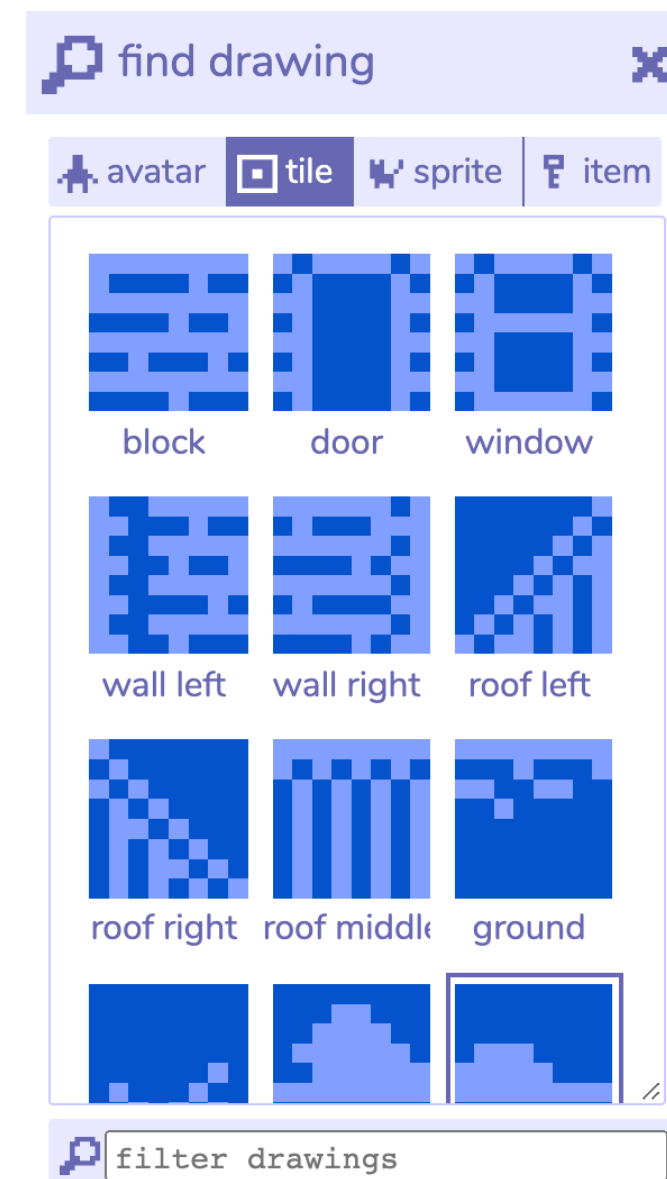
room design

toggle the `wall` button in the `room` panel to **see where your walls are**.

click the `play` button to, well, **play your game**. that way you can check if your walls work, and you can also just get a feel of how to navigate your game.

once you have at least two rooms, you can connect them using **exits**.

room

▶ play   example room   ◀ ▶ + ⧉ 🗑

🎨 colors: blueprint ⌄   exits & endings ⧉   ⊙ visibility

visibility: ⊙ grid   ⊙ walls   ⊘ exits & endings
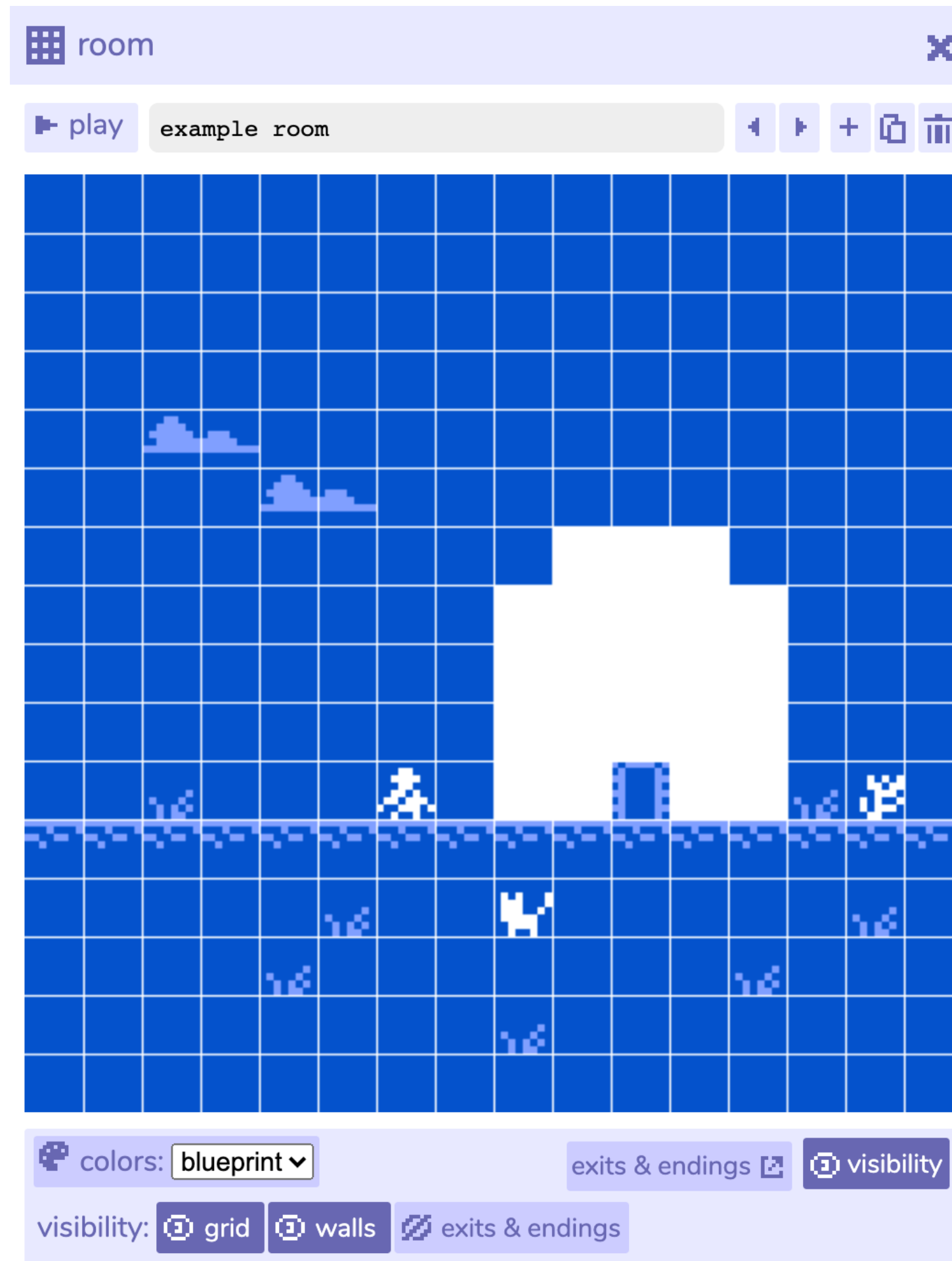
tips

i generally roughly plan out my rooms on paper, then create them, adding placeholder tiles where i want my walls and exits to be.

there are some bitsy pieces that take place only in one room, but **you can add as many rooms as you want**, so you can go wild with them as well.

exits & endings ✕

you've heard of "making an entrance", let's make an **exit**.

click + in the exits & endings panel and then choose if you want to make a `two-way exit`, **a** `one-way exit` **or an** `ending`.
you can add transition effects to your exits by clicking `exit options`

`endings` **work just like exits do except they mark an ending to your game.** you can make as many endings as you want.

room ✕

▶ play | example room | ◀ ▶ + ⎘ 🗑

📱 ↕

colors: blueprint ▾   exits & endings ⬀ ⊙ visibility

visibility: ⊙ grid   ⊙ walls   ⊙ exits & endings

⊡ exits & endings ✕

exit 1/1 | ◀ ▶ + ⎘ 🗑

⊡ exit

example ro... (10,10)
⊹ move ✎ ⊞

↪ return exit

room 1 (10,10)
⊹ move ✎ ⊞

⊡ exits & endings ✕

ending 1/1 | ◀ ▶ + ⎘ 🗑

⚑ ending

room 1 (10,8)
⊹ move ✎

💬 ending dialog   ⊞ ⬀

The end
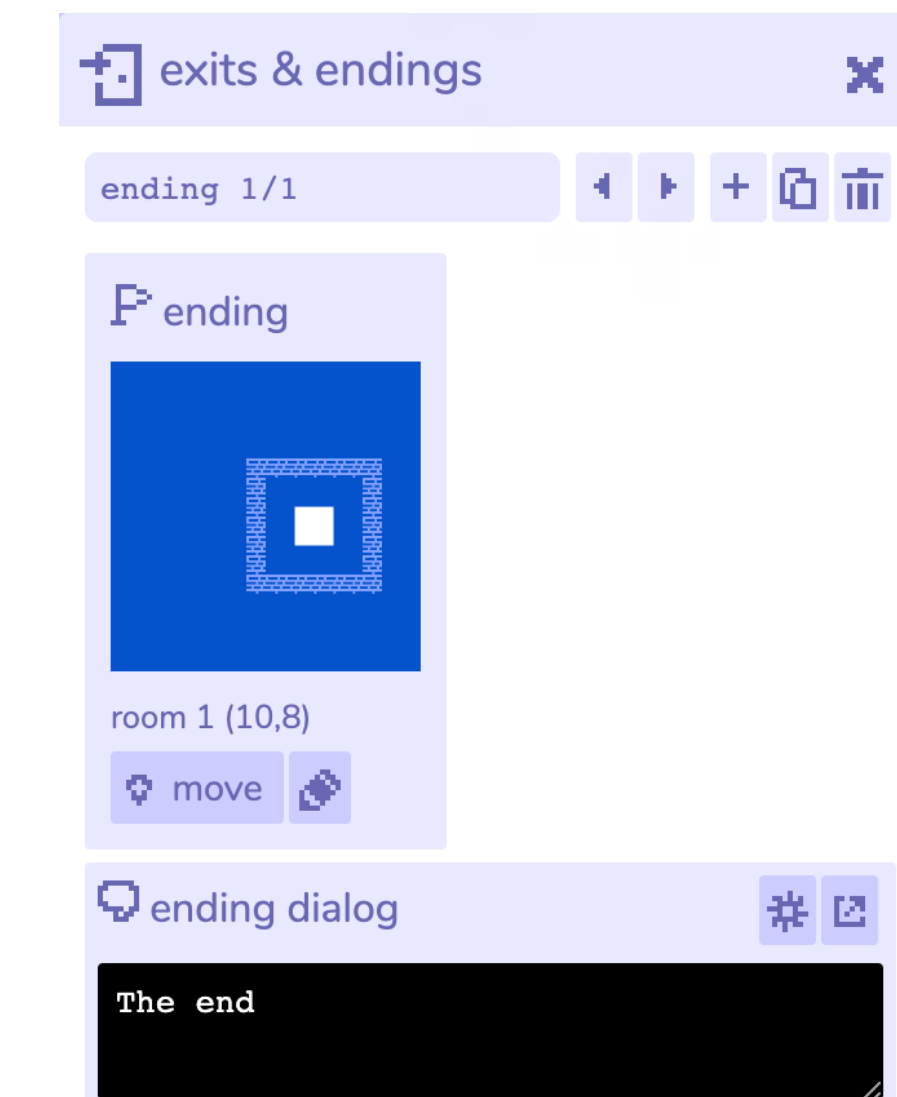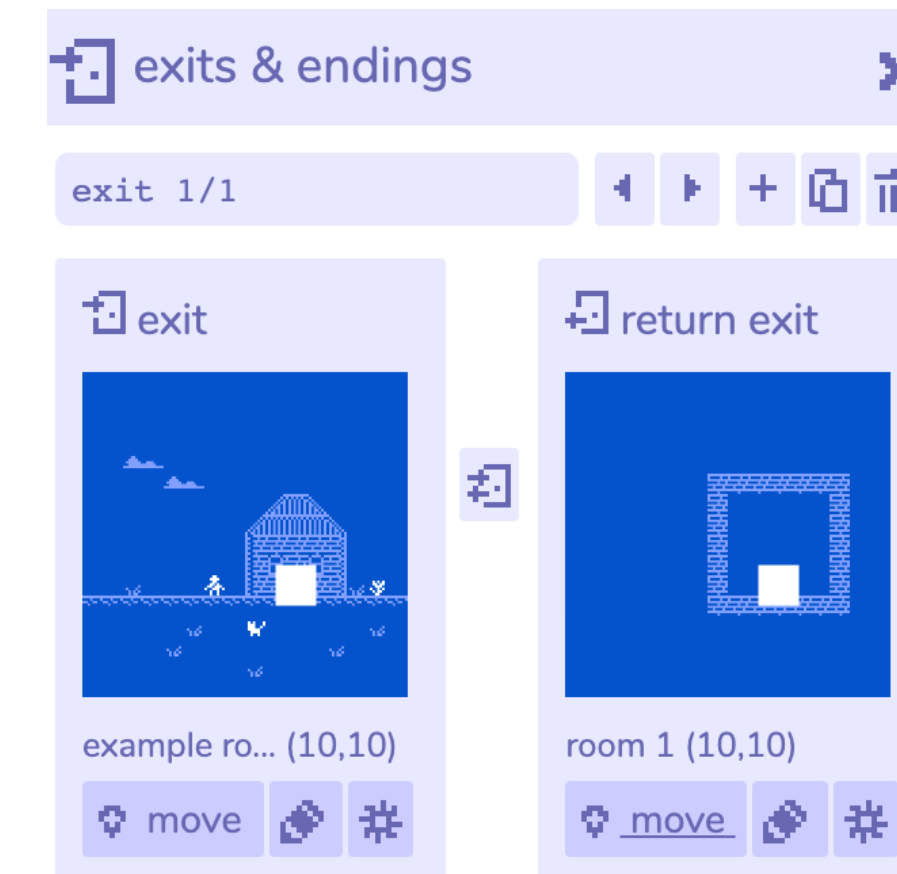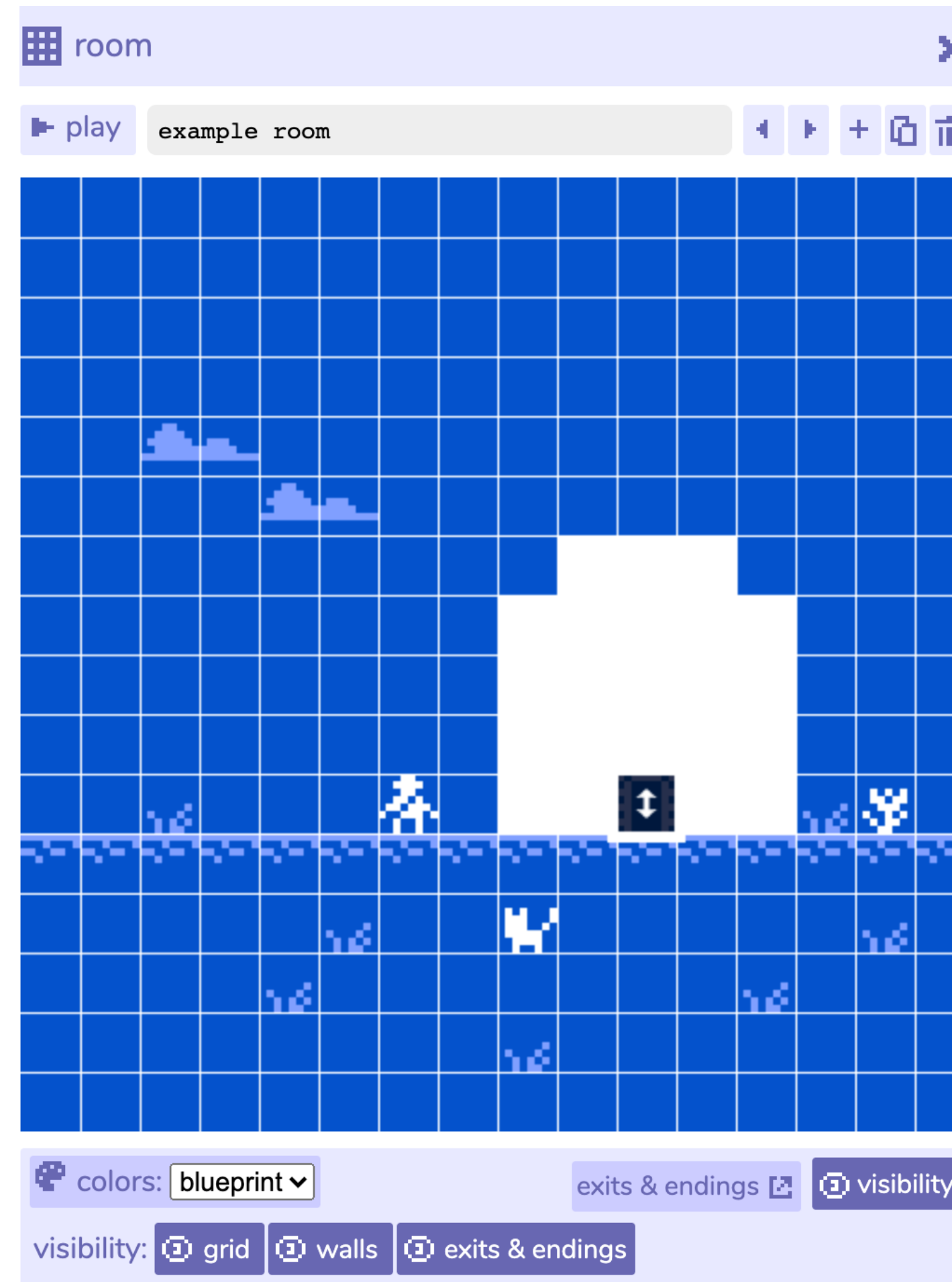
editing an exit

`exits & endings` **should be toggled in your room panel. open the** `exits & endings` **panel, and click the** `+ exit` **button. click** `move` **to place your exit in your room. you can also drag the black square to move the exit around in your room.**

thinking about exits

exits are commonly used as **doors between rooms**, but i've seen them being used to make animations, show the passing of time, or making sprites appear out of nowhere.

if you're placing them as doors, it's important to keep **continuity** in mind, as to not confuse the player (unless that's your aim). for example, it makes sense for the character to exit at the right-side and enter a new room from its left side.

tips

generally, you want to make it obvious **where the exits in a room are**, unless it's part of your game to make it confusing.

there was a paragraph here with some other tips but they were made obsolete by the new version of bitsy... it really did make exits better i love 6.0 thank you very much

dialog

now that we have most of the basics covered, let's talk about **dialog**.

sprites and items are the only elements to which you can add dialog.

to edit dialog for each sprite you make, go to the `paint` **panel and type into the `dialog` field.**

now click play and walk up to the sprite and it will talk to you!

paint

avatar | tile | **sprite** | item

cat

grid

dialog

```
hello I'm a cat
```

animation
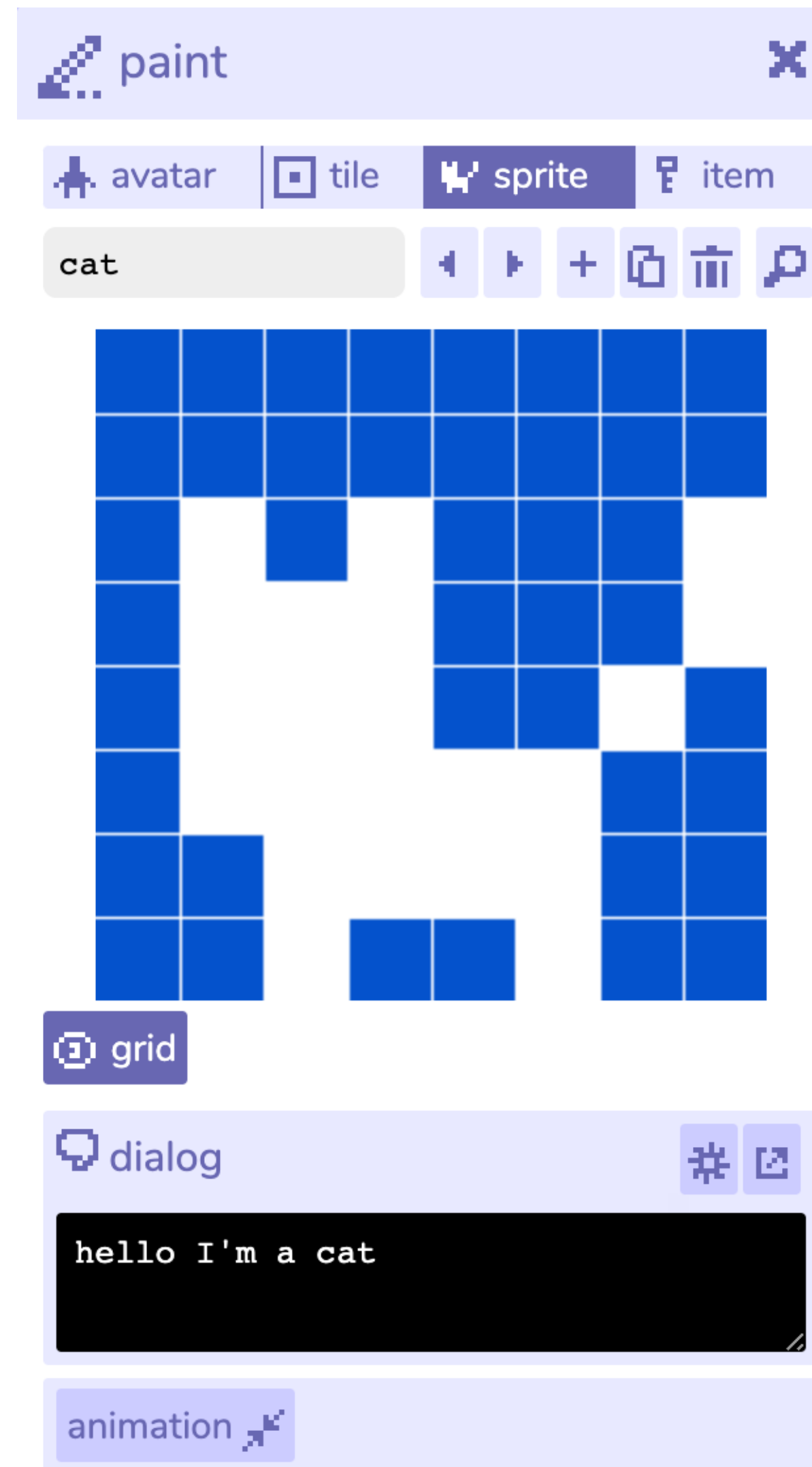
tips

dialog is usually one of the last things i add to my game.

what i do is write down all of my dialog in a text editor and then copy/paste and edit that dialog in bitsy for each of my sprites.

i think you should have fun with the dialog!

advanced dialog ✕

with your `paint` **panel still open, click on the** `dialog` **tool to open the advanced** `dialog` **panel.**

there you can find different kinds of **dialog sections and functions** in the `+add` option.

and **text effects**! you can change colours of your text or make it wavy, or shaky, or rainbow, or all of them at the same time!

dialog ✕

▶ preview   cat dialog   ◀ ▶ + ▢ 🗑

🔺 🔻 ᴬ̠ᴮ̠   🗑

{rbw}hello I'm a cat{rbw}

ᴬ̠ᴮ̠ text effects
color 1 color 2 color 3 wavy shaky rainbow
+ insert drawing avatar A ▾

+ add

hello I'm a cat

memo ✕

lists are used if you want your sprite to say a lines in a **sequence** (say the lines only once), a **cycle** (say the lines once then repeat from the first line), and **shuffle** (say lines in a random order).

branching list is used in association with item variables. for example a sprite will say a line only once you have picked up a specific item.

colour palettes ✕

set **colour palettes** for your game in the `colors` panel.
you can make multiple colour palettes and apply them to different rooms by selecting the one you want in the dropdown menu in the `room` tools.

game data ✕

in the `game data` **panel,** you can find the text version of the game itself. you could tweak it in the editor, but i recommend pasting it in a text editor like **sublimetext** for that. this is also the data you need to use with hacks like **borksy**.

settings ✕

in the `settings` panel you can change the **background colour** of the html file of the game (so that it matches the background colour of your room), set the **game window size** and change **dialog fonts**.

inventory ✕

the `inventory` panel is the one you use for setting variables. check out the **tutorials** if you want to know more about them.

download game ✕

in this panel you download your **game's html file**. that's the file you need for uploading to itch.io. you can also **import** a game from its html here.
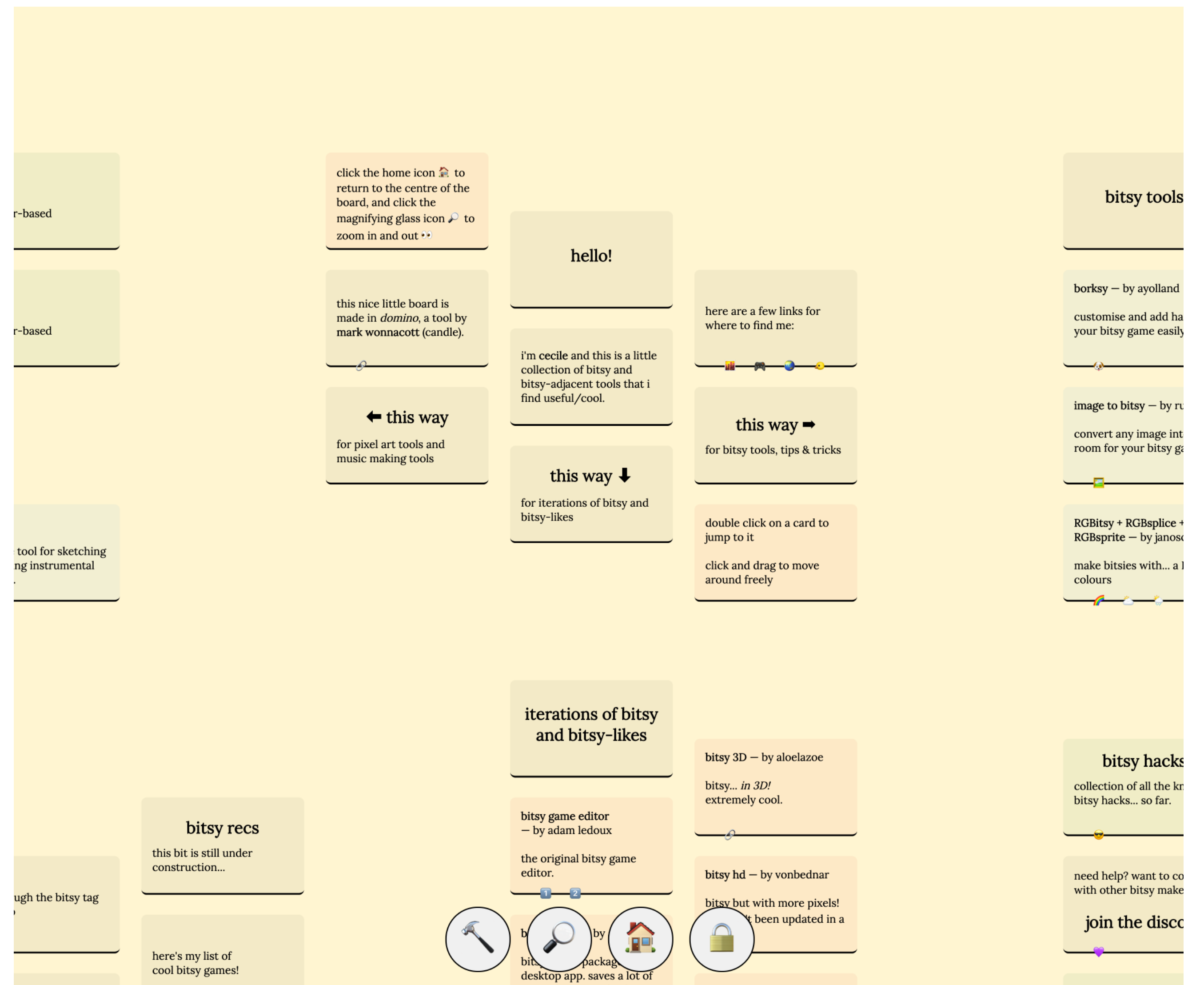
i have compiled ressources that are helpful when making a game in bitsy!

�key **bit.ly/BitsyTools**

you can find:
— tools to make youy bitsy game more versatile and/or complicated,
— tutorials, tips and tricks,
— game recommendations for inspiration,
— tools for making pixel art and music for your game,
— different kinds of bitsy (bitsy in 3D, bitsy in HD...)

---

r-based

r-based

tool for sketching
ng instrumental

ugh the bitsy tag

bitsy recs

this bit is still under construction...

here's my list of
cool bitsy games!

---

click the home icon 🏠 to return to the centre of the board, and click the magnifying glass icon 🔍 to zoom in and out 👀

this nice little board is made in *domino*, a tool by **mark wonnacott** (candle).

← this way

for pixel art tools and music making tools

this way ⬇

for iterations of bitsy and bitsy-likes

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hello!

i'm **cecile** and this is a little collection of bitsy and bitsy-adjacent tools that i find useful/cool.

iterations of bitsy and bitsy-likes

bitsy game editor
— by adam ledoux

the original bitsy game editor.

1 2

b   by
bit   packag
desktop app. saves a lot of

---

here are a few links for where to find me:

🟥 🎮 🔵 🟡

this way ➡

for bitsy tools, tips & tricks

double click on a card to jump to it

click and drag to move around freely

bitsy 3D — by aloelazoe

bitsy... *in 3D!*
extremely cool.

bitsy hd — by vonbednar

bitsy but with more pixels!
t been updated in a

---

bitsy tools

borsky — by ayolland

customise and add ha
your bitsy game easily

image to bitsy — by ru

convert any image int
room for your bitsy ga

**RGBitsy + RGBsplice +
RGBsprite** — by janos

make bitsies with... a
colours

bitsy hacks

collection of all the kn
bitsy hacks... so far.

need help? want to co
with other bitsy make

join the disco

sharing games ✕

if you've finished making your game and want to share it with people, you have a few options but most people share their bitsies on the website **itch.io**.

itch.io is a platform where people share video games, board games, zines, etc.

it's known for being more community-oriented than commercial games platforms like **steam** or the **epic games store**.

uploading your game on itch.io ✕

in order to share your games on itch.io, you have to **create an account**. there's an **extensive guide** for how to upload HTML5 games to itch.io, but simply put:

1. from your **dashboard**, click `create new project` title your project, and add a cover image to it.

2. in **kind of project**, select `HTML`.

3. in **uploads**, upload your game packaged in a `.zip` file. your game has to be titled `index.html` **for it to be** playable on itch.io. **this is important!**

4. in **embed options**, you can change the `viewport dimensions` **to whatever you want, but most people** upload their bitsy games at `512 x 512 px`.

5. when you're ready to launch, set your **visibility** to `public` **and click save. your game is now live!**

thanks

cecile-richard.com   thanks