
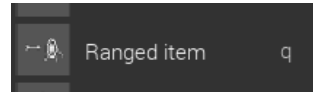
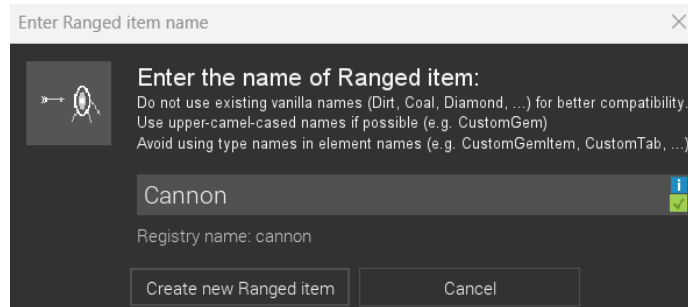


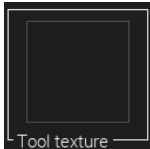
Let's Code a Ranged Weapon!

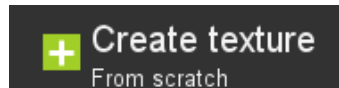
1) Click the “Green Plus Sign”  and select



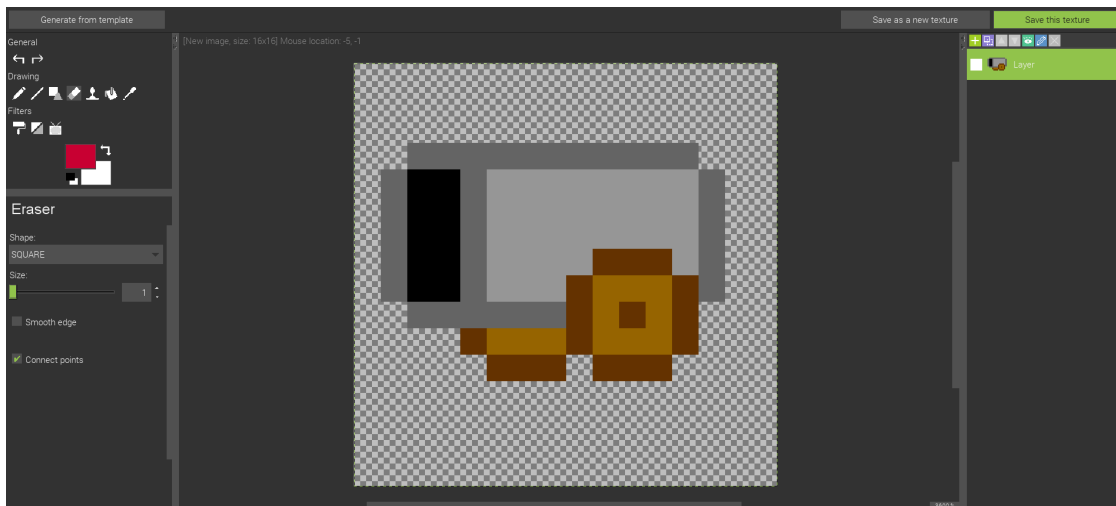
2) Name your tool (using “CamelCasing” if necessary) and **Create new Ranged item**




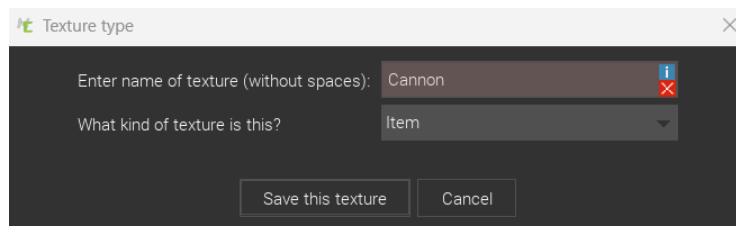
3) Click on  and then click



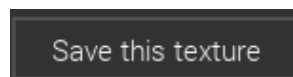
4) Design your own Ranged Weapon!



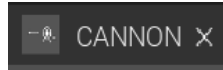
5) Click on  and name the Texture and change its type to “ITEM”

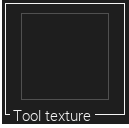


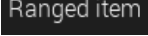
then click



6) Go back to your Tool Tab



7) Select  again and select YOUR Texture

8) Adjust the characteristics of the  as you like!

The image shows a configuration menu for a 'Ranged item'. At the top, there is a preview window showing a pixelated cannon icon with a red 'X' in the bottom left corner, labeled 'Texture'. Below this, the menu is divided into two columns. The left column contains various settings with question mark icons for help: 'Item model:' (with a note 'Select the item model to be used. Supported: JSON, OBJ'), 'In-game name:', 'Special information about the ranged item:' (with a note 'Use comma to separate entries'), 'Creative inventory tab:', 'Item animation:', 'Max stack size:', 'Damage vs mob/animal (check to enable melee damage):', 'Item for ammo' (with a note 'Leave empty to disable ammo requirement'), 'Shoot constantly when active?', 'Item usage count:' (with a note 'Set to 0 if stack size is larger than 1'), 'Ranged action sound:', and 'Enable glowing effect'. The right column contains the corresponding input fields: a 'BUILT IN' dropdown menu set to 'Normal', a text field for 'Cannon', an empty text field for special information, a dropdown menu for 'Combat' (showing a sword icon), a dropdown menu for 'bow' (showing a bow icon), a numeric input field set to '1', a numeric input field set to '0', a small grey square for 'Item for ammo', a checkbox for 'Shoot constantly when active?' which is currently unchecked, a numeric input field set to '100', a text field for 'entity.arrow.shoot' with a blue 'i' icon and a red 'X' icon, and a 'Make item glow' section with a checkbox (unchecked), a dropdown menu set to '(always)', and two small square icons. At the bottom, there is a navigation bar with arrows and the text 'Ranged item', 'Projectile', and 'Triggers'.

Texture

Item model:
Select the item model to be used. Supported: JSON, OBJ

In-game name:

Special information about the ranged item:
Use comma to separate entries

Creative inventory tab:

Item animation:

Max stack size:

Damage vs mob/animal (check to enable melee damage):

Item for ammo
Leave empty to disable ammo requirement

Shoot constantly when active?

Item usage count:
Set to 0 if stack size is larger than 1

Ranged action sound:

Enable glowing effect

BUILT IN Normal

Cannon

Combat

bow

1

0

entity.arrow.shoot

Make item glow

(always)

< — Ranged item — Projectile — Triggers — >

9) Adjust the characteristics of the **Projectile** as you like!

The screenshot shows the configuration menu for a Projectile. It includes the following settings:

- Projectile power: 1 (with a note "1 is like bow")
- Projectile damage: 5
- Projectile knockback: 5
- Has projectile particles: ☐ Check to enable
- Does projectile ignite fire?: ☐ Check to enable
- Item representing texture of projectile: [Empty texture slot]
- Projectile model: Default (with a "BUILT IN" label)
- Model texture: [Empty texture slot] with a "+" button

Make sure your Ranged weapon has an **Item representing texture of projectile**
You can either create a **New Item** for this **OR** use an existing item like a **Firework Charge**.

Now for the FUN!

9) Select the **Triggers** Tab

Each **Event** will cause a **Procedure** to happen and **YOU** get to control the **Special Effect** that comes after the event in the game.



For the first example, let's create an explosion when the **Projectile hits something**.

The screenshot shows the "Projectile events" configuration menu. It contains four event triggers, each with a "do:" dropdown set to "(no procedure)" and a "+" button:

- When projectile hits block**: Variables x, y, z, world, entity, immediatesourceentity.
- When projectile hits player**: Variables x, y, z, world, entity, sourceentity, immediatesourceentity.
- When projectile hits living entity**: Variables x, y, z, world, entity, sourceentity, immediatesourceentity.
- While projectile flying tick**: Variables x, y, z, world, entity, immediatesourceentity.

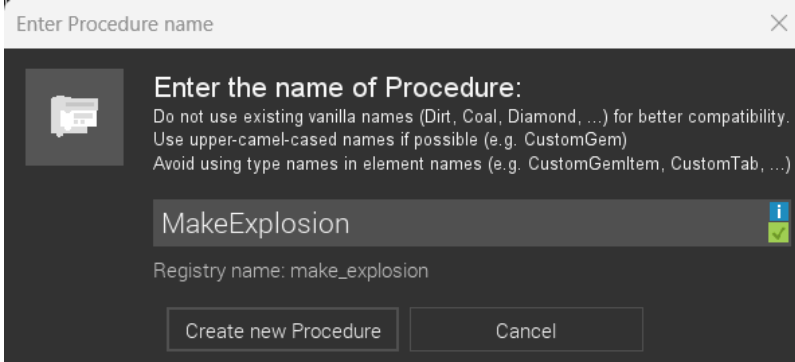
Now, we don't need to make different **Procedures** for each event because if the **Projectile** hits **Anything** we want it to cause an **Explosion!**

10) Return to the **WORKSPACE** Window

10) Click the “Green Plus Sign”  and select 

10) Click on the 

11) Name and create the new **Procedure**



Enter Procedure name

Enter the name of Procedure:
Do not use existing vanilla names (Dirt, Coal, Diamond, ...) for better compatibility.
Use upper-camel-cased names if possible (e.g. CustomGem)
Avoid using type names in element names (e.g. CustomGemItem, CustomTab, ...)

MakeExplosion

Registry name: make_explosion

Create new Procedure Cancel

12) We will now see **Coding Window**

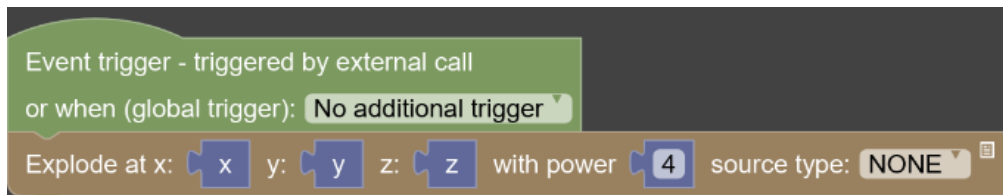
For this example let's **Strike Lightning** and cause an **Explosion!**

Step 1: Select the **World management** Tab

Step 2: Find and Click on these code block:



Step 3: Connect the Code block to the bottom of the Green Event Trigger:



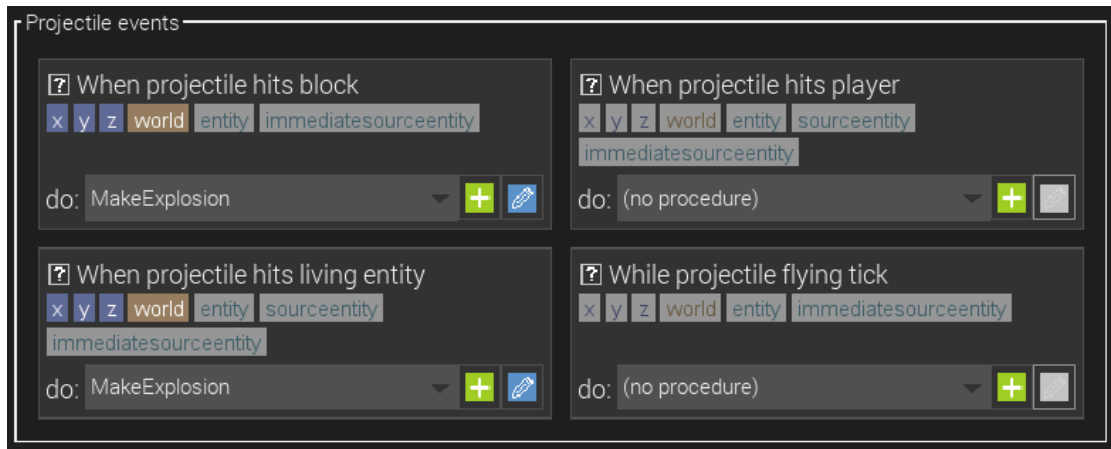
To increase the power of the explosion, change the number in the blue puzzle piece.
Here's some information about each type of explosion:

NONE	Only causes health damage
BLOCK	Breaks surrounding blocks in a box shape
MOB	Simulates the creeper explosion
TNT	Simulates a TNT explosion

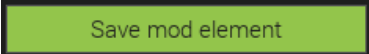
13) Once finished with the **Procedure**, select

Save mod element


14) Click on your **Ranged Item** , go to the **Triggers**  Tab, and update events:



15) Finally save your **Weapon Mod** by clicking



Time to play test!

16) Click on the  in the top right corner of your screen and create a new world in CREATIVE MODE to test out your weapon!

Your Turn!

17) Pick one of the other events of this Combat tool and create a new **Procedure** for it.



Need help with ideas?

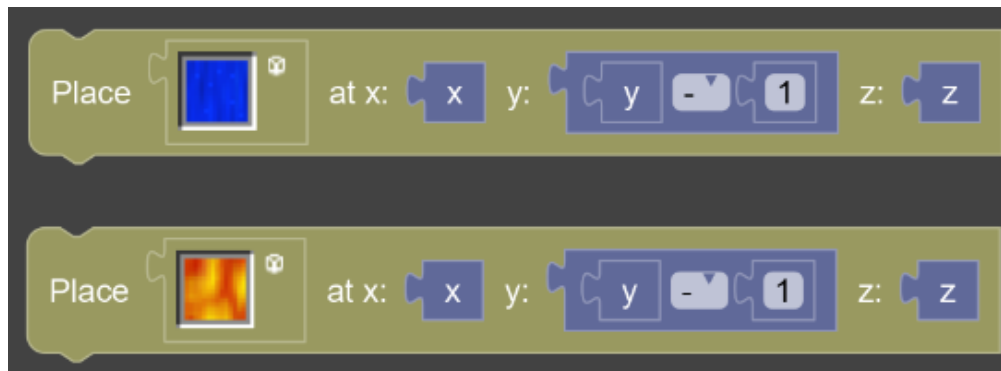
Try making a **Procedure** for “**While Projectile Flying Tick**”

(Hint: While the projectile is in the air, your procedure will happen)

Here are some code blocks that might be fun to use!

Block management

Place Water **or** Lava one block under the Projectile as it flies!



OR

World management

Strike Lightning **or** Spawn an entity one block under wherever the projectile is flying!

