

Learning:

1. **drag and drop behavior**
2. tilesheet inserting
3. **pinning a sprite to a hitbox**
4. **event to set the position of a sprite**
5. setting the viewport to fit the 320 x 320 board
6. changing a text to show the current row and column

<https://opengameart.org/content/boardgame-tiles>



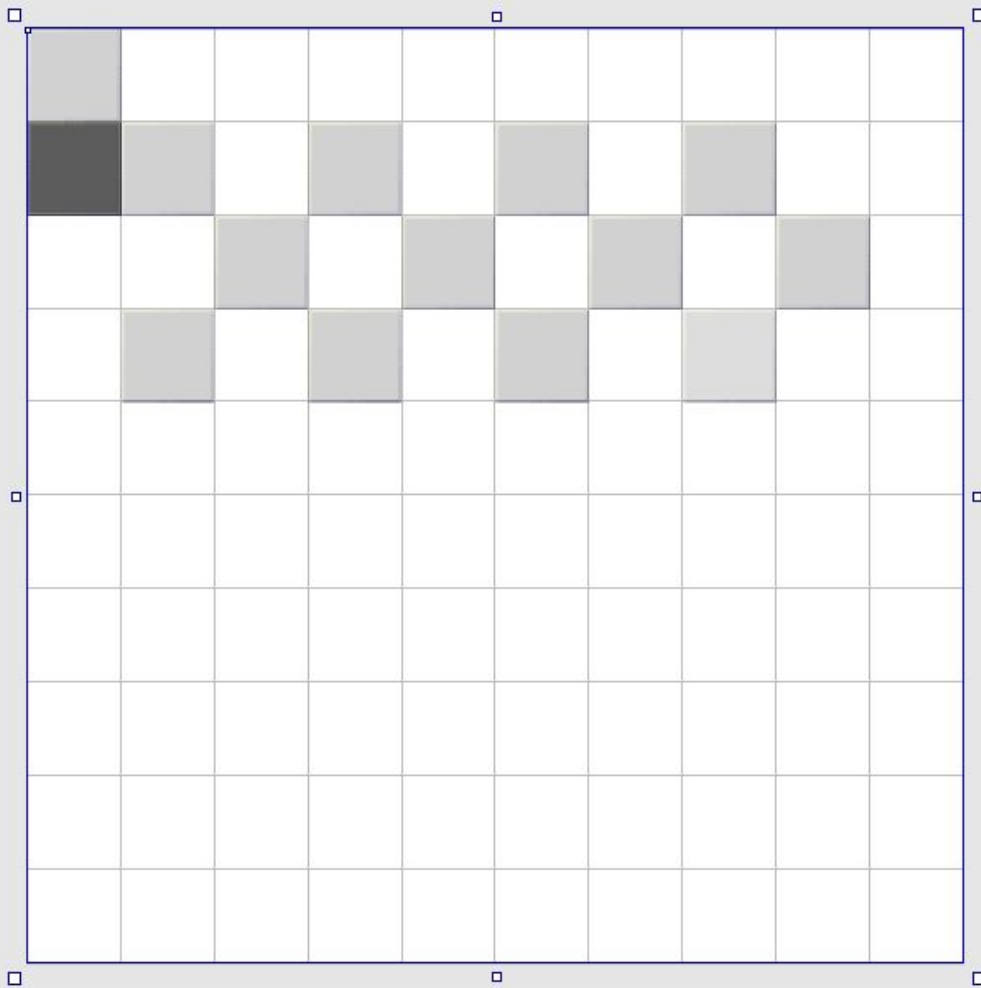
one sprite: chess piece

one sprite: chess hitbox

snap to grid

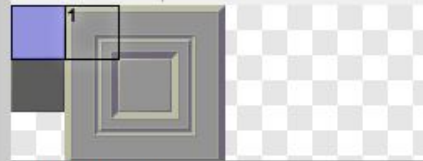
behavior: drag and drop

event: set the piece on dropped to be $\text{round}(X / 32) * 32$ so it's aligned correctly to the grid



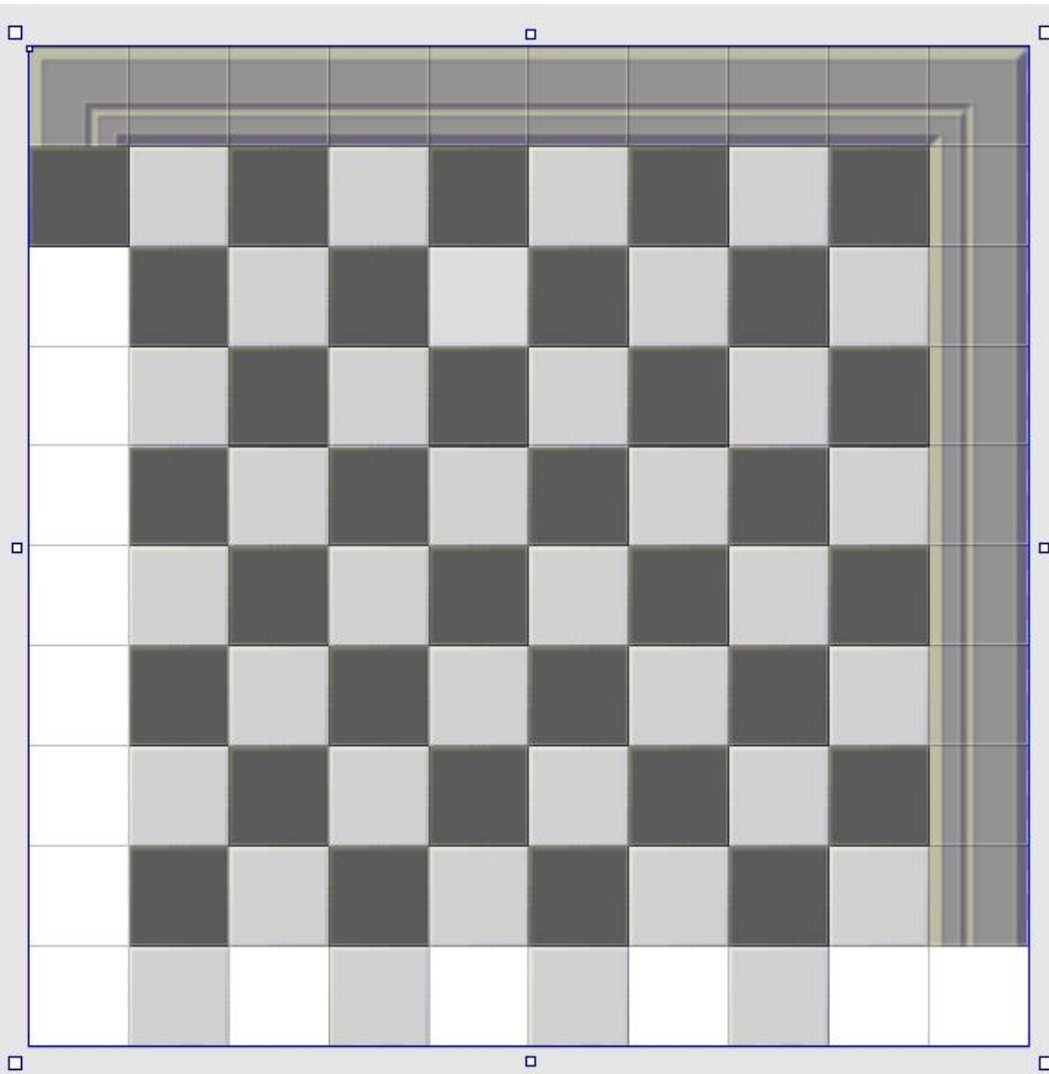
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Tilemap: Tilemap UID 2

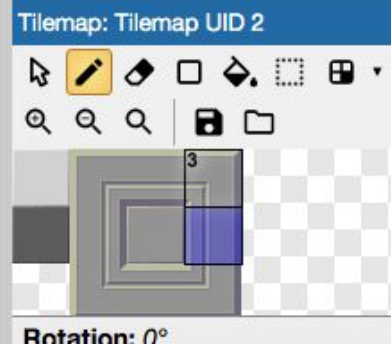


Rotation: 0°

imprt



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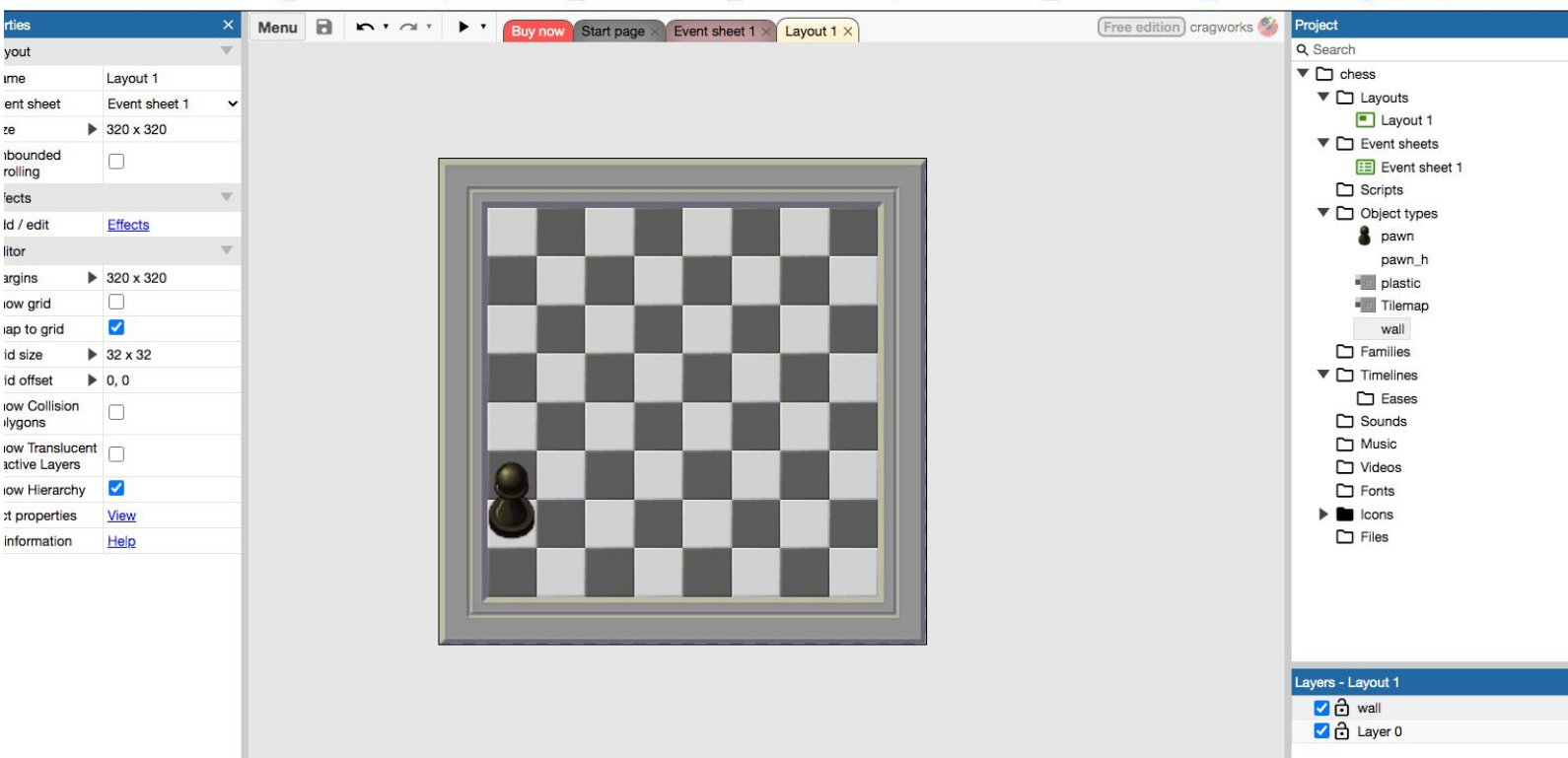


Import tile sheet into Construct 3.

Make the tile map select 32 x32

Insert the wall and the checkerboard tiles. Total size will be 320 x 320

Finished tilemap



Import the chess piece as a new sprite and crop it.



In the editor project properties, turn on snap to grid, so the piece will always snap to the right spot.

Instance variables

Add / edit [Instance variables](#)

Behaviors

DragDrop

Axes Both

Enabled ☒

Add / edit [Behaviors](#)

Effects

Blend mode Normal

Add / edit [Effects](#)

Container

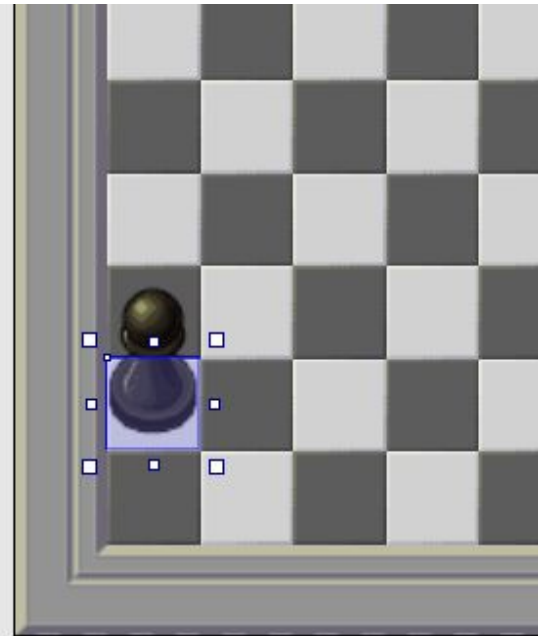
No container [Create](#)

Properties

Animations [Edit](#)

Size [Make 1:1](#)

Initially visible ☒



Make another sprite called pawn_h This will be the hitbox. Put it in the square and put the chess piece over the square. The pawn_h will have a drag and drop behavior. The pawn sprite will be pinned to pawn_h.

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- System On start of layout pawn Pin Pin to **pawn_h** (X: True, Y: True, angle: True, width: No, height: No, Z: False) Add action Add...
- pawn_h On DragDrop drop pawn_h Set position to $(32 \times \text{round}(\text{pawn_h.X} \div 32), 32 \times \text{round}(\text{pawn_h.Y} \div 32))$ Add action Add...
- pawn_h DragDrop is dragging Text Set text to "R: "&round(pawn_h.X÷32)&"C: "&round(pawn_h.Y÷32) Add action Add...

Add event Add...

Properties

Layout

Name Layout 1

Event sheet Event sheet 1

Size 320 x 320

Unbounded scrolling ☐

Effects

Add / edit [Effects](#)

Editor

Margins 320 x 320

Show grid ☐

Snap to grid ☒

Grid size 32 x 32

Grid offset 0, 0

Show Collision Polygons ☐

Show Translucent Inactive Layers ☐

Show Hierarchy ☒

Project properties [View](#)

More information [Help](#)

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Add event Add...

You have 47 events remaining

When logged in to the Free edition of Construct 3, you may use up to 50 events in a project. [Purchase a plan](#) to unlock the full features of Construct 3.

Project

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Add these 3 events and actions.

The first one pins the **pawn** to the **pawn hitbox**.

The second one moves the hitbox to the right place (snap to grid) **when you let go of the hitbox**.

$32 \times \text{round}(\text{pawn_h.X} \div 32)$ is the row

$32 \times \text{round}(\text{pawn_h.Y} + 32)$ is the column

You need to round otherwise you could get 2.232323 instead of 2 for the row or column

The 3rd event happens when you are **dragging the hitbox**. Then, it will display the row and column you're on by changing the text at the top.



Task: make the rest of the chess pieces so they can be dragged and dropped anywhere on the board. You will need to duplicate the chess piece + hitbox 16 times.

8 pawns
2 rooks
2 knights
2 bishops
1 king
1 queen

x2 (because black and white)



Then choose another board game to create. Add the tile sheet, sprites (pieces), and drag and drop behavior.